



Ikegami **image**



HUNGRY FOR DETAILS

IKEGAMI IS A LEADING MANUFACTURER of specialized cameras, image processing and transmission equipment. Ikegami was founded in 1946 in Tokyo, Japan. Today around 800 employees are working in 3 factories and 9 sales and service organizations all over the world.

Ikegami has consistently created the most advanced products in all image processes, namely image, transmission, processing, recording and display. Ikegami Electronics (Europe) GmbH in Neuss, Germany, was founded in 1970 and it is the sales and service organization for Europe and Africa.

Ikegami has an office in the UK, a regional office in Dubai and works with distributors, system integrators and dealers throughout Europe, Middle East & Africa.

EMMY AWARDS



- 1981** Development of Digital Computers for automatic adjustment of colour studio cameras
- 1983** Development of the EC-35 Electronic Cinematography Camera
- 1994** Development of Skin-Tone Detail, Edge Control Enhancement Technology
- 2010** Development and Production of Portable Tapeless Acquisition

BROADCAST

WORLD-LEADING IKEGAMI PRODUCTS
RECOGNIZED BY BROADCASTERS EVERYWHERE



MEDICAL

AS NATURAL AS POSSIBLE IKEGAMI'S SUPERIOR COLOUR
REPRODUCTION GIVING SATISFACTION TO DOCTORS



SECURITY

HIGH QUALITY AND RELIABLE IKEGAMI PRODUCTS
FOR A WIDE RANGE OF SECURITY AND IT APPLICATIONS



INDUSTRIAL

UNIQUE IKEGAMI IMAGE PROCESSING
TECHNOLOGY FOR PRECISE DEFECT-DETECTION

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- 70 **MLW-2624C-DC** | 26-inch Full-HD 3G Multi-Format LCD Colour Monitor
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- 71 **MLW-3225C** | 32-inch HDTV/SDTV Multi-Format LCD Colour Monitor

- 71 **MLW-3225C-3D** | 32-inch 3D HDTV/SDTV Multi-Format LCD Colour Monitor

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73 ACCESSORIES FOR MEDICAL SYSTEMS

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- 85 **POIE-Series** | Colour Powdered/Granulated Medicine Inspection Device

Superior camera technology provides exceptional wide colour space and the depth of field for studio and outdoor productions

REVIVE COLOURS AND EMOTIONS





NEW UHK-430

UNICAM XE



4K Ultra High Definition 3CMOS Digital Camera System

- 2/3-inch 3 CMOS native 4K sensor
- Conventional B4 mount lenses
- No colour aliasing due to 3 chip technology
- Flexibility with swappable optical blocks
- 16 axis colour corrector and focus assist powered by Next-Generation High-Speed Video Processor Asic AXII
- Future expandability
- 4K/2K simulcast operation
- Various interfaces like Quad 3G-SDI, 12G SDI, VoIP, Gigabit ethernet data trunk
- Wide colour space and HDR
- Compact, lightweight and userfriendly
- 40 Gb/s transmission via SMPTE Hybrid Fibre Cable up to 4 km
- RGB 4:4:4 for high quality Chroma keying

First in Ikegami's next-generation Unicam XE series, the UHK-430 employs three newly-developed 4K-native 2/3 inch CMOS sensors which provide full 3840 x 2160 ultra-high definition resolution plus the depth of field required for studio and outdoor production. The camera is equipped with a B4 bayonet mount compatible with 2/3 inch HD lenses. An optional SE-U430 expander accommodates large studio or OB lenses.

UNICAM XE



RELATED ITEMS:

CCU-430 | VFL-201D | VFL-701D | VFE-741D | OCP-300 | MCP-300 | SE-U430 | T-430

RATINGS / PERFORMANCE UHK-430

Image Sensor		2/3-inch 3CMOS native 4K
Scanning System	3840 x 2160	59.94 p / 50 p, 3840 x 2160 px
	1920 x 1080	119.88 p / 100 p / 59.94 p / 50 p / 29.97 p / 25 p / 23.98 p
Sensitivity		F11 @ 4K / 50 p, F11 @ HD / 50 i, F10 @ 4K / 60 p, F10 @ HD / 59.54 i at 2000 lx (White reflection 89.9%)
S/N Ratio		Full-HD 62 dB (typ.)
Limiting Resolution		2000 TV lines (typ.) 4K / 60 p, 1000 TV lines (typ.) HD
ND Optical Filter Disc		Clear, 1/4, 1/8, 1/16, 1/64
CC Optical Colour Compensation		3200 K, 4300 K, 6300 K; Cross, Option
Modulation Index		35% (typ.) @ 4K / 60 p, 60% (typ.) @ HD
DC Utility Power output		UHK-430M: HR10A-4pin (x1): DC 12V 1.0A (max); UHK-430S: D-Tap (x1) DC12V 1.5A (max)
Dimensions / Weight		W 148.5 mm x H 243 mm x D 340 mm, 4.6 kg
Power Consumption		55W

NEW UHK-435 **4K HDR**



UNICAM XE

The UHK-435 is the world's first 2/3-inch 3-CMOS sensor 4K/HD studio camera. It captures the extended depth of field required for studio and outdoor production and can be used with B4 bayonet-mount large studio or OB lenses. The camera delivers wide dynamic range and wide colour gamut, fully supporting HLG (Hybrid Log-Gamma) conforming to HDR International Standard (ITU-R BT). UNICAM XE series peripherals such as the CCU-430 camera control unit, VFL-701 D 7-inch full HD LCD viewfinder and 7.4-inch OLED viewfinder are fully compatible with the UHK-435. The viewfinder can be positioned close to the extended line of the optical axis. Interfaces are available for a wide range of signal protocols including Quad 3G-SDI, 12G SDI and IP.



Backside Panel

RELATED ITEMS:

CCU-430 | VFL-701D | VFE-741D | OCP-300 | MCP-300

4K Ultra High Definition 3CMOS Digital Studio Box Camera System

- 2/3-inch 3 CMOS native 4K sensor
- Conventional B4 mount lenses
- No colour aliasing due to 3 chip technology
- Future expandibility
- 16 axis colour corrector and focus assist
- Ultra wide-bandwidth fibre transmission
- 4K/2K simulcast operation and HD cut out of the 4K picture
- Various interfaces like Quad 3G-SDI, 12G SDI, VoIP, Gigabit ethernet data trunk
- Wide colour space and HDR



RATINGS / PERFORMANCE UHK-435

Image Sensor	2/3-inch 3CMOS native 4K	
Scanning System	3840 x 2160	59.94 p / 50 p
	1920 x 1080	119.88 p / 100 p / 59.94 p / 50 p / 29.97 p / 25 p / 23.98 p
Sensitivity	F11 @ 4K / 50 p, F11 @ HD / 50 i, F10 @ 4K / 60 p, F10 @ HD / 59.54 i at 2000 lx (White reflection 89.9%)	
S/N Ratio	Full-HD 62 dB (typ.)	
Limiting Resolution	2000 TV lines (typ.) 4K / 60 p, 1000 TV lines (typ.) HD	
ND Optical Filter Disc	Clear, 1/4, 1/8, 1/16, 1/64	
CC Optical Colour Compensation	3200 K, 4300 K, 6300 K; Cross, Option	
Modulation Index	35 % (typ.) @ 4K / 60 p, 60 % (typ.) @ HD	
DC Utility Power output	(Option)	
Dimensions / Weight (T.B.A.)	W 315 mm x H 328.5 mm x D 398 mm, 17 kg	

NEW CCU-430**UNICAM XE**

The CCU-430 enables full control of the UHK-430 4K camera including optional 12G-SDI connectivity. CCU and camera can be connected up to 4km via SMPTE hybrid camera cable carrying full-bandwidth video, audio, control data and camera power. Where local power is available for the camera, the CCU-430 can be linked up to 10km via dark fibre. A 40 Gbps optical transceiver delivers the full 4K RGB 4:4:4 colour space needed to create very high quality chroma key overlays. Expansion modules are available to accommodate signal protocols such as Quad-link 3G-SDI, 10/25Gbps VoIP, or Gigabit Ethernet in addition to 12G-SDI.

**RELATED ITEMS:**

UHK-430 | VFL-701D | VFE-741D | VFL-201D | SE-U430 | OCP-300 | MCP-300

RATINGS / PERFORMANCE CCU-430		
Digital Video Input	Return Video Input [BNC]	4x 3G-SDI or HD-SDI (3G-SDI Level-A/B)
	HD QTV Input [BNC] (Prompter)	2x HD-SDI (SMPTE 292M)
Analog Input	Reference Input [BNC Loop through]	Tri level sync (SMPTE 274) Black Burst Signal (NTSC/PAL)
Digital Video Output Format	4K Quad Link Output	2CH 8 Output (3G/HD-SDI), 3840x2160 px, 3G-SDI (Square Division or 2SI Division Level A/B), 59.94P, 50P, 29.97P, 25P,24P,23.98P, HD-SDI (Square Division), 29.97P/PsF, 25P/PsF,24P/PSF,23.98P/PsF
Remote	Remote (CP/Ethernet)	2x Remote CP connector (ICCP); 1x LAN RJ-45 (Not Supporting with PoE)
	Ext. Remote	D-sub 15P, Female
	Mic. Remote	ch1/ch2 independent control
	Power Remote	HR05-R8F, Female, CCU POWER ON/OFF control
Output Signals	HDTV Output [BNC]	2CH 8 Output (3G/HD-SDI), Down-converted (1080p/1080i/720p) 3G-SDI (SMPTE 424/425 Level-A/B), 1920x1080:59.94P, 50P, 29.97P/PsF, 25P/PsF, 24P/PsF, 23.98P/PsF, 1920x1080:59.94I, 50I HD-SDI (SMPTE 292 M), 1920x1080:59.94I, 50I, 1920x1080:29.97P/PsF, 25P/PsF, 24P/PsF, 23.98P/PsF, 1280x720:59.94P,50P HIGH SPEED, 1920x1080:119.88P, 1920x1080:100p
	Monitor Output [BNC]	2CH 2 Output (VF or PM Assignable); HD-SDI (SMPTE 292 M)
	HD Trunk Video Output [BNC]	1x HD-SDI (SMPTE 292 M)
	Analog Output	SYNC OUTPUT [BNC]: 1x Tri level sync (SMPTE 274)
	Digital Audio Output	1x AES/EBU format [BNC] (SMPTE 276 M)
	Analog Audio Output	+4 dBs / 0 dBs; 2 x XLR-3 (2 CH)
	Tally Out	PRC05-RB5F1, Female; Red/Green/Yellow
	Communication	D-sub 25 P, Female, INTERCOM, PROD/ENG, 4 W/RTS/CC, PROGRAM AUDIO 3 systems, TALLY IN, Red/Green/Yellow
DC Utility Power output	UHK-430	UHK-430 M: HR10 A-4pin (x1): DC 12 V 1.0 A (max) UHK-430 S: D-Tap (x1) DC 12 V 1.5 A (max)
	SE Interface	QR/P4 24pin (x1)
	DC Input	XLR 4pin (x1)
	USB Port	USB2.0 Type-A
Data Trunk #1		D-sub 9P, Female, RS-422
Gigabit Ethernet Trunk		LAN RJ-45 (1000BASE-T) (VTP CAT.5e)
I/F	D-sub 15P, Female	DATA TRUNK #2 (RS-422), Incom control, PREVIEW contact, System Control Head Power on IND, DC 12 V, 500 mA OUTPUT
AC Inlet		AC INLET / FUSE / MAIN POWER SWITCH / Noise Filter
Inlet	SE interface Inlet	QR/P4 24 pin (x1) C
	DC input	XLR 4 pin (x1)
	USB Port	USB2.0 Type-A
Dimensions / Weight		W 483 mm x H 133 mm x D 449 mm / 19 kg

4K Camera Control Unit

- Ultra wide-bandwidth fibre transmission
- 4K/2K simulcast operation
- Various interfaces like Quad 3G-SDI, 12G SDI, VoIP, Gigabit ethernet data trunk
- Wide colour space and HDR
- Compact, lightweight and userfriendly
- 16 axis colour corrector and focus assist powered by Next-Generation High-Speed Video Processor Asic AXII

Multi-Video Interface

- Switchable 4K or HD signal output
- Various interfaces like Quad 3G-SDI level A/B, 12G SDI, VoIP (10Gbps/25Gbps), Gigabit Ethernet Data Trunk
- Built-in 4 x 3G-SDI standard 4K output
- (switchable quad link square division/2 sample interleave division)
- With option board, 4K, HD and HD cut-out signals from native 4K are available simultaneously

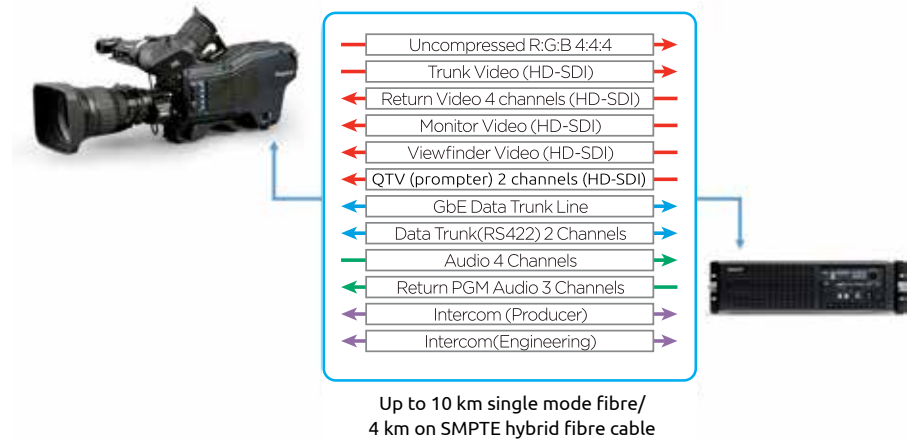
Ethernet camera control

The system supports Ethernet based control allowing customers to choose the camera control system based on their needs. Ikegami's command control protocol is also supported.

Gigabit Ethernet Trunk

The built-in network trunk allows data transmission between camera and CCU at up to 1Gbps (1000BASE-T). It makes communication with various IP-based products possible utilizing the camera's transmission system.

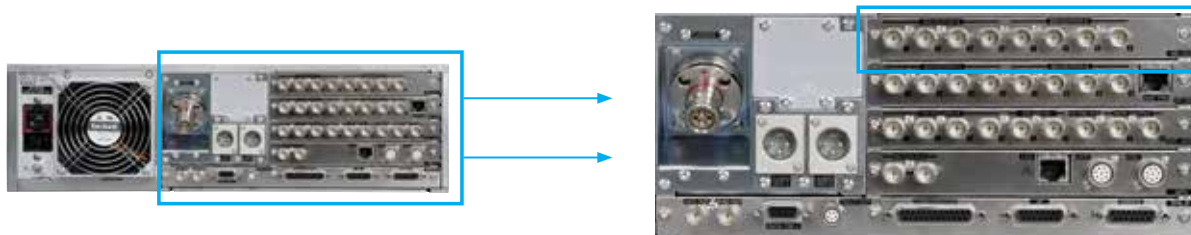
Ultra wide-bandwidth 40gbps fibre transmission



Built-in 40Gbps optical transceiver delivers full bandwidth of 4K resolution signals transmission between camera and CCU enabling full colour space in 4K, RGB 4:4:4; to create super high quality chroma key signals. Simultaneous output of HD QTV x 2 lines, HD and RET x 2 lines is possible at the camera head. 4 BNC outputs on the backside of the main unit are configurable. The high bandwidth is a perfect basis for professional chroma key compositing of two images or video streams together based on colour hue (chroma range).

HD Out Board for Simultaneous HD/4K (option)

This board can be installed on the top



12G-SDI Out Board (option)



12G-SDI is ideal for outside broadcast applications as all data are transmitted along a single channel, eliminating potential timing issues which can occur in parallel-cable quad-link delivery.

NEW SE-U430



The SE-U430 System Expander enables the use of a large studio viewfinder and studio lenses with the UHK-430, converting the portable camera into a full facility studio camera. Installation of the camera into the SE-U430 is very easy, and conversion back to portable configuration is quick for maximum operating flexibility. The camera can be slide back by releasing the lens lock while maintaining the optical axis of the lens and camera. This makes the swapping of large lenses very easy.

System Expander

UNICAM XE

■ Portable Lens also can be attached

■ Improved lens swap mechanism



RATINGS/PERFORMANCE

Dimensions	W 333 x H 329.5 x D 403 mm
Weight	SE-U430: Approx. 12.5 kg LS-U430: Approx. 2.9 kg
Ambient Temperature	-20°C to +45°C
Ambient Humidity	30% to 90% (non-condensing)
Power for lens	DC 12V 3.0A
Power for script lighting	DC 12V 1A

RELATED ITEMS:

UHK-430
VFL-701D
VFE-741D
CCU-430

NEW VFL-201D



The VFL-201D is a 2-inch LCD Viewfinder developed for UHK-430. It uses a QHD LCD Panel with the resolution of 960 horizontal pixels and 540 vertical pixels, and allows full colour and high resolution video monitoring. They apply the new Focus Assist function that supports accurate focusing in both 4K and HD modes. The digital interface allows access to the camera menu from the Viewfinder.

2-inch LCD Colour Viewfinder

UNICAM XE

■ Bidirectional Digital I/F

■ Y TALLY

■ Function Switch

■ Various Marker Functions

■ Preset Mode

■ Shadow Function

■ Peaking Function

RATINGS/PERFORMANCE

Power Supply	DC12V (DC +10.5V to + 18V) 4W
Ambient Humidity	20% to 85% (non-condensing)
Dimensions / Weight	W215 x H72 x D 156 mm - Approx. 780 g or less
Screen	155.52 mm x 87.48 mm LCD H 1920 x V 1080
Screen Brightness	220 cd/m ² or more
Colour	16.77 Million (RGB 8 bit/ea)
Contrast Ratio	200:1 (typical)
Angle of visibility	Vertical 45° and horizontal 45°

RELATED ITEMS:

UHK-430
VFL-701D
VFE-741D
CCU-430

NEW VFE-741D



The VFE-741D is a OLED Viewfinder with digital I/F, employing a 7.4-inch QHD OLED Panel, achieving high resolution, high brightness, and high contrast. They apply the new Focus Assist function that supports accurate focusing in both 4K and HD modes. The digital interface allows access to the camera menu from the viewfinder. Picture-in-picture, WFM, and Vector scope functions are built into this viewfinder.

7.4-inch OLED Colour Viewfinder

UNICAM XE

- Digital I/F
- Picture in Picture Display
- Peaking Function
- Camera No. Display TALLY (Option)
- Y TALLY
- Various Marker Functions
- Shadow Function
- High response and high contrast

RATINGS / PERFORMANCE

Power Supply	DC12V (DC +10.5V to +18V) 20W
Ambient Humidity	20% to 85% (non-condensing)
Dimensions / Weight	W 235 x H 143.5 x D 76.5 mm - Approx. 1.6 kg (VF body + cable)
Screen	164.160 mm x 92.340 mm OLED H 960 x V 540
Screen Brightness	350 cd/m ² or more
Colour	1.07 Billion (RGB 10 bit/ea)
Contrast Ratio	100000:1 (typical)

RELATED ITEMS:

UHK-430
VFL-701D
VFE-741D
CCU-430
SE-U430

NEW VFL-701D



The VFL-701D is 7-inch Multi-Format LCD Viewfinder with digital I/F. It features compact, light weight and low power consumption design. It employs 7-inch FHD LCD Panel, achieving wide viewing angle. They apply the new Focus Assist function that supports accurate focusing in both 4K and HD modes. The digital interface allows access to the camera menu from the viewfinder. Picture-in-picture, WFM, and Vector scope functions are built into this viewfinder.

7-inch LCD Colour Viewfinder

UNICAM XE

- Digital I/F
- Picture in Picture Display
- Peaking Function
- Camera No. Display TALLY (Option)
- Y TALLY
- Various Marker Functions
- Shadow Function
- Full HD resolution

RATINGS / PERFORMANCE

Power Supply	DC12V (DC +10.5V to +18V)
Ambient Humidity	20% to 85% (non-condensing)
Dimensions / Weight	W 235 x H 143.5 x D 76.5 mm - Approx. 1.5 kg (VF body + cable)
Screen	155.52 mm x 87.48 mm LCD H 1920 x V 1080
Screen Brightness	400 cd/m ² or more
Colour	16.77 Million (RGB 8 bit/ea)
Contrast Ratio	1000:1 (typical)
Angle of Visibility	Vertical 80° and horizontal 80°

RELATED ITEMS:

UHK-430
VFL-201D
VFE-741D
CCU-430
SE-U430

HDK-97ARRI



The HDK-97ARRI offers a unique convergence of attributes, designed with the latest innovations. The ARRI Large-format front end is famed for its film-like, organic look characterized by extended, clean highlights, an extremely low noise floor, natural skin tones, excellent colour separation and cinematic depth-of field. Employing large pixels and a custom-designed read-out architecture, this definitely acclaimed 35 mm CMOS Sensor demonstrates exceptional dynamic range. In addition, ARRI's stainless steel lens mount system ensures super stable flange focal depth between lens and sensor.



RELATED ITEMS:

FA-97A | CA-75HD | CCU-980 | CCU-970 | BS-98 | BSF-55 | VFE-740HD
VFE-740HD | VFL-P700 | VFL-200HD | CSU-110 | MCP-300 | OCP-300

Super 35mm 3G Multi-Format HDTV CMOS Camera System

- Super 35 mm CMOS Large Sensor
- Full compatibility with all Unicam HD Systems
- PL Lens Mount
- Docking style Camera Head
- Standard B4 Lens mountable
- Custom Gamma Correction
- Motorized ND-Filter
- ARRI and Ikegami Collaboration
- Superior real time processing and image controls
- Shallow depth of field
- High Sensitivity – Low Noise – Expanded dynamic Range – Superior Resolution
- Supports all existing HDTV Formats

RATINGS/PERFORMANCE

Image Sensor	Super 35 mm ALEV III CMOS Sensor RGB Bayer pattern color filter array	
Scanning System	Multi-Format	
Sensitivity	T11 at 1080 p / 29.97, T12 at 1080 p / 25 * Theoretical value, T10 at 1080 p / 23.98 with 1/48sec Shutter	
S/N Ratio	64 dB (1080i)	
Limiting Resolution	1000 TV lines (1080i)	
ND Optical Filter Disc	Clear, 6.2 %	
Electrical Colour Compensation	3200K, 4300K, 5600K, 6300K, 8000K; Variable ECC: 2000K to 20000K	
Electrical Gain	-6 dB, -3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB	
Electrical Shutter	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000 or variable Shutter	
Gamma	OFF, 0.35, 0.4, 0.45, Cine 1,2, Custom 1 to 5	
Dynamic Range	1200% *at Custom Gamma 1200% mode	
Output Format	with FA-97A & CCU-980 or CCU-970 or BS-98	1080 p / 59.94 / 29.97, 1080 p / 50 / 25, 1080 i / 59.94 / 50 1080 psf / 29.97, 1080 psf / 25, 1080 p / 23.98 1080 psf / 23.98, 1080 pd / 23.98, 720 p / 59.94 / 50 576 i 50 YPbPr 4:2:2, 480 i 59.94 YPbPr 4:2:2 (Option Board)
Input Signals (FA-97A)	External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR-3 CN 2 ch (600 Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR Type or 110 Type CN 2 ch
	Video Trunk	HD-SDI BNC 1 ch (factory option, available only when operated in 1.5 G)
Output Signals (FA-97A)	3G-SDI/HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch or VF / RET / MON / HD-QTV (MENU Selection) Serial Digital 75 Ω BNC 1 ch (factory option)
	Q-TV	75 Ω VBS 2 ch (2nd channel is option, and 1 ch only in 720p/50 Hz)
	DC-Out	+12 V DC 500 mA
Dimensions / Weight	W 180.7 x H 299 x D 476.6 mm (excluding VF) / approx. 9.5 kg (Head + FA)	
Operating Temperature	-20 °C to +45 °C	
Relative Humidity	30 % to 90 % (non-condensing)	
Operating Voltage	DC+11 to 16 V * DC input cable should be less than 3 m	
Power Consumption	Less than 80 W (in 1080 p/59.94, 50), less than 75 W (in 1080 p/29.97, 25)	

HDK-970A



HDK-970A/970AP is a top of the line in 16-Bit Full Digital 3G HDTV Studio/EFP Camera System. It combines the highest picture quality, functionality and reliability. The camera supports 3G-HDSDI 1080p (59.94/50 Hz) wide-band video processing as a standard feature for the highest picture quality. Both the single and dual link output are available in connection with CCU-970 and BS-97 Camera Control Units and Base Stations. Integrating Ikegami's advanced picture processing technology with digital processing technology maximizes the effect of 16-Bit A/D conversion, increasing gradation in dark areas where the processing is performed for more natural reproduction of dark colours.



RELATED ITEMS:

FA-97A | CCU-980 | CCU-970 | BS-98 | BSF-55 | VFE-740HD | CSU-110
MCP-300 | OCP-300

16-Bit Full Digital 3G HDTV Multi-Format 3CCD Camera System

- Video processing Technology to maximize the Benefit of 16-Bits
- Newly developed 2.3 Megapixel progressive Sensors
- Newly developed FPGA
- 3 Gbps high bit-rate Video Output
- Native support for 23.98 P Formats
- Custom Gamma Function
- Variable Colour Depth Function
- Lens Aberration Correction Function
- Sophisticated Camera Control Panel System
- Compatibility with all Unicam HD Systems

RATINGS / PERFORMANCE

Image Sensor		2/3-inch 2.3 Megapixel Progressive CCD
Scanning System		Multi-Format
Optical System		2/3-inch, RGB 3CCD, F1.4
Sensitivity		F10 (1080/59.94i), F11 (1080/50i) typical at 2000lx
S/N Ratio / Limiting Resolution		62 dB (1080i) / 1000 TV lines (1080i)
ND Optical Filter Disc		CAP, 100%, 25%, 6.2%, 1.6% (Optional AA-OLPF exchangeable to any position)
Optical Filter Disk		CROSS, 3200K, 4300K, 6300K, 8000K (Optional AA-OLPF exchangeable to any position)
Electrical Colour Compensation		5600K
Electrical Gain / Electrical Shutter		-3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB / 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Digital Extender		1.5X, 2X, 3X, 4X
Output Format	with CCU-980 or CCU-970 or BS-98	1080p 50/59.94 YPbPr 4:2:2; 720p 50/59.94 YPbPr 4:2:2; 1080i 50/59.94 YPbPr 4:2:2; 1080i 50/59.94 RGB 4:4:4; 1080i 100/119.88 YPbPr 4:2:2 (Option); 1080psf 25 / 29.97 YPbPr 4:2:2; 1080p 25/29.97 YPbPr 4:2:2 (Option); 1080p 23.98 RGB 4:4:4 (HDK-970AP only); 1080psf 23.98 RGB 4:4:4 (HDK-970AP only); 1080p 23.98 YPbPr 4:2:2 (HDK-970AP only); 1080psf 23.98 YPbPr 4:2:2 (HDK-970AP only); 576i 50 YPbPr 4:2:2 & 480i 59.94 YPbPr 4:2:2 (Option Board)
Input Signals	External Sync	SYNC 0.6V p-p ±6 dB 75Ω BNC CN 1 ch (BB / PS signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR-3 CN 2 ch (600Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR Type or 110 Type CN 2 ch
	Video Trunk	HD-SDI BNC 1 ch (available only when operated in 1.5G)
Output Signals	3G-SDI / HD-SDI	Serial Digital 75Ω BNC 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75Ω BNC 1 ch or VF / RET / MON / HD-QTV (MENU Selection) Serial Digital 75Ω BNC 1 ch (factory option)
	Q-TV	75Ω VBS 2ch (2nd channel is option, and 1 ch only in 720p/50 Hz)
	DC-Out	+12V DC 500 mA
Dimensions / Weight		W 315 x H 462 x D 517 mm (excluding lens) / approx. 24 kg
Operating Temperature		-20°C to +45°C
Relative Humidity		30% to 90% (non-condensing)
Operating Voltage		AC 100 / 110 / 117 / 220 / 240V ±10%
Power Consumption		Approx. 100W (1080p Format)

HDK-97A



The HDK-97A/97AP is a top of the line in 16-Bit Full Digital 3G HDTV companion Camera System. It combines the highest picture quality, functionality and reliability. The Camera supports 3G-HDSDI 1080p (59.94/50Hz) wide-band video processing as a standard feature for the highest picture quality. Both the single and dual link output are available in connection with CCU-970 and BS-97 Camera Control Units and Base Stations. Integrating Ikegami's advanced picture processing technology with digital processing technology maximizes the effect of 16-Bit A/D conversion, increasing gradation in dark areas where the processing is performed for more natural reproduction of dark colours.



RELATED ITEMS:

TA-97 | FA-97A | CA-75HD | CCU-980/M | CCU-970/M | BS-98 | BSF-55
VFE-740HD | VFL-P700 | VFL-200HD | CSU-110 | MCP-300
OCP-300 | SE-H750

16-Bit Full Digital 3G HDTV Portable Multi-Format 3CCD Camera

- High End 2K Progressive 3CCD 16-Bit Full Digital Portable Camera
- Superior 2/3-inch 2.3 Megapixel 3CCD Sensor
- High Sensitivity – Low Noise – Expanded dynamic Range – Superior Resolution
- High-speed 16-Bit A/D Conversion
- Newly developed 38-Bit FPGA digital Signal Process
- Ikegami Lens Aberration Correction ILAC
- Supports all existing HDTV Formats
- Compact Docking Style Camera Body
- Full Compatibility with all Unicam HD Systems

RATINGS / PERFORMANCE

Image Sensor	2/3-inch 2.3 Megapixel Progressive CCD	
Scanning System	Multi-Format	
Optical System	2/3-inch, RGB 3CCD, f1.4	
Sensitivity	F10 (1080/59.94i), F11 (1080/50i) typical at 2000lx	
S/N Ratio / Limiting Resolution	62 dB (1080i) / 1000 TV lines (1080i)	
ND Optical Filter Disc	CAP, 100%, 25%, 6.2%, 1.6% (Optional AA-OLPF exchangeable to any position)	
Optical Filter Disk	CROSS, 3200K, 4300K, 6300K, 8000K (Optional AA-OLPF exchangeable to any position)	
Electrical Colour Compensation	5600K	
Electrical Gain / Electrical Shutter	-3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB / 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000	
Digital Extender	1.5X, 2X, 3X, 4X	
Output Format	with FA-97A & CCU-980 or CCU-970 or BS-98	1080p 50 / 59.94 YPbPr 4:2:2; 720p 50 / 59.94 YPbPr 4:2:2; 1080i 50 / 59.94 YPbPr 4:2:2; 1080i 50 / 59.94 RGB 4:4:4; 1080i 100 / 119.88 YPbPr 4:2:2 (Option); 1080psf 25 / 29.97 YPbPr 4:2:2; 1080p 25 / 29.97 YPbPr 4:2:2 (Option); 1080p 23.98 RGB 4:4:4 (HDK-97AP only); 1080psf 23.98 RGB 4:4:4 (HDK-97AP only); 1080p 23.98 YPbPr 4:2:2 (HDK-97AP only); 1080psf 23.98 YPbPr 4:2:2 (HDK-97AP only); 576i 50 YPbPr 4:2:2 & 480i 59.94 YPbPr 4:2:2 (Option Board)
Input Signals (FA-97A)	External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR-3 CN 2 ch (600 Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR Type or 110 Type CN 2 ch
Output Signals (FA-97A)	Video Trunk	HD-SDI BNC 1ch (factory option, available only when operated in 1.5 G)
	3G-SDI / HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch or VF / RET / MON / HD-QTV (MENU Selection) Serial Digital 75 Ω BNC 1 ch (factory option)
	Q-TV	75 Ω VBS 2 ch (2nd channel is option, and 1 ch only in 720p/50Hz)
	DC-Out	+12 V DC 500 mA
Dimensions / Weight	W 138.5 x H 270 x D 337 mm (Head + FA or TA) / approx. 4.6 kg (Head + FA, excluding VF)	
Operating Temperature	-20 °C to +45 °C	
Relative Humidity	30% to 90% (non-condensing)	
Operating Voltage	DC +11 to 16 V	
Power Consumption	Approx. 60 W (without FA / 1080p Format)	

HDK-790GX



The HDK-790GX is a state of the art full digital HDTV Camera with superior picture quality and high reliability for studio and field HD production. It reproduces the outstanding performance of Ikegami's obsolete EX-series and adds new features and accessories associated with the Unicam HD.



16-Bit Full Digital HDTV Interlace 3CCD Studio/EFP Camera

- 2/3-inch 2.3 Megapixel AIT CCD
- Newly developed FPGA with advanced full Digital Process ASIC
- Advanced Features made possible with digital Technology
- Digital Extender
- Built-in Triple Layer Filter (ND/EFF/ECC)
- 2 Channels Q-TV
- HD-SDI Trunk
- Lens Aberration Correction Function
- Camera Operator Assist Functions

RATINGS / PERFORMANCE

Image Sensor	2/3-inch 2.3 Megapixel AIT CCD	
Scanning System	1080i 50 / 59.94 YPbPr 4:2:2; 1080 psf 25 / 29.97 YPbPr 4:2:2	
Optical System	2/3-inch, RGB 3CCD, f 1.4	
Sensitivity	F10 (1080/59.94i), F11 (1080/50i) typical at 2000 lx	
S/N Ratio / Limiting Resolution	60 dB (1080i) / 1000 TV lines (1080i)	
ND Optical Filter Disc	CAP, 100%, 25%, 6.2%, 1.6% (Optional AA-OLPF exchangeable to any position)	
Optical Effect Filter Disc	Clear, Cross, Snow, Fog, Clear (Optional AA-OLPF exchangeable to any position)	
Electrical Colour Compensation	3200K, 4300K, 5600K, 6300K, 8000K variable	
Electrical Gain	-6 dB, -3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB, +18 dB	
Electrical Shutter	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000	
Accumulation	1/15, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2, 1 s	
Gamma / Digital Extender	OFF, 0.35, 0.4, 0.45 / 1.5X, 2X, 3X, 4X	
Output Format	with CCU-980 or CCU-970 or BS-98 or BSF-55	1080i 50 / 59.94 YPbPr 4:2:2; 1080 psf 25 / 29.97 YPbPr 4:2:2; 576i 50 YPbPr 4:2:2; 480i 59.94 YPbPr 4:2:2 (Option Board); 1080i 50 / 59.94 YPbPr 4:2:2; 1080 psf 25 / 29.97 YPbPr 4:2:2; 576i 50 YPbPr 4:2:2; 480i 59.94 YPbPr 4:2:2
Input Signals	External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR-3 CN 2 ch (600 Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR Type or 110 Type CN 2 ch
	Video Trunk	HD-SDI BNC 1 ch (available only when operated in 1.5 G)
Output Signals	3G-SDI/HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch or VF / RET / MON / HD-QTV (MENU Selection) Serial Digital 75 Ω BNC 1 ch (factory option)
	Q-TV	VBS signal 1 ch (2 ch as option with applicable CCU)
	DC-Out	+12 V DC 500 mA
Dimensions / Weight	W 315 x H 328 x D 398 mm (Head + FA or TA) / approx. 24 kg	
Operating Temperature	-20 °C to +45 °C	
Relative Humidity	30% to 90% (non-condensing)	
Operating Voltage / Power Consumption	AC 100/110/117/220/240V ±10% / Approx. 75 VA	

RELATED ITEMS:

FA-97A | CCU-980 | CCU-970 | BS-98 | BSF-55 | VFE-740HD
CSU-110 | MCP-300 | OCP-300

HDK-79GX



The HDK-79GX is a state of the art Full Digital HDTV Portable Camera with superior picture quality and high reliability for studio and field HD production. It reproduces the outstanding performance of Ikegami's obsolete EX-series and adds new features and accessories associated with the Unicam HD.



RELATED ITEMS:

TA-97 | FA-97A | FA-55 | CA-75HD | CCU-980/M | CCU-970/M | BS-98
BSF-55 | VFE-740HD | VFL-P700 | VFL-200HD | CSU-110
MCP-300 | OCP-300 | SE-H750

16-Bit Full Digital HDTV Portable Interlace 3CCD Studio/EFP Camera

- 2/3-inch 2.3 Megapixel AIT CCD
- High Sensitivity – Low Noise – Expanded dynamic Range – Superior Resolution
- Newly developed 38-Bit FPGA & advanced ASIC digital Signal Process
- High-speed 16-Bit A/D Conversion
- Ikegami Lens Aberration Correction: ILAC
- Compact Docking Style Camera Body
- Full Compatibility with all Unicam HD Systems

RATINGS/PERFORMANCE

Image Sensor	2/3-inch 2.3 Megapixel AIT CCD	
Scanning System	1080i 50 / 59.94 YPbPr 4:2:2; 1080 psf 25 / 29.97 YPbPr 4:2:2	
Optical System	2/3-inch, RGB 3CCD, F1.4	
Sensitivity	F10 (1080/59.94i), F11 (1080/50i) typical at 2000 lx	
S/N Ratio / Limiting Resolution	60 dB (1080i) / 1000 TV lines (1080i)	
ND Optical Filter Disc	CAP, 100%, 25%, 6.2%, 1.6% (Optional AA-OLPF exchangeable to any position)	
Optical Effect Filter Disc	Clear, Cross, Snow, Fog, Clear (Optional AA-OLPF exchangeable to any position)	
Electrical Colour Compensation	3200K, 4300K, 5600K, 6300K, 8000K variable	
Electrical Gain	-6dB, -3dB, 0dB, +3dB, +6dB, +9dB, +12dB, +18dB	
Electrical Shutter	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000	
Accumulation	1/15, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2, 1s	
Gamma / Digital Extender	OFF, 0.35, 0.4, 0.45 / 1.5X, 2X, 3X, 4X	
Output Format	with FA-97A & CCU-980 or CCU-970 or BS-98	1080i 50 / 59.94 YPbPr 4:2:2, 1080 psf 25 / 29.97 YPbPr 4:2:2, 576i 50 YPbPr 4:2:2, 480i 59.94 YPbPr 4:2:2 (Option Board)
	with FA-55 & BSF-55	1080i 50 / 59.94 YPbPr 4:2:2, 1080 psf 25 / 29.97 YPbPr 4:2:2, 576i 50 YPbPr 4:2:2, 480i 59.94 YPbPr 4:2:2
Input Signals (FA-97A / FA-55)	External Sync	SYNC 0.6V p-p ±6dB 75Ω BNC CN 1ch (BB / PS signal)
	Audio	-60dB to +4dB (variable) / -20dB (fixed) XLR-3 CN 2ch (600Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR Type or 110 Type CN 2ch
Output Signals (FA-97A / FA-55)	HD SDI	Serial Digital 75Ω 1ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75Ω BNC 1ch or VF / RET / MON / HD-QTV (MENU Selection) Serial Digital 75Ω BNC 1ch (factory option for only FA-97A)
	Q-TV	VBS signal 1ch (2ch as option with applicable CCU)
	AUX-Out	VBS signal 1ch (QTV-1, QTV-2 or Main video selectable by menu) * Available with FA-55 only. * QTV-2 can not be selected if BS/CCU does not support 2ch of Q-TV
	DC-Out	+12V DC 500mA
Dimensions / Weight	W138.5 x H270 x D337 mm (Head + FA or TA) / approx. 4.6kg (Head + FA, excluding VF)	
Operating Temperature	-20°C to +45°C	
Relative Humidity / Operating Voltage	30% to 90% (non-condensing) / DC+11 to 16V	
Power Consumption	Approx. 20W (without FA)	

NEW HDK-73 **HDR**



The HDK-73 is a cost-efficient docking-style camera system with F13 high sensitivity 2/3-inch CMOS sensors delivering high picture quality in either 1080i or 720p. The camera can be configured for studio or remote operation via a light weight 1.5RU fibre base station, as well as self-contained operation for wireless or onsite recording applications. Fibre configurations include a choice of OpticalCon links (up to 350m) or SMPTE copper/fibre hybrid cable (up to 1km) including power from the base station. Both fibre solutions support long distance transmission (more than 8km) using a pair of SM fibres, with power provided locally for the camera head. Included in the HDK-73 are new key features such as Ikegami's Quick EZ Focus assist and CAC chromatic aberration correction. Also included is HLG hybrid log gamma for HDR picture origination. Control of the HDK-73 is provided using a range of control panels from the simple joystick OCP-10 to the advanced touch screen OCP-300. Control panels can be connected directly to the base stations. Assignable Ethernet connection is also available on this camera. These factors combine to make the HDK-73 ideal for an extensive range of applications both in the studio and in the field.

RELATED ITEMS:

FA-97A | FA-55 | FA-300 | CA-75HD | CCU-980 | CCU-970
 BS-98 | BSF-55 | BSF-300 | VFE-740HD | VFL-P700 | VFL-200HD | CSU-110
 BSH-300 | MCP-170 | OCP-300/100/10 | SE-H750

3-CMOS HDTV CAMERA SYSTEM - HDR READY

- Newly Developed High Performance Full HD 2/3-inch CMOS Sensors
- Native Multi-format
- Advanced Full Digital DSP
- Lens Aberration Correction Function
- HDR (High Dynamic Range)
- Two HD-SDI Outputs from the Camera Head
- Quick EZ Focus Assist Function
- RET and QTV Channels
- Advanced Digital Detail
- Dockable Camera Body
- Moire Reduction Filter (Factory Option)

RATINGS / PERFORMANCE

Image Sensor		2/3-inch 2.6 million pixel CMOS sensors
Scanning System		1080 i 50/ 59.94YPbPr 4:2:2, 720 p 50/ 59.94 YPbPr 4:2:2
Optical System		2/3-inch, R,G,B 3 prism, F 1.4
Sensitivity		F13 at 2000lx 1080/50 i (Typical)
S/N Ratio		60 dB or more (in 1080/50i)
Limiting Resolution		1000TV lines (in 1080/50 i)
Modulation Depth		60% at 800 TV lines (in 1080/50 i)
ND Optical Filter Disc		1/100%, 2/25%, 3/6.2%, 4/1.6%
Electrical Colour Compensation		A/3200K, B/4300K, C/6300K, D/8000K
Electrical Gain		-6 dB, -3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB, +18 dB
Electrical Shutter		1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Output Format	with FA-97A & CCU-980 or CCU-970 or BS-98	1920 x 1080/59.94 i, 50 i, 1280 x 720/59.94 p, 50 p 720 x 580/59.9 i (NTSC), 720 x 576/50 i (PAL)
	with FA-55 & BSF-55 or FA-300 & BSF-300	1920 x 1080/59.94 i, 50 i, 1280 x 720/59.94 p, 50 p 720 x 580/59.9 i (NTSC), 720 x 576/50 i (PAL)
Input Signals	External Sync	SYNC 0.6 Vp-p ±6 dB 75 Ω BNC CN 1ch (BB/PS Signal)
	Audio	-60 dB to +4 dB (Variable) / -20 dB (Fixed) XLR CN 2ch (600 Ω Balanced)
	Intercom	XLR Type or 110 Type CN 2ch
Output Signals (FA-55 / FA-300)	HD SDI	Serial Digital 75 Ω, BNC, 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch
	Q-TV	VBS signal, BNC, 1 ch
	AUX-Out	with FA-55: VBS signal, BNC, 1 ch (QTV-1, QTV-2 or Main video selectable by menu) with FA-300: VBS signal 1 ch (QTV-1 or Main video selectable by menu)
	DC-Out	+12 V DC 500 mA
Dimensions / Weight		W 138.5 x H 270 x D 337 mm / approx. 4.6 kg (Camera Head + FA, excluding VF)
Operating Temperature		-20°C to +45°C
Relative Humidity		30% to 90% (non-condensing)
Operating Voltage		DC+11 to 16V
Power Consumption		BSF-55: approx. 44W (BS only) Power for HDK-73 and FA-55 without VF: approx. 70W BSF-300: approx. 44W (BS only) Power for HDK-73 and FA-300 without VF: approx. 70W

HDK-5500



The HDK-5500 is a 3CMOS Camera, adapting Ikegami's leading Camera and digital technology, achieving super high sensitivity and a high picture quality. Incorporating 1.3 Megapixel super high sensitivity CMOS Sensor allows sufficient sensitivity for shooting without using any lights even under moonlight conditions. It can be used for variety of purposes such as observation of nature, various documentaries and real-time reports.



Example of application

RELATED ITEMS:

TA-97 | FA-97A | FA-55 | CA-75HD | CCU-980/M | CCU-970/M | BS-98
BSF-55 | VFE-740HD | VFL-P700 | VFL-200HD
OCP-300/100/10 | SE-H750

Ultra Low-Light High Sensitivity 3CMOS HDTV Portable Camera

- 2/3-inch 1.3 Megapixel Super High Sensitivity 3CMOS Sensor
- Sensitivity: F22/2000 lx (S/N: 56 dB)
- Output Video Format: 1080/59.94i, 1080/50i (HD-SDI)
- Lens Mount: B4 (BTA) Type
- Analog/Serial I/F Lens Support
- Minimum Illumination: 0.001 lx or less (60 frame)
- Camera Operator Assist Functions
- Docking style Camera Body

RATINGS/PERFORMANCE

Image Sensor	2/3-inch 1.3 Megapixel CMOS	
Scanning System	1080i 50/59.94 YPbPr 4:2:2	
Optical System	2/3-inch, RGB 3CMOS, f 1.4	
Sensitivity	F22 or more at 2000 lx	
S/N Ratio	56 dB (1080i)	
Limiting Resolution	700 TV lines (1080i)	
ND Optical Filter Disc	100%, 25%, 6.2%, 1.6%	
Electronic Colour Compensation	3200K, 4300K, 6300K, 8000K variable	
Electrical Gain	-6 dB, 6 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB, 54 dB, 60 dB, 66 dB, 72 dB, 78 dB	
Electric Shutter	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000	
Minimum Illumination	0.001 lx	
Input Signals (FA-55)	External Sync	SYNC 0.6 Vp-p ±6 dB 75 Ω BNC CN 1ch (BB/PS Signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR-3 CN 2ch (600 Ω balanced)
	Intercom	ENG/PRD/PGM 4-wire/RTS/clearcom XLR 7 or 5 pin
Output Signals (FA-55)	HD-SDI	Serial Digital 75 Ω BNC 1ch
	Monitor HD-SDI	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1ch
	Q-TV	75 Ω VBS 1ch (2 nd Q-TV: factory option)
	AUX-Out	VBS signal 1ch (QTV-1, QTV-2 or Main video selectable by menu) * Available with FA-55 only * QTV-2 can not be selected if BS/CCU does not support 2ch of Q-TV
	DC-Out	+12V DC 500 mA
Dimensions / Weight	W 138.5 x H 270 x D 337 mm / approx. 4.5 kg (Head & Adaptor)	
Operating Temperature	-20°C to +45°C	
Relative Humidity	30% to 90% (non-condensing)	
Operating Voltage	DC +11 to 16V	
Power Consumption	Approx. 20W (without FA-55)	

HC-HD300



Newly developed 1/3-inch 3CMOS HDTV Camera HC-HD300 with the concept of "The Broadcast quality" following the highest picture quality, functionality and reliability of Ikegami's superb broadcasting top end camera UnicamHD HDK Series. HC-HD300 will be suitable for the usage at CATV/satellite broadcasting, educational and video production in enterprises.

Professional High Performance 3CMOS Full Digital Portable Camera

- 1/3-inch 2.5 Megapixel 3CMOS Sensor
- Sophisticated Picture Quality
- Supports 1080i & 720p 4:2:2 HDTV Formats
- Compact Docking Style Camera Body
- Full Compatibility with all Unicam HD Systems
- Flexible Integration: Neutrik optical CON DUO Connector for hybrid Cables

RATINGS/PERFORMANCE

Image Sensor	1/3-inch 2.5 Megapixel CMOS	
Scanning System	720p 50 / 59.94 YPbPr 4:2:2 / 1080i 50 / 59.94 YPbPr 4:2:2	
Optical System	1/3-inch, RGB prism, f 1.4	
Sensitivity	F10 (1080/59.94i) / F11 (1080/50i) typical at 2000lx	
S/N Ratio	58 dB (1080i)	
Limiting Resolution	1000 TV lines (1080i)	
ND Optical Filter Disc	ND 100%, 25%, 6,20%, 1,6%	
Electronic Colour Compensation	CC 3200K, 4300K, 6300K, 8000K	
Electronic Colour Compensation	variable	
Electrical Gain	-6 dB, -3 dB, 0 dB, +3 dB, +6 dB, +9 dB, +12 dB, +18 dB	
Electric Shutter	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000	
Transmission Interface FA-300	Neutrik optical CON DUO, maximum distance 250m	
Output Format (with FA-300 & BSF-300)	1080i 50 / 59.94 YPbPr 4:2:2	
Input Signals (FA-300)	External Sync	SYNC 0.6 V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS Signal)
	Audio	-60dB to +4dB (variable) / -20dB (fixed) XLR-3 CN 2 ch (600 Ω balanced)
	Intercom	ENG / PRD / PGM-1/2 XLR 7 or 5-pin
Output Signals (FA-300)	HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Monitor HD-SDI	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch
	Q-TV	75 Ω VBS 1 ch
	AUX-Out	VBS signal, BNC type 1 ch (Q-TV-1, Q-TV-2 or Main video selectable by menu)
	DC-Out	+12V DC 500 mA
Dimensions / Weight	W 138.5 x H 270 x D 337 mm (excluding VF), approx. 4.5 kg (Head & Adaptor)	
Operating Temperature	-20°C to +45°C	
Relative Humidity	30% to 90% (non-condensing)	
Operating Voltage	DC +11to16V	
Power Consumption	Approx. 13W (without FA-300)	



Neutrik Connector



PSU-300

RELATED ITEMS:

FA-55 | FA-300 | CA-75HD | BSF-55 | VFL-P700
VFL-200HD | BSH-300 | OCP-100/10

FA-97A



3G fibre adaptor for Unicam enables 1080 progressive, 1080/100i double speed and full colour 4:4:4 transmission.

3G HDTV Fibre Adaptor

RATINGS/PERFORMANCE

Input Signals	External Sync	SYNC 0.6Vp-p \pm 6 dB 75 Ω BNC CN 1 ch (BB / PS Signal)
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR CN 2 ch (600 Ω balanced)
	Video Trunk	Serial Digital 75 Ω BNC 1 ch (Option)
	Intercom	XLR Type or 110 Type CN 2 ch
Output Signals	3G-SDI/HD-SDI	Serial Digital 75 Ω BNC 1 ch
	Analog Video	R, G, B D-Sub CN 1 ch (For System Expander)
	Q-TV	VBS signal 1 ch
	HD Q-TV*	Serial Digital 75 Ω BNC 1 ch (Option)
	Monitor Video (1.5G)	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch or VF / RET / MON / HD Q-TV (MENU Selection) Serial Digital 75 Ω BNC 1 ch (Factory option) *Optional HD Q-TV (Trunk) module should be installed in CCU
	Intercom	0 dBs 4 ch (ENG / PROD / PGM1 / PGM2) XLR Type or 110 Type CN

RELATED ITEMS:

HDK-97ARRI
HDK-970A
HDK-97A
HDK-79GX
HDK-73
HDK-5500
CCU-980/M
CCU-970/M
BS-98

FA-55



1.5G transmission fibre adaptor for Unicam HD which make it possible to migrate HDTV environment by affordable cost.

HDTV Camera Fibre Adaptor

RATINGS/PERFORMANCE

Input Signals	External Sync	SYNC 0.6Vp-p \pm 6 dB 75 Ω BNC 1 ch
	Audio	-60dB to +4dB (variable) / -20dB (fixed) 2 ch (600 Ω balanced)
	Intercom	XLR Type or 110 Type CN 2 ch
Output Signals	HD-SDI	Serial Digital 75 Ω 1 ch
	Analog Video	R, G, B D-Sub CN 1ch (For System Expander)
	AUX-Out	VBS signal 1 ch (QTV-1, QTV-2 or Main video selectable by menu)
	Q-TV	VBS signal 1 ch
	Monitor Video	VF / RET / MON (MENU Selection) Serial Digital 75 Ω BNC 1 ch
	Intercom	0 dBs 4 ch (ENG / PROD / PGM1 / PGM2) XLR Type or 110 Type CN
	DC-Out	+12VDC 500 mA (max.) 4-pin type 1 ch

RELATED ITEMS:

HDK-79GX
HDK-73
HDK-5500
HC-HD300
CCU-980/M
CCU-970/M
BS-98
BSF-55

FA-300



1.5G transmission Fibre Adaptor for Unicam HD with limited cable length by affordable cost.

1.5G HDTV Affordable Fibre Adaptor

RATINGS/PERFORMANCE			
Transmission Interface		Neutrik optical CON DUO, maximum distance 250m	RELATED ITEMS: HDK-73 HC-HD300 BSF-300
Output Format	HDTV	1080i 50 / 59.94 YPbPr 4:2:2 / 720p 50 / 59.94 YPbPr 4:2:2	
	SDTV	576i 50 YPbPr 4:2:2 & 480i 59.94 YPbPr 4:2:2	
Input Signals	External Sync	SYNC 0.6Vp-p ±6 dB 75 Ω BNC type 1 ch	
	Audio	-60 dB to +4 dB (variable) / -20dB (fixed) XLR type 2 ch (600Ω balanced)	
	Intercom	XLR type or 110 type 2 ch	
Output Signals	HD-SDI	BNC type 1 ch	
	AUX-Out	VBS signal, BNC type 1 ch (QTV-1 or Main video selectable by menu)	
	Monitor Video	HD-SDI, BNC type 1 ch (VF, RET or Main video selectable by menu)	
	DC-Out	+12 VDC 500 mA (max.), 4-pin type 1 ch	

TA-97



Compression free analogue HD triax Transmission Adaptor for Unicam HD.

HDTV Analogue Triax Transmission Adaptor

RATINGS/PERFORMANCE				
Output Format		1080i or 720p (59.94 Hz or 50Hz)	RELATED ITEMS: HDK-97A HDK-79GX HDK-73 HDK-5500 CCU-980M CCU-970M	
Input Signals (with HDK-55)	External Sync	BB/PS 0.6Vp-p ±6 dB 75 Ω BNC CN 1 ch		
	Audio	-60 dB to +4 dB (variable) / -20 dB (fixed) XLR CN 2 ch (600Ω balanced)		
	Intercom	Intercom 2 ch XLR-5 or 7-Pin, ENG & PROD Line		
Output Signals (with HDK-55)	HD-SDI	BNC 1 ch		
	Analog Video	R,G,B D-Sub CN 1 ch (for System Expander)		
	Q-TV	VBS BNC 1 ch (Q-TV / Mon HD-Y video selectable)		
		Monitor Video		SDI BNC 1 ch (VF / RET / Main video selectable)
Transmission Length (Main Line / RET Signal)		75 m to 500 m diameter 9.2 mm by BELDEN 150 m to 1000 m diameter 13.2 mm by BELDEN 75 m to 750 m diameter 8.8 mm by FUJIKURA 150 m to 1350 m diameter 14.5 mm by FUJIKURA		

CA-75HD



Camera Adaptor for Unicam series HD camera.

Stand-alone Camera Adaptor

RATINGS/PERFORMANCE

Input Signals	External Sync	BNC x 1 (BB or 3 state SYNC)
	Audio	AUDIO IN XLR 3 pin x 2; LINE =+4 dB, MIC= -60 dB, +48 V on/off; Input level VR x 2; Input limiter on/off
	HD-SDI Return	BNC x 1
	Remote Control	8-pin remote control for Ikegami remote panels
	DC-Power	DC Power V mount plate x 2, DC in XLR 4 pin
Output Signals	HD-SDI	HD-SDI out x 2
	Audio	Embedded audio CH 1/2
	DC-Out	DC OUT +12 V XLR 4 pin (F) x 1 DC OUT +12 V mini 4-pin x 2 DC OUT 12 V CAMTAP x 1; USB 5 V 2 A x 2
Power Requirement		DC12V (10.8 to 18 V)
Ambient Temperature		-20°C to +45°C
Dimension / Weight		W 160 x H 235 x D 240 mm / 2.0 kg

RELATED ITEMS:

HDK-97ARRI
HDK-97A
HDK-79GX
HDK-73
HDK-5500
HC-HD300

WA-97



WA-97 is a full integrated wireless camera adaptor for Unicam HD. COFDM technology and Diversity reception enables multi-path free, stable & reliable communication. Bi-directional remote control communication ensures complete and rugged remote operation. Genlock junction between receiving-basestation and camera head ensures a steady and low latency at any time. Optional build in hassle free 2-Way intercommunication possible.

Radiocam HDTV Wireless Adaptor for Unicam HD

- DVBT compliant, COFDM 2k Standard
- Genlock Transmission
- MPEG2 4:2:2P@ML/HL - H.264 optional
- Low Latency; Full Remote Control

RATINGS/PERFORMANCE

Applicable Cameras	HDK-97ARRI, HDK-97A/C, HDK-79GX & HDK-55
Transmission Frequency	1.95 GHz - 2.65 GHz, 3.5/5/7 GHz band optional
EIRP	Selectable output power 10 - 100 - 400 mW as standard. Different power radiation upon request.
Encoding	MPEG-2 SP@HL 4:2:2, H.264 optional
Modulation	COFDM, DVB-T (8 MHz, 2 k Mode) QPSK/16 QAM/64 QAM, Guard interval
Transmission Range	500 m with standard setup and components
Remote Control Receiver	UHF (433 / 434 MHz or 455 / 465 MHz), other bands upon request
Intercom Receiver	Red on air tally - Green flashing warning tally
Tally	W 125 x H 270 x D 337 mm
Battery Clip	IDX V-Mount, different mounts on request
Weight	Approx. 9 kg (with HDK-97A Head)

RELATED ITEMS:

HDK-79GX
HDK-97A
HDK-73
HDK-5500
BSW-970
ODU-890
IDU-890

BSF-55



Description?

The BSF-55 is newly designed in compact size of 1.5 RU height with 19 inch rack mount width, transmitting uncompressed high quality pictures. HDTV (1080i 50/60, 720p 50/60, 1080p 50/60) and SDTV (625i 50, 575i 60) formats are supported simultaneously in both, digital and analogue domain.

HDTV Fibre Base Station

RATINGS / PERFORMANCE

Input Signals	Genlock	PS 1Vp-p or Tri-level / 75Ω bridged / VBS / BBS 75Ω bridged VBS / BBS 75Ω bridged	
	Return Video	BNC 2 ch single end input SDI & BNC 2 ch single end input VBS	
	Q-TV	VBS BNC 1 ch	
	Intercom	Select from 4-wire / Clearcom / RTS	
	PGM Sound / Tally	2-LINE / R, G	
Output Signals	HD/SD-SDI	BNC 4 ch - 4xHD or 2xHD & 2xSD or 4xSD	
	VBS	BNC 2 ch	
	PM	HD / SD-SDI	BNC 1 ch Select from HD / SD
		SD	BNC 1 ch Select from R, G, B, Y, VBS
	WFM	BNC 1 ch Select from HD-SDI / SD-SDI	
	Intercom	Select from 4-wire / Clearcom / RTS	
	MIC	0 dBs / +4 dBs 2 ch Low impedance	
	Tally	R, G	
Dimensions / Weight	W 483 x H 66.4 x D 405 mm / approx. 7 kg		

RELATED ITEMS:

HDK-97ARRI
HDK-970A
HDK-97A
HDK-790GX
HDK-79GX
HDK-73
HDK-5500
FA-55

BSF-300



The BSF-300 is newly designed affordable Base Station transmitting uncompressed high quality pictures over short distances. HDTV (1080i 50/60, 720p 50/60, 1080p 50/60) and SDTV (625i 50, 575i 60) formats are supported simultaneously in both, digital and analogue domain.

Affordable HDTV Fibre Base Station

RATINGS / PERFORMANCE

Output Format	HDTV	1080i 50/59.94 YPbPr 4:2:2/720p 50/59.94 YPbPr 4:2:2
	SDTV	576i 50 YPbPr 4:2:2 & 480i 59.94 YPbPr 4:2:2
Input Signals	Genlock	PS 1Vp-p or Tri-level/75Ω bridged VBS/BBS 75Ω bridged
	Return Video HD/SD	BNC 2 ch Select from HD-SDI / SD-SDI
	Return Video SD (Opt.)	BNC 2 ch VBS
	Q-TV	BNC 1 ch VBS
	Intercom	Select from 4-wire / Clearcom / RTS
	PGM / Tally	2-LINE / R, G
Output Signals	3G / Dual link / HD-SDI	BNC 4ch - 4 x HD or 2 x HD & 2 x SD or 4 x SD
	SD-SDI (option)	BNC 2 ch
	PM	BNC 1 ch Select from HD-SDI / SD-SDI / VBS
	WFM	BNC 1 ch Select from HD-SDI / SD-SDI
	Intercom	Select from 4-wire / Clearcom / RTS
	MIC	0 dBs / +4 dBs 2 ch Low impedance
	Tally	R, G
	Dimensions / Weight	W 483 x H 66.4 x D 405 mm / approx. 7 kg

- Neutrik optical CON DUO fibre 1.5G Transmission
- Maximum Distance 350 m
- Single fibre Mode up to 10 km
- HD/SD/VBS Return Video x 4
- BBS or Tri-Level Genlock
- Compression and delay free Technology
- Low Voltage Power Transmission

RELATED ITEMS:

HDK-73 | HD-HC300 | FA-300

CCU-980/M **4K**



The CCU980 is a full rack size Hybrid 4K Camera Control Unit. It supports not only Ikegami's conventional one-by-one ICCP control or Arcnet based network control systems, but also an Ethernet based control systems, allowing customers to choose the camera control system based on their needs. CCU980M is capable for HD triax transmission to work with Unicam HD (+TA-97).



RELATED ITEMS FOR CCU-980:

HDK-97ARRI | HDK-970A | HDK-97A | HDK-790GX | HDK-79GX
HDK-5500 | FA-97A | FA-55 | BS-98

RELATED ITEMS FOR CCU-980M:

HDK-97A | HDK-79GX | HDK-73 | HDK-5500 | TA-97 | FA-97A | FA-55

Hybrid 4K Camera Control Unit

- Support of 3G-SDI/HD-SDI/SD-SDI
- Frame Synchronizer for Return Signal
- 4 channels of Return Video Input
- Embedded Audio available as Standard
- Ethernet Port available

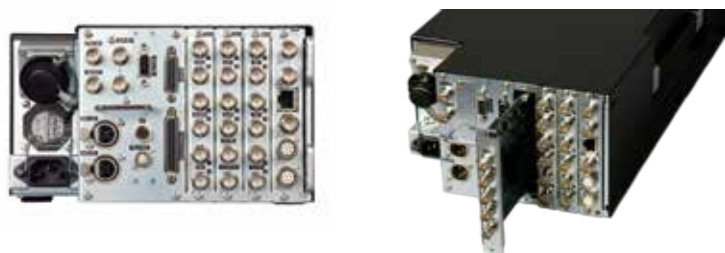
RATINGS / PERFORMANCE

Input Signals	Genlock	Tri-level sync or BBS 75 Ω BNC x2 (Loop Through), (HDTV/SDTV automatic detection), SUB REF: 10 Field ID 75 Ω BNC x2 (Loop Through)	
	Return Video	3G / HD / SD-SDI BNC 4 ch single end input 2 ch Active-Through (Menu Selection)	
	Q-TV	SD	VBS BNC 2 ch
		HD	HD-SDI BNC 1 ch
	Intercom	Select from 4-wire / Clearcom / RTS	
	PGM Sound	2-LINE	
	Audio Trunk	Option	
Tally	R, G, Y		
Output Signals	3G/Dual Link/HD-SDI	BNC 4 ch / Select from 3G-SDI / DUAL-LINK / HD-SDI	
	4K	1920 x 1080 Progressive Square Division 3G/HD-SDI 75 Ω BNC 4 ch	
	Sync. Signal	BNC 1 ch select from HDTV (tri-level 0.6Vp-p) / SDTV (HV 2Vp-p)	
	Trunk Video-Out	HD-SDI BNC 1 ch (only in 1.5G mode)	
	Intercom	Select from 4-wire / Clearcom / RTS	
	MIC	0 dBs standard 2 channels Low impedance	
	Tally	R, G, Y	
Dimensions / Weight	W 483 x H 133 x D 454 mm / approx. 28 kg		

BS-98



The BS-98 is a half rack size Hybrid 4K Base Station. It supports not only Ikegami's conventional one-by-one ICCP control or Arcnet based network control systems, but also an Ethernet based control system, allowing customers to choose the camera control system based on their needs.



Hybrid 4K Base Station

- Support of 3G-SDI/HD-SDI/SD-SDI
- Frame Synchronizer for Return Signal
- 4 channels of Return Video Input
- Embedded Audio available as Standard
- Ethernet Port available

RATINGS / PERFORMANCE

Input Signals	GENLOCK	Tri-level sync or BBS 75 Ω BNC x2 (Loop Through), (HDTV /SDTV automatic detection), SUB REF: 10 Field ID 75 Ω BNC x2 (Loop Through)	
	Return Video	3G / HD / SD-SDI BNC 4 ch single end input 2 ch Active-Through (Menu Selection)	
	Q-TV	SD	VBS BNC 2 ch
		HD	HD-SDI BNC 1 ch
	Intercom	Select from 4-wire / Clearcom / RTS	
	PGM Sound	2-LINE	
Audio Trunk	Option		
Tally	R, G, Y		
Output Signals	3G/Dual Link/HD-SDI	BNC 4 ch / Select from 3G-SDI / DUAL-LINK / HD-SDI	
	4K	1920 x 1080 Progressive Square Division 3G/HD-SDI 75 Ω BNC 4 ch 3G/HD-SDI 75ΩBNC 4ch	
	Sync. Signal	BNC 1 ch Select from HDTV (tri-level 0.6Vp-p) / SDTV (HV 2Vp-p)	
	Trunk Video	HD-SDI BNC 1 ch (Only in 1.5 G mode)	
	Intercom	Select from 4-wire / Clearcom / RTS	
	MIC	0dBs standard 2 channels Low impedance	
	Tally	R, G, Y	
Dimensions / Weight	W218 x H 125 x D457 mm / approx. 9 kg		
Power Consumption	approx. 110VA (CCU only)		

RELATED ITEMS:

HDK-97ARRI | HDK-970A | HDK-97A | HDK-790GX | HDK-79GX
HDK-73 | HDK-5500 | FA-97A | FA-55 | CCU-980

VFE-740HD



The VFE-740HD is a OLED Colour Viewfinder, employing a 7.4-inch QHD OLED Panel, achieving high resolution, high brightness, high contrast and wide viewing angle. Its true colour reproduction and fine gradation provide optimum monitoring. Especially its superb quick motion response is helpful when shooting sports etc.

7.4-inch Multi-Format OLED Viewfinder

- Multi-Format 3G high grade OLED
- Perfect viewing Angle
- Moiré free QHD Resolution
- Latency free Response
- Dot-by-Dot Function

RATINGS / PERFORMANCE

Power Supply	DC12V (DC +10.5V ~ +18 V) 18 W
Ambient Humidity	20 % to 85 % (non-condensing)
Dimensions / Weight	W235 x H143.5 x D76.5 mm - 1.5 kg (VF body + cable)
Input Signals	Analog RGB / YPbPr signal (VF Cable) / 3G & 1.5G HD-SDI BNC x1 - 75 Ω
Screen	132.76 mm x 74.80 mm OLED H960 x V 540
Screen Brightness	350 cd / m ² or more
Colour	1.07 Billion (RGB 10 bit / ea)
Contrast Ratio	100000:1 (typical)
Angle of Visibility	Up-and-Lower 176°, Right-and-Left 176°

RELATED ITEMS:

HDK-97ARRI
HDK-970A
HDK-97A
HDK-790GX
HDK-79GX
HDK-73
HDK-5500
SE-H750

VFL-P700



VFL-P700 is a Multi-Format HDTV Viewfinder in compact, small and light weight design. It employs a 7-inch LCD Panel with 800 by 480 dots achieving high contrast, high quality and good angle of view.

7-inch Multi-Format LCD Viewfinder / Monitor

- Multi-Format Support
- De-Embedded analogue Audio Output
- Vectorscope / Waveform Display
- HD-SDI / SD-SDI Input and Output
- Dot-by-Dot Function
- Various Display Marker

RATINGS / PERFORMANCE

Power Supply	DC 12 V to 12 W
Ambient Humidity	30 % to 85 % (non-condensing)
Dimensions / Weight	W 195 x H 153 x D 50 mm - 1 kg (VF body + cable)
Input Signals	YPbPr signal BNC x 3 / HD / SD-SDI BNC x 2 - 75 Ω
Screen	152.4 (H) x 91.4 (V) mm - 800 (H) x 480 (V) dot
Tally Input	TALLY IN 1: G/R - TALLY IN 2: R only
MON Speaker	Build-in x 1
Audio Output	XLR 3-pin (Male) x 2 - Output level : -20 dBu
Headphone Output	Ø6.3 Stereo Jack x 1

RELATED ITEMS:

HDK-97ARRI
HDK-97A
HDK-79GX
HDK-73
HDK-5500
SE-H750

VFL-200HD



VFL-200HD is a 2-inch LCD Viewfinder developed for the Unicam HD Camera Series. The Viewfinder uses a QHD LCD Panel with the resolution of 960 horizontal pixels and 540 vertical pixels, and allows full colour and high resolution video monitoring. The Viewfinder is compatible with the functions and operations of the obsolete Ikegami 2-inch CRT Viewfinder. It adds new features identically to the large colour LCD Viewfinder range.

2-inch Multi-Format Colour LCD Viewfinder

- Compact and high Resolution Viewfinder
- QHD 960 x 540 LCD Panel
- Highest Image Quality
- Input Signal Format auto Detection
- Build-in Heater for the Operation in low Temperature Condition
- Dot-by-Dot Display
- Peaking Function
- Various Marker Functions

RATINGS / PERFORMANCE

Power Supply	DC12V (DC10.5 to 18V) 4.1 W
Temperature / Humidity	-20°C to 45°C / 90% or less (non-condensing)
Dimensions / Weight	W 15 mm x H 7 mm x D 56 mm - 670 g
Input Signals	Analogue YPbPr signal (VF Cable) - 75 Ω
Screen	2-inch TFT active matrix Non-interlace / 960 (H) X 540 (V)
Brightness / Contrast	220 cd/m ²
Contrast Ratio	250 : 1
Colour Depth	TN 16.777.216
Viewing Angle	Vertical 70° and horizontal 70°

RELATED ITEMS:

- HDK-97ARRI
- HDK-97A
- HDK-79GX
- HDK-73
- HDK-5500

Unicam with VFE-740HD



Unicam with VFL-P700



Unicam with VFL-200HD



SE-H750



The SE-H750 System Expander enables the use of large Viewfinders and full studio lenses with the entire Unicam HD range. It converts HDK-97A, HDK-79GX, and HDK-55 into a full facility Studio Camera. Installing a Camera into the SE-H750 is very easy and hassle free due to the movable Viewfinder attachment. Cable is unnecessary for connection, it's all part of the highly sophisticated mechanisms.



RELATED ITEMS:

HDK-97A | HDK-79GX | HDK-73 | HDK-5500

State-of-the-Art System Expander

- Newly developed cable less Structure
- No optical Axis Error
- Portable Lens also can be attached

RATINGS / PERFORMANCE

Utility Power Output	Power for script lighting	DC 12V 0.5A
	Power for miscellaneous use (with CCU-970/M)	AC 220V 1.0A
	Power for lens	DC 12V 3.0A
Output Signals	VF VIDEO	1.0Vp-p 75Ω, 1 ch or 3 ch
	Ambient Temperature	-20°C to +45°C
	External Dimensions	W 403 ±5 x H 279.5 ±5 x D 333 mm
	Weight	16.5 kg (incl. Lens supporter)



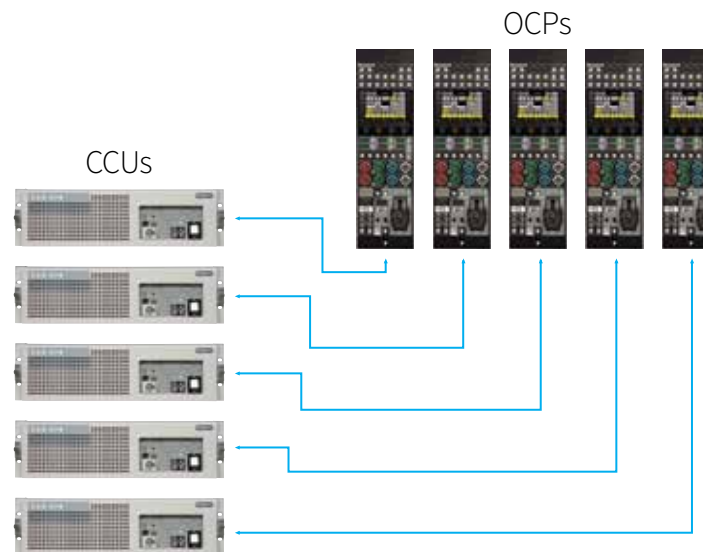
OCP-300



Three different control architectures are supported by the new OCP-300 Operation Control Panel and BSH-300 Ethernet / ICCP command converter, each with a wide range of camera control capability. The OCP-300 supports not only Ikegami's conventional one-by-one ICCP control and Arcnet based control systems, but also an Ethernet based control system, allowing customers the flexibility to choose the camera control system based on their needs. The OCP-300 includes a touch screen LCD with rotary encoders, and SD Memory Card slot for full camera setup and filing capability. The control depth feature allows the selection of basic, complete and customized operating access. The OCP-300 also supports PoE, powering over Ethernet, so separate power supplies are not necessary. The BSH-300 is used for converting command between Ethernet and ICCP, allowing previous control panels such as the OCP-200 and MCP-200, to be integrated into the Ethernet network system.

Ethernet Capable Operation Control Panel

- New control Panel System
- Ethernet/Arcnet/ICCP Multi-Network Control System
- Supports up to 48 total Cameras
- Touch Screen LCD Panel Interface
- POE + Support (require POE + HUB)
- Can also be setting for conventional One-by-One Camera Control



Ethernet or ICCP Connection

RELATED ITEMS:

UHK-430 | HDK-97ARRI | HDK-970A | HDK-97A
 HDK-790GX | HDK-79GX | HDK-73 | HDK-5500 | HDL-45E | HDL-F30
 HDL-23 | HDL-4500 | BSW-970

RATINGS / PERFORMANCE

Dimensions	102 x 354 x 129 mm / 4.0 x 13.9 x 5.1-inch, include joystick knob
Weight	1,5 kg (3.3 lbs) approx.

BSH-300

OCP-300



BSH-300



(Type A)
up to 6 OCP



(Type B)
up to 6 BS



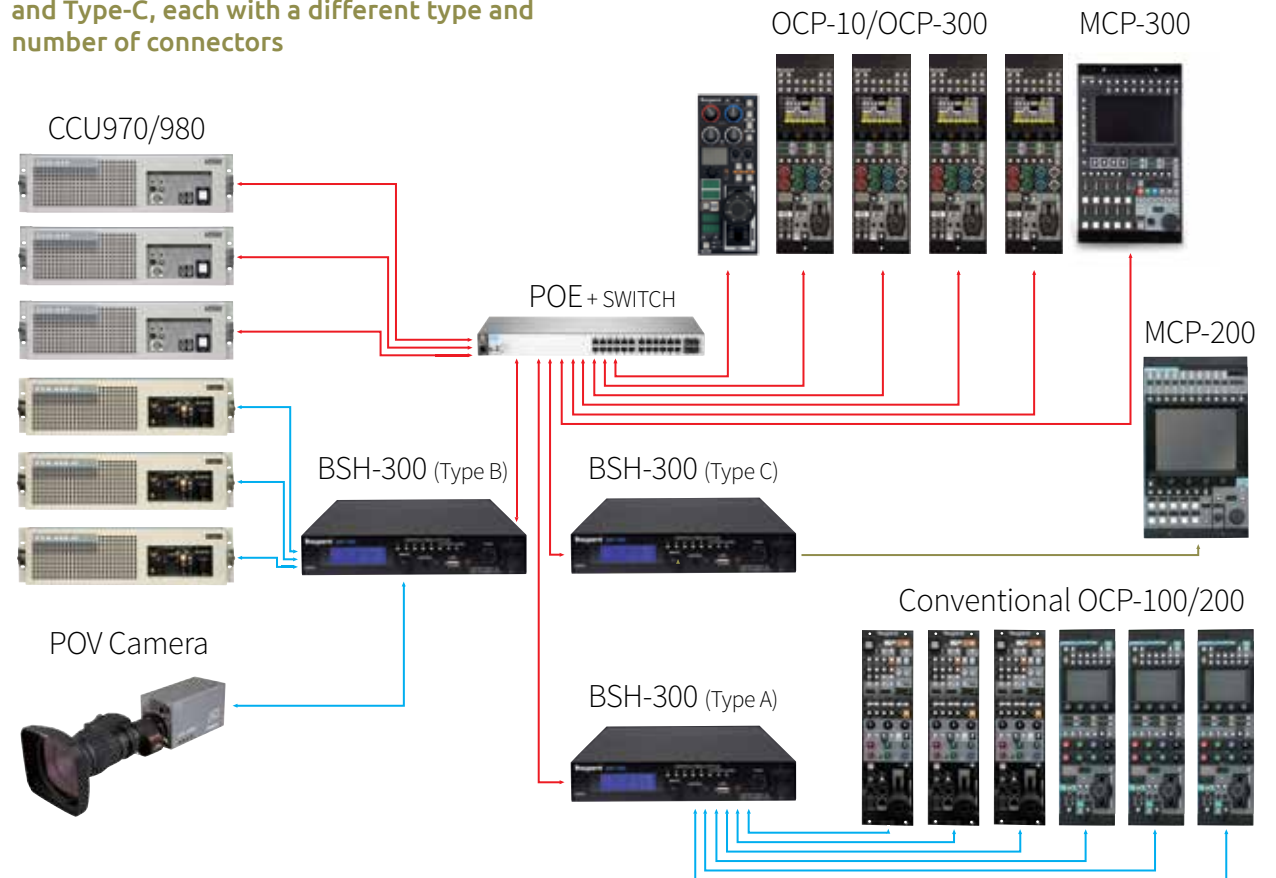
(Type C)

Three different control architectures are supported by the new OCP-300 Operation Control Panel and BSH-300 Ethernet/ICCP command converter, each with a wide range of camera control capability. The OCP-300 supports not only Ikegami's conventional one-by-one ICCP control and Arcnet based control systems, but also an Ethernet based control system, allowing customers to choose the camera control system flexibly based on their needs. The OCP-300 is equipped with a touch screen LCD with rotary encoders, and SD Memory Card slot for full camera set-up and filing capability. The control depth feature allows the selection of basic, complete and customized operating access. The OCP-300 also supports PoE, powering over Ethernet, so separate power supplies are not necessary. The BSH-300 is used for converting command between Ethernet and ICCP, allowing previous control panels such as the OCP-100 and MCP-200 to be integrated into the Ethernet network system.

Sophisticated Camera Control Panel System

- Ethernet/Arcnet/ICCP Multi-Network Control System
- Supports up to 48 total Cameras
- Touch Screen LCD Panel Interface
- POE+ Support (require POE+ HUB)
- Conventional One-by-One Camera Control Support
- Joystick and VR Type available
- Multi Camera Operation Option

There are three types of BSH-300: Type-A, Type-B and Type-C, each with a different type and number of connectors



BSH-/CPH-200E

ARCNET based Network Control Panel & Base Station Hub



- Arcnet Support with Redundancy
- 8-Control Panel Ports
- 6CCU/Base Station Ports
- Daisy Chain coaxial Network up to 500 m



RATINGS/PERFORMANCE

Power (BSH)	AC 100 to 240V 1.5 to 0.8A /60Hz
Operating Temperature	0°C to +45°C
Storage Temperature	-25°C to +60°C
Ambient Humidity	30% to 90% (non-condensing)
External Dimensions	W 217 x H 38.6 x D 400 mm
Weight	2.6 kg

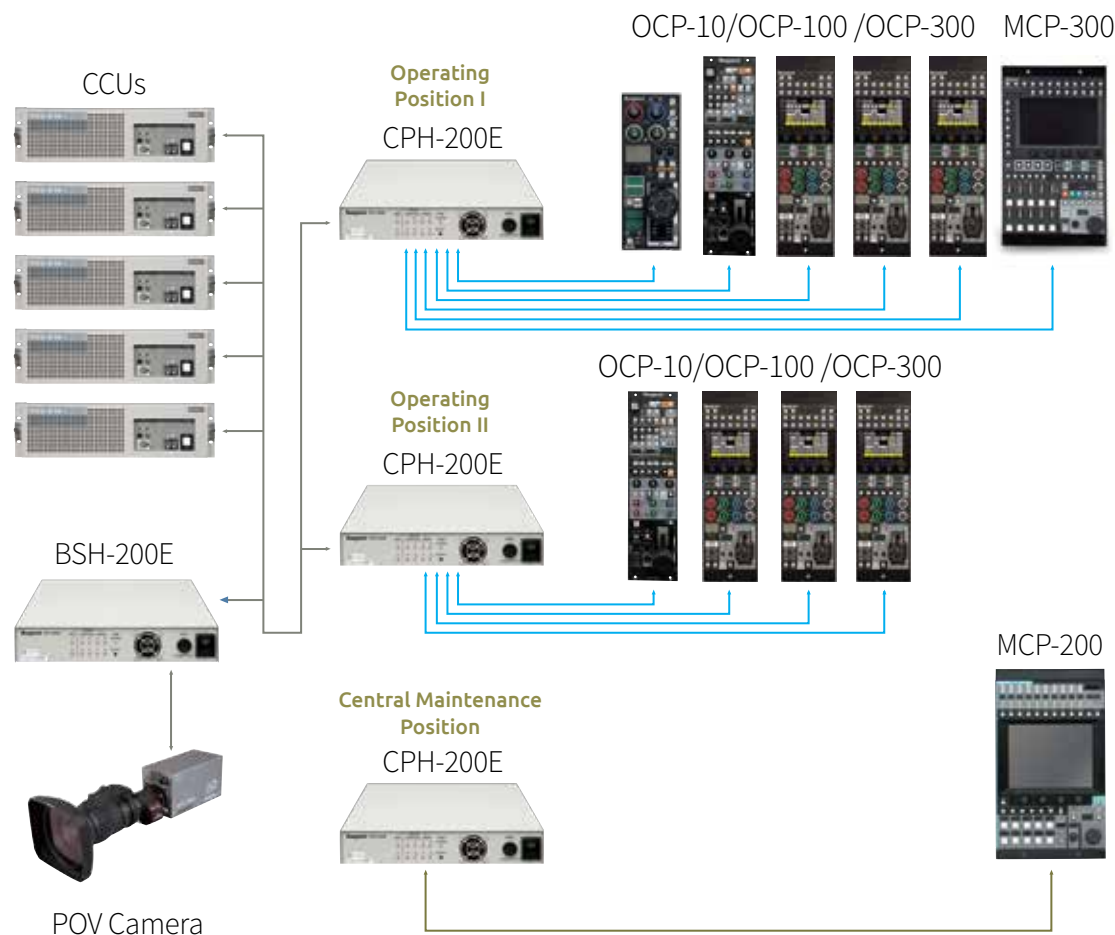
RATINGS/PERFORMANCE

Power (CPH)	AC 100 to 240V 1.5 to 0.8A 50/60 Hz (The power supply to the control panel is contained)
Operating Temperature	0°C to +45°C
Storage Temperature	-25°C to +60°C
Ambient Humidity	30% to 90% (non-condensing)
External Dimensions	W 217 x H 38.6 x D 400 mm
Weight	2.8 kg

CPH-200E/BSH-200E

ARCNET/ICCP Command Converter

- Coax Cable
- CP Cable
- MCP Cable
- LAN Cable



ARCNET BASED CAMERA CONTROL SYSTEM

MCP-300



The MCP-300 is a newly designed network master control panel for use with not only Ikegami conventional ICCP control and Arcnet based control, but also Ethernet based control, allowing customers the flexibility to choose the camera control system based on their needs. As a master control panel, it provides simultaneous operation for up to 10 cameras, moreover up to 100 cameras can be selected (10 cameras x 10 groups). The MCP-300 also supports PoE, Powering over Ethernet, so a separate power supply is not necessary.

Network Master Control Panel

- Ethernet / Arcnet / ICCP Multi-Network Control System
- Large Touch Screen LCD
- Illuminated Control Panel
- User Customize Functions
- Character Output Function (Option)

RATINGS / PERFORMANCE

Power Requirement	DC+12V (+10 to +18V)
Power Consumption	13W (Standard)
Cable Length (max.)	10m (MCP Cable without DC IN) 30m (MCP Cable with DC IN) 100m (LAN Cable, CAT5e or higher)
Operating Temperature	0°C to +45°C (+32°F to +113°F)
Storage Temperature	-25°C to +60°C (-13°F to +140°F)
Operating Humidity	30% to 90% (non-condensing)
Dimensions	W204 x H354 x D79.4 mm (W8.03 x H13.94 x D3.13 inch)
Weight	Approx. 2.6 kg (5.73 lbs)

RELATED ITEMS:

UHK-430
HDK-97ARRI
HDK-970A
HDK-97A
HDK-790GX
HDK-79GX
HDK-73

MCP-200



The MCP-200 is a Arc-net based control panel system offered as an alternate to the traditional Ikegami style control panels. The Arc-net system allows any OCP-200 to control any camera with assignment set at the OCP itself. System wiring is simplified with control of up to 96 cameras via a single coax cable between CCU locations and video control locations.

ARCNET based Network Master Control Panel

- Arcnet/ICCP Multi-Network Control System
- Supports up to 96 total Cameras
- 7,5-inch Large Touch Screen LCD Panel Interface
- conventional One-by-One CSU Support

RATINGS / PERFORMANCE

Power Consumption	+11 V to +16 V
Operating Temperature	0°C to +45°C
Storage Temperature	-25°C to +60°C
Ambient Humidity	30% to 90% (non-condensing)
External Dimensions	W 204 x H 354 x D 83.2 mm
Weight	Approx. 2.4 kg

RELATED ITEMS:

UHK-430
HDK-97ARRI
HDK-970A | HDK-97A
HDK-790GX | HDK-79GX
HDK-73

OCP-100



Conventional Operational Control Panel

- Traditional Control Conception (ICCP)
- Direct button Operation
- Single Cable Connection with Power Supply
- Dedicated to operate HDK-79GX & HDK-55
- New Functionality like variable Colour Temperature

RELATED ITEMS:

HDK-79GX | HDK-5500 | HC-HD300
BSW-970
HDL-F30 | HDL-23 | HDL-4500 | HDK-73

RATINGS / PERFORMANCE

Voltage	DC +11 to +16 V rating DC +12 V
Wattage	Approx. 3.2 W
Dimensions (WHD)	92.2 x 177.5 x 355.5 mm
Weight	Approx. 2.1 kg

MCP-170



Conventional Master Control Panel

- Traditional Control Conception (ICCP)
- Direct button Operation
- Single Cable Connection with Power Supply
- For control up to 40 Cameras

RELATED ITEMS:

BSW-970

RATINGS / PERFORMANCE

Power Supply Voltage	+12V (+11V to +16V)
Operating Temperature	0°C to +45°C
Operating Humidity	30% to 90%
Dimensions	W182 x H341 x D55 mm
Weight	Approx. 1.7 kg

CSU-110



Conventional Camera Select Unit

- Traditional Control Conception (ICCP)
- 8 Ports per Unit
- Cascading for up to 40 Camera Control
- Video Router Capability

RATINGS / PERFORMANCE

Power Supply Voltage	AC 100V to 240V 0.3 to 0.2A 50 Hz/60 Hz
Power Consumption	Approx. 25VA (when operating 1 MCP)
Operating Temperature	0°C to +45°C
Operating Humidity	30% to 90%
Dimensions	W 483 x H 88 x D 472 mm
Weight	Approx. 11 kg

OCP-10

OCP-10 is a Miniature Operational Control Panel with essential functions for basic camera operation in a smart shape. It utilizes direct ICCP connection as well as Ethernet network support (optional). Whenever size matters, OCP-10 is the perfect fit.



Rear connectors

Network Miniature Operational Control Panel

- Small, compact, light weight
- Essential Camera Controls
- Tally In/Out
- ICCP & Ethernet Connection (optional)
- Full Menu Access

RATINGS / PERFORMANCE

Power Requirements	DC +9.0 to +18.0V (nominal DC +12V) approx. 5.5W
Temperature/Humidity	0°C to +40°C / 30% to 90% (non-condensing)
Dimensions/Weight	W 60 x H 160 x D 160 mm / approx. 950 g
Switches	Menu, Function 1, Function 2, Scene File, Knob Free, ABB, AWB, Call, Auto Iris, Iris Full, Enable
Controls	R & B Gain, Function Control 1 & 2, Function Select, Master Pedestal, Iris, Iris Range, Iris Sensitivity

RM-51A

The RM-51A is a remote controller with essential functions for basic camera operation in a compact shape.



ICCP Miniature Remote Controller

- Small, compact, light weight
- Essential Camera Controls
- Menu Access
- Tally In/Out
- ICCP Connection

RATINGS / PERFORMANCE

Power Requirements	DC +9.0 to +18.0V (nominal DC +12V), approx. 3.6W
Temperature/Humidity	0°C to +40°C / 30% ~ 90% (non-condensing)
Dimensions/Weight	W 90.7 x H 76.9 x D 151 mm / approx. 450 g
Switches	Menu, Digital Extender, Scene File, Black Stretch, ABB, AWB, AVC, Auto Iris, Filter Hold, Bar
Controls	R & B Gain, DTL, R-G-B-Master Flare or R-G-B Pedestal, Master Pedestal, Iris

HDL-45E/E1



3CCD Multiple-purpose HDTV Camera System

- 2/3-inch 2.3 Megapixel AIT CCD
- 14-Bit A/D Conversion
- Low Noise Gain up
- Built-in Servo Filter / ECC (Electronic Colour Compensation) Filter
- Fully compatible with Unicam HD Product Range
- Advanced Full Digital Processing ASIC
- Light weight and compact
- ATW (Auto Tracking White balance) Function
- Digital Extender
- AVC (Auto Video Level Control) Function
- 23.95/24psF optionally available (HDL-45E1)

The HDL-45E/E1 is a 3CCD multi-purpose HDTV Camera achieving superb picture quality, high stability and excellent reliability with the incorporation of Ikegami's cutting edge digital technologie. The Camera provides superior picture with newly developed 2/3-inch 2.3 Megapixel AIT CCD, digital processing LSI (ASIC) and the latest 14-bit A/D Converters. With its compact one-piece form, this Camera is suitable for various applications such as a weather camera, news flash camera, POV camera, etc. The HDL-45E1 adds support for the 1080/24psF and 1080/23.98psF formats.

RATINGS / PERFORMANCE

Image Sensor		2/3-inch, 2.3 Megapixel AIT CCD
Scanning System	HDL-45E	1080i 50 / 59.94 YPbPr 4:2:2, 1080 psF 25 / 29.97 YPbPr 4:2:2
	HDL-45E1	1080i 50 / 59.94 YPbPr 4:2:2, 1080 psF 25 / 29.97 YPbPr 4:2:2, 1080 p 24 / 23.98 YPbPr 4:2:2
Optical System		2/3-inch, RGB 3CCD, F1.4
Sensitivity		F11 (1080/59.94i), F12 (1080/50i) typical at 2000 lx
S/N Ratio		56 dB (1080i)
Limiting Resolution		1000 TV lines (1080i)
ND Optical Filter Disc		100 %, 25 %, 6.2 %, 1.6 %
Electrical Colour Compensation		3200 K / 5600 K selectable
Electrical Gain		-6,-3, 0, +3,+6,+9,+12,+18,+24,+30,+36,+42,+48,+54 dB -6,-3, 0, +3,+6,+9,+12 dB for 1080 psf
Electrical Shutter		1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Accumulation		1/15, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2, 1 s, 2 s, 4 s
External Sync		SYNC 0.6V p-p ±6 dB 75 Ω BNC CN 1 ch (BB / PS Signal)
Output Signals (Digital)		HD-SDI × 2 ch (SMPTE 292 M, 75 BNC Connector, UP CN BOX type: 1 ch)
Output Signals (Analog)		G,B,R / Y,Pb,Pr selectable 1 ch (Multi-pin Connector)
Dimensions / Weight		W90 x H103 x D180 mm / approx. 1.7 kg
Operating Temperature		-10°C to +45°C
Relative Humidity		30% to 90% (non-condensing)
Storage Temperature		-20°C to +60°C
Operating Voltage		DC+11 to +16V
Power Consumption		Approx. 22W



Example of application

RELATED ITEMS:

BSH-300 | OCP-300/100/10 | RM-51A

HDL-4500



Super High Sensitivity 3CMOS HDTV Camera System

- Sensitivity: F22 / 2000 lux (S/N: 56 dB)
- Advanced Full Digital Processing LSI (ASIC)
- Built-in Servo Filter / ECC (Electronic Colour Compensation) Filter
- Colour Corrector + Custom Colour Effect
- Two HD-SDI Outputs
- Full Remote Control
- ATW (Auto Tracking White balance) Function
- Digital Extender
- Frame Accumulation
- Column Adding
- ENG Style Operation (Option)
- AVC (Auto Video Level Control) Function

The HDL-4500 is a three CMOS Camera, belonging to Ikegami's leading camera and digital technology, achieving super high sensitivity and a high quality picture. 1.3 Megapixel High-speed Multi-sampling type super high sensitivity CMOS Sensor allows sufficient sensitivity for shooting without using any lights even under moonlight conditions. With its compact one-piece form, the camera is suitable for various POV applications such as a traffic and weather camera, as well as a wide range of surveillance applications.

RATINGS / PERFORMANCE

Image Sensor	2/3-inch, 1.3 Megapixel CMOS
Scanning System	1080i 50 / 59.94 YPbPr 4:2:2
Optical System	2/3-inch, RGB 3CMOS, F 1.4
Sensitivity	F22 or more at 2000 lx at 2000 lx
S/N Ratio	56 dB (1080i)
Limiting Resolution	700 TV lines (1080i)
ND Optical Filter Disc	100 %, 25 %, 6.2 %, 1.6 %
Electrical Colour Compensation	3200K / 5600K selectable
Electrical Gain	0dB, -6dB, 0dB, 6dB, 12dB, 18dB, 24dB, 30dB, 36dB, 42dB, 48dB, 54dB, 60dB, 66dB, 72dB, 78dB
Electrical Shutter	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Gamma	OFF, 0.35, 0.40, 0.45
Minimum Illumination	0.001 lx (theoretical value) / F 1.4 +78 dB [gain up, 100 % video level]
Digital Extender	1.5X, 2X, 3X, 4X, 6X, 8X, 10X
External Sync	SYNC 0.6V p-p ±6dB 75 Ω BNC CN 1 ch (BB / PS Signal)
Output Signals (Digital)	HD-SDI × 2 ch (SMPTE 292M, 75 BNC Connector, UP CN BOX type: 1 ch)
Output Signals (Analog)	G,B,R / Y,Pb,Pr selectable 1ch (Multi-pin Connector)
Dimensions / Weight	W90 x H 103 x D 180 mm / approx. 1.8 kg
Operating Temperature	-10°C to +45°C
Relative Humidity	30 % to 90 % (non-condensing)
Storage Temperature	-20°C to +60°C
Operating Voltage	DC+11 to +16V
Power Consumption	18W or less



Example of application

RELATED ITEMS:

BSH-300 | OCP-300/100/10 | RM-51A

HDL-F3000



Ultra Low-light Multi-Purpose Compact Camera

- Extreme Starlight Vision
- Clear Image
- Multi format
- Quality Picture under any Illumination
- Compact & Light Camera Head

The HDL-F3000 is a high sensitivity compact two-piece separate optics camera for gyro-stabilized gimbal applications. Equipped with 2/3-inch 2.6 megapixel CMOS sensors, it achieves a minimum illumination of 0.007 lux, with image enhancement features that include haze removal, backlight comp, and digital zoom. The HDL-F3000 operates in 1080i, 720p, and 30p formats. Equipped with 2/3-inch 2.6 megapixel CMOS sensors, it achieves a minimum illumination of 0.0068 lux, with image enhancement features that include haze removal, backlight comp, and digital zoom (0.000057 lx with frame accumulation ON).

RATINGS/PERFORMANCE

Image Sensor		Three 2/3-inch 2.6million pixel CMOS
Scanning System		1080/59.94i, 1080/50i, 1080/29.97psF, 1080/25psF, 720/59.94psf, 720/50p
Lens Mount		BTA S-1005B
Electronic Colour Compensation		3200 / 4300 / 6300 / 8000K
Operating Temperature	Camera Head	-20 °C to +45 °C
	CCU	-10 °C to +45 °C
Storage Temperature	Camera Head	-30 °C to +60 °C
	CCU	-20 °C to +60 °C
Dimensions	Camera Head	W 100 x H 123 x D 80 mm
	CCU	W 120 x H 105 x D 180 mm
Weight	Camera Head	Approx. 1.0kg
	CCU	Approx. 1.5kg
S/N Ratio		64dB or more(1080/59.94i with NR ON)
Limiting Resolution		1000 TV lines
GAIN		-6,-3, 0,+3,+6,+9,+12,+18,+24,+30,+36,+42,+48,+54,+60,+66,+72dB
GAMMA		OFF, 0.35, 0.40, 0.45
Electronic Shutter		1/100, 1/120, 1/250, 1/500,1/1000, 1/2000, 1/4000, 1/10000(Variable Shutter available)
Frame Accumulation		1/30, 1/15, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2, 1, 2
Digital Extender		x1.1 to 10.0
Power Consumption	Camera Head	Approx. 9.8W
	CCU	Approx. 23W
Output Signal		2ch HD-SDI(SMPTE292M)
External Sync Input	HDTV	PS 1Vp-p, Sync 0.6Vp-p
	SDTV	VBS 1Vp-p, BBS 0.3Vp-p



Example of application

RELATED ITEMS:

OCP-100 | OCP-300 | OCP-10 | RM-51A

HDL-23



Ultra Compact 3G HDTV 3CMOS Camera System

- 1/3-inch Progressive 3CMOS Sensor
- Multiple Output Interfaces
- Multi-Format Support
- 3G 1080P50 capable
- Compact & small
- Camera Head Size: W34xH40xD40mm

The HDL-23 is a subminiature HDTV Camera with progressive 3CMOS Sensor, providing native 1080p/50 HDTV picture with superb colour reproduction.

RATINGS / PERFORMANCE

Scanning System	1920 x 1080 progressive
Optical System	1/3-inch 3CMOS Sensor
Lens Mount	C-Mount
Power Requirement	+12VDC
Power Consumption	Approx. 20W
Remote Control	Ikegami standard OCPs (OCP-200/OCP-100/RM-51A)
Ambient Temperature	0°C to +40°C
Max. Cable Length	15 m (standard: 5 m)
Dimensions	Head: W34 x H40 x D40 mm approx. CCU: W170 x H58 x D200 mm approx.
Weight	Head: Less than 0.1 kg CCU: Less than 3 kg
Performance	
Sensitivity	F10 at 2000lx, 3200K
SNR	54 dB
Limiting Resolution	1000 TVL
Output Signals	
HD-SDI	1080i/50 Hz, 59.94 Hz 0.8Vp-p / 75 Ω x 2 ch
DVI	1920 x 1080p/50 Hz, 59.94 Hz x 1 ch
HDMI (Option)	1920 x 1080p/50 Hz, 59.94 Hz x 1 ch
SD-VBS	1.0Vp-p / 75 Ω x 1 ch
SD-Y/C	Y : VS1.0Vp-p / 75 Ω x 1 ch C : 0.286Vp-p / 75 Ω
IP Stream Output (Option)	
Network Mode	10 Base-T or 100 Base-TX
Motion Picture (H.264) Profile	Data rate: 512 k - 12 Mbps Frame rate: 25/ 12/ 8/ 5/ 3/ 2/1 fps
Still Picture (JPEG)	1920 x 1080 or 1280 x 720 pixels



RELATED ITEMS:

BSH-300 | OCP-300/100/10 | RM-51A

iHTR Series



Real Time Long Distance Transmission with no Compression for High Bit Rate Video Signals. The device provides 10 km (6.25 miles) transmission distance, multiplexing up to 20 Gbps of multiple format video. (20 Gbps require 2 x SFP Transceiver Module, 2-core fiber cable) It achieves efficient use of optical fiber by using Ikegami's original multiplex method. Supports various video interfaces by selecting the plug-in unit to be installed in rear of the device. The HD-SDI plug-in interface also supports input and output for 3G and DVB-ASI. (3G, DVB-ASI are optional) With chain or loop connection, the distribution and switching of high bit rate video signals is easily achieved with simple cabling and switch setting. Super low transmission delay provides smooth remote camera control.

Video Packetizing Optical Multiplex Fibre Transmission

- Non compression long distance Hybrid Camera cable
- High resolution, Real time, Super low delay rate (< 200 μs)
- Multi-Format Support (HD-SDI, SD-SDI)
- 3G /HD-SDI with Embedded Audio
- Up to 8 multiplexed HD-SDI sources on two fibre cores
- Remote Power Supply with SMPTE transmission up to 40 km
- Up to 8 HD-SDI inputs or outputs selectable per unit
- Ethernet /Serial (Bi-directional operation)
- Loop Operation up to 8 devices for 8x10 km Ring Video Network

















RATINGS / PERFORMANCE

Optical Transmission Rate	10.3125G bps Bi-directional – Due to 64b/66b encoding for 10.3125 Gbps there are potential error patterns
Optical Transceiver	SFP+ unit Max. 2 sets
Multiplex Technology	Ikegami original optical packet multiplexing
Coding Technology	64b/66b
Fiber Cable / Fiber Connector	Singlemode optical fiber / LC type
Max. Transmission Distance	420 km (recommended Opt. transceiver)
Optical Loss Budget	Approx. 5 dB (1310 nm wave length, with recommended Opt. transceiver)
Video Transmission Channels	Max. 12 ch uncompressed HD-SDI (Optical fiber 2 cores)
Topology	Point to Point, Single direction or Bidirectional/ Cascade unidirectional connection (max. 8 stations in the network), Loop connection (max. 8 stations in the network)
Expansion Slot	2 slots (Hot-swap not supported)
LAN Port	100 BASE-TX (2-point Bridged) 100 BASE Duplex
System Set-Up	by PC with dedicated application software
Transmission Setting	Broadcast distribution
Video Transmission Delay	Less than 200 μsec (8x HD-SDI in Loop connection) Disconnection of the cables / Power cycle affects the actual latency.
Rated Power Input	DC12V +/- 10% (Battery operation not supported)
Power Consumption	Approx. 30 W (with 2x HD-SDI input cards)
Operating Temperature	0°C to 40°C
External Dimensions	181 mm (W) x 44 mm (H) x 255 mm (D) excl. protrusions
Weight	Approx. 1.8 kg (configured with 2x IF cards)
Accessories	Blank panels (for Expansion slot), Optical ports protector



iHTR Series

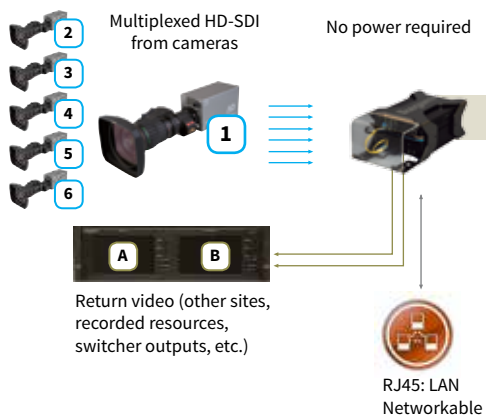
Video Packetizing Optical Multiplex Fibre Transmission

ACCESSORIES			
	Part Nr.	Name	Function
	iHTR-100A	HTR Main Unit	1RU size, with 2x I/F board-slot
	iHTR-B151A	HD-SDI 4 Input Board (2ch input for 3G-SDI)	Input Signal: SMPTE 292M / SMPTE 424M Embedded Audio Supported 1080p/50, 59.94, 1080i/50, 59.94, 1080p/23.98, 1080p/23.98sF, 720p/50, 59.94
	iHTR-B152A	HD-SDI 4 Output Board (2ch output for 3G-SDI)	Input Signal: SMPTE 292M / SMPTE 424M Embedded Audio Supported 1080p/50, 59.94, 1080i/50, 59.94, 1080p/23.98, 1080p/23.98sF, 720p/50, 59.94
	iHTR-B155A	HD-SDI 2 Input / 2 Output Board with RS-422/232C connectors, and uninterrupted switching function	Input Signal: SMPTE 292M / SMPTE 424M Embedded Audio Supported 1080p/50, 59.94, 1080i/50, 59.94, 1080p/23.98, 1080p/23.98sF, 720p/50, 59.94, and RS-435, RS-232C serial communication.
	iHTR-B156A	HD-SDI 2 Input / 2 Output Board	Input Signal: SMPTE 292M / SMPTE 424M Embedded Audio Supported 1080p/50, 59.94, 1080i/50, 59.94, 1080p/23.98, 1080p/23.98sF, 720p/50, 59.94
	iHTR-B157A	HD-SDI 2 Input / 2 Output Board with RS-422/232C connectors	Input Signal: SMPTE 292M / SMPTE 424M Embedded Audio Supported 1080p/50, 59.94, 1080i/50, 59.94, 1080p/23.98, 1080p/23.98sF, 720p/50, 59.94, and RS-435, RS-232C serial communication.
	iHTR-101	HTR Power Supply	AC Power Box for iHTR-100
	iHTR-102	HTR Power Supply & Hybrid Fibre Cable Adaptor	AC Power Box for iHTR-100 with LEMO/TAJIMI fibre optics cable adaptor
	iHTR-103	HTR DC Power Transmission Adaptor	Power Box & Power Transmitter to iHTR-104 with LEMO/TAJIMI Fibre Optics Cable CN
	iHTR-104	HTR DC Power Receiving Adaptor	Power Box & Power Transmitter to iHTR-103 with LEMO/TAJIMI Fibre Optics Cable CN
	iHTR-105	HTR Power Supply & SC Fibre Cable Adaptor	AC Power Box for iHTR-100 with SC fibre optics cable adaptor
	iHTR-B112	Optical Transceiver	iSFP+ Optical Transceiver (1-core bidirectional 20km)
	iHTR-B113	Optical Transceiver	iSFP+ Optical Transceiver (1-core bidirectional 40km)
	iHTR-B131	HTR Protect Suit	For Connector/Cable Protection and Mobile Use
	iHTR-B135	1U rack mount adaptor	iSFP
	iHTR-B136	2U rack mount adaptor with slide rail	iSFP

Optical-Fibre Camera Cable Operation for Live Broadcasting Event

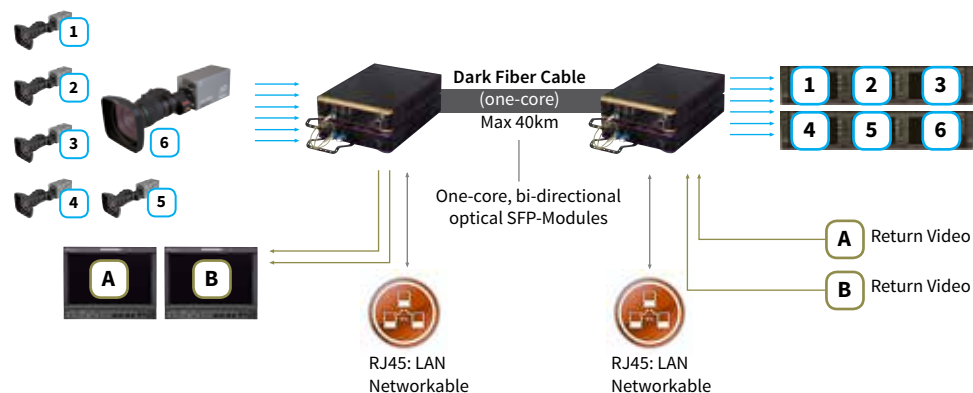
Camera cable adaptor with power supply, transmit DC power via optical camera cable. 6x video source and 2x return videos can be transmitted by one cable.

Field. Stage, etc.

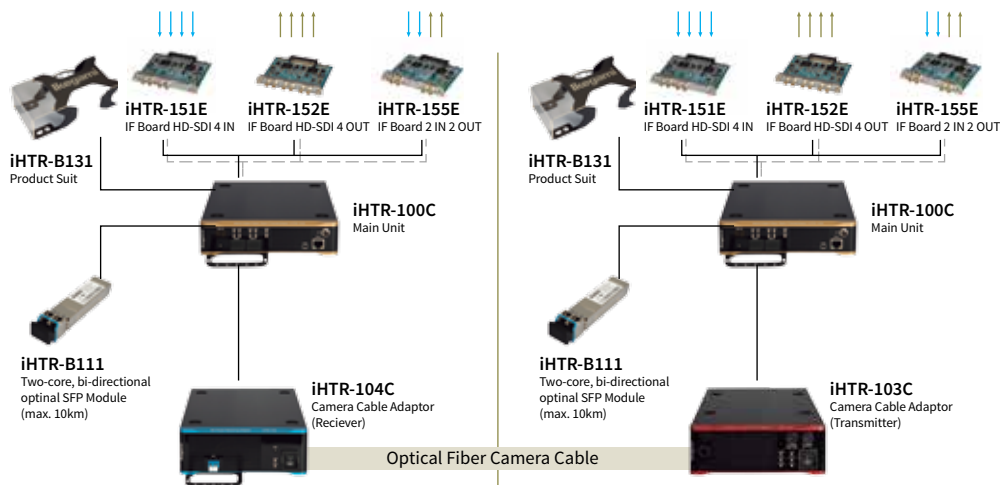


OB Van, etc. (Control site)

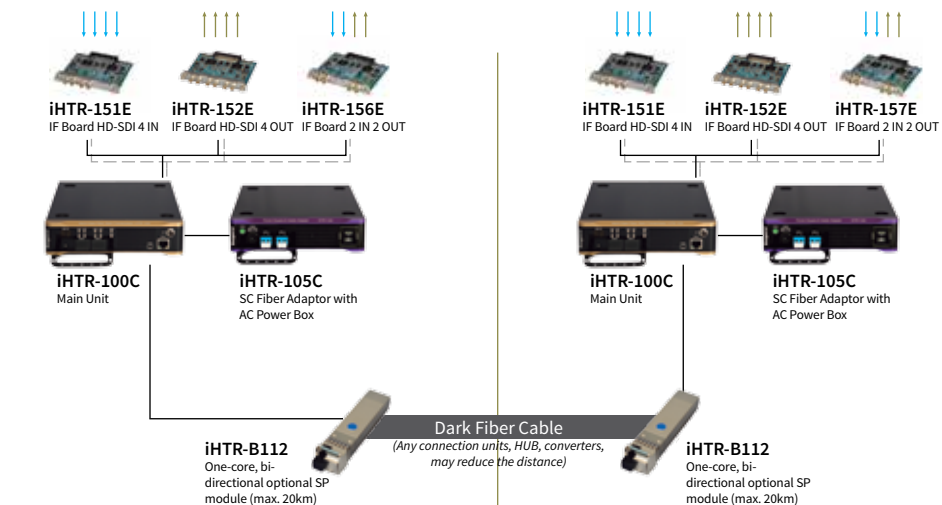
Multiplexed HD-SDI signals from camera



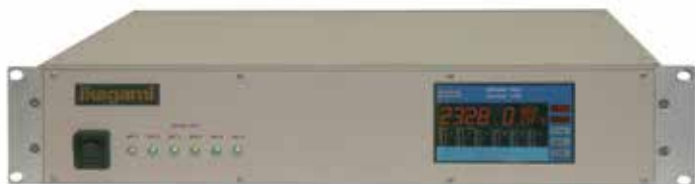
Configurations



Configurations



BSW-970



This outperforming 6-way diversity base station BSW-970 is engineered for mobile and stationary requirements. The internal decoder provides many professional features like ASI, SDI, HD-SDI, component or composite and analog / embedded audio outputs with an end-to-end low delay. It features a genlock link to the wireless camera to ensure a fixed and stable latency. Full duplex camera remote control is integrated as well as 4 wire intercom. The performance and reliability is proven by its use in the most challenging environments around the world. For many users, the BSW-970 provides the hassle free use of wireless camera systems.



RELATED ITEMS:

WA-97 | BDC-2006 | VLA-1903 | Data-TX | OCP-300/100 | MCP-200/170 | BSH-300
CPH/BSH-200

Radiocam HDTV Wireless Base Station 6-Way Diversity

- Integrated 6 times HDTV Diversity Receiver
- DVBT compliant, COFDM 2k Standard
- High Performance FFT-MRC Diversity
- MPEG2 4:2:2P@ML/HL - H.264 optional
- Low Latency
- Genlock Transmission
- Full Remote Control
- ASI In/Out/Switch

RATINGS/PERFORMANCE

Inputs/Outputs	6 x UHF input 70 to 860 MHz BNC (f) 75 Ω
	Genlock in external Genlock Tri-Level BNC (f) 75 Ω
	CVBS Output, Analog Video PM Output BNC (f) 75 Ω
	HD-SDI Output BNC (f) 75 Ω with embedded audio
	ASI Output BNC (f) 75 Ω
	ASI Input BNC (f) 75 Ω
	Audio Output, 2 x Analogue Audio Output 600 Ω Sub-D9/XLR3
	Data Output TTL BNC (f) 75 Ω
	ICCP Remote Control Input / Output
	Tally Input / Output Power / Make
	Intercom Input / Output Analogue 600 Ω
	AC Input Neutrix PowerCon
	Technical Characteristics
Channel Bandwidth 6.7 or 8 MHz	
Demodulation Autodetect FEC and Guard interval	
Decoding MPEG-2 4:2:2 422P@ML/HL (factory option H.264)	
Control Color LCD Touch Panel with Spectrum Analyser	
Power Input 100 to 240 VAC (50 to 60 Hz), <100 W	
Temperature 0 °C to +40 °C / Humidity 5% to 95 %	
Dimensions (W x D x H) 485 x 400 x 88.9 mm	
Weight 6.25 kg	

ODU-890



Fibre Outdoor Unit

- 1000m Extension SMPTE Hybrid Cable
- Fibre Connector Lemo 3K.93C (SMPTE311M)
- UHF Remote Control TX
- Tripod Mount

The Fibre Outdoor Unit features a 2 times diversity receiver with integrated downconverter in a compact, weatherproof housing that can be mounted on, or close to the venue. The integrated UHF data transmitter allows full remote control over the wireless camera. Via SMPTE hybrid camera cables the unit can be extended up to 1000 m from indoor devices.

IDU-890



Fibre Indoor Unit

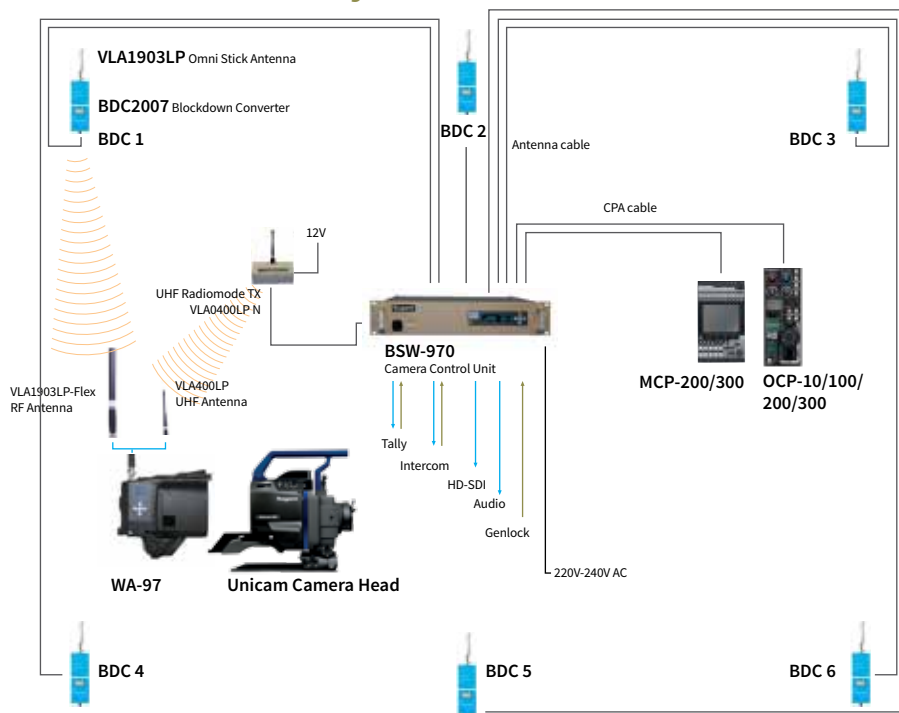
- 1000m Extension SMPTE Hybrid Cable
- Fibre Connector Lemo 3K.93C (SMPTE311M)
- UHF Remote Control TX
- Tripod Mount

The Fibre Indoor Unit is the complementary part to the Outdoor Unit. It receives the ASI Transport Stream generated by the ODU. Besides the ASI signal, the remote control data and the power supply for the outdoor unit are also transmitted via the hybrid fiber cable. By using the inbuilt display and the keyboard, the frequency of the ODU can be directly set from the indoor unit.

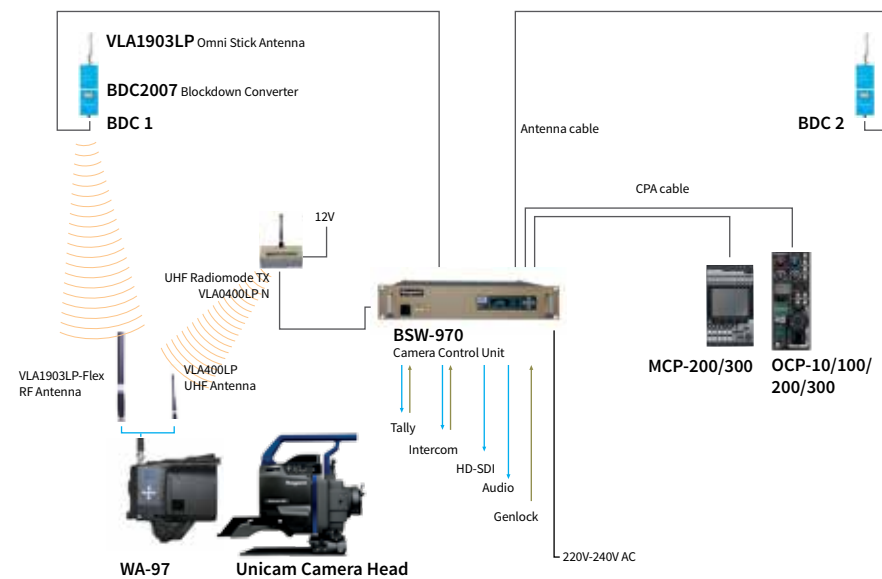


Rear connectors

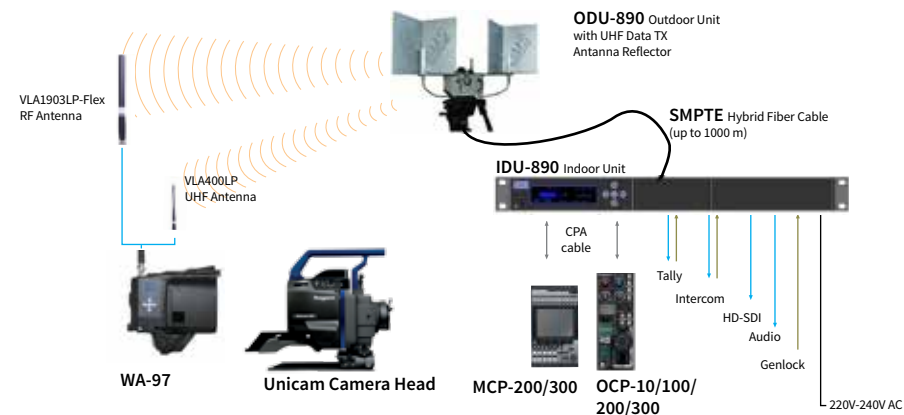
BSW-970: 6x diversity



BSW-970: 2x diversity



Indoor/Outdoor Unit



NEW HQLM-3120W



The HQLM-3120W is 31-inch 4K UHD LCD Monitor. It incorporates a 10-bit LED backlight UHD LCD panel with a contrast ratio of 1450:1. The monitor provide two 4K inputs and 3G/HD SDI and HDMI inputs as standard. ASP-100 Auto set-up probe can easily adjust and maintain the accurate colour reproduction.

RELATED ITEMS:

ASP-100 Auto Setup Probe | SRC-400 Serial Remote Controller
 RCT-30A Infrared Remote Controller | CC-E31 Hard Carrying Case

31.1-inch 4K UHD LCD Broadcast Monitor

- Employs a 31.1-inch 4,096x2,160 pixel 10-bit resolution UHD LCD panel, using LED backlight
- 3G-SDIx4 input for 4K format by square division or 2-sample interleave
- 2ch 12G-SDI input for 4K
- 3G/HD-SDI and HDMI input
- High Contrast Ratio 1450:1
- Wide critical viewing angle of 178 degree (Horizontal/Vertical)
- Wide color gamut meeting the ITU-R BT.2020 standard
- WFM monitoring, Vector Scope, VITC display
- 8ch embedded audio level display
- Multi format; Shadow Function
- Centralized Control Function
- Closed caption; Various User Marker
- User Marker Display Function (10 Patterns x12 Scenes)
- Built-in Test Signal Function
- Multi Display Function (Max. 4 Sources)
- External Memory Function
- USB Mouse Control; Downmix Function
- Colour Temperature Auto Adjustment Function
- IMD/UMD Display by TSL Protocol and User Display
- 2x / 4x Zoom Function
- Image and Test Signal Mix
- White Balance Adjustment Assist
- HDR VERSION WILL BE AVAILABLE SOON

RATINGS/PERFORMANCE

Panel Specifications	Screen Size	31.1 inch
	Screen Resolution	4096 x 2160
	Brightness	350 cd/m ²
	Contrast Ratio (typ)	1450:1 or more
	Colour Depth	10.7 Billion (RGB 10-bit)
	View Angle	178° H/V
General Specifications	Power Requirements	AC 100 V-120V, 200V-240V
	Power Consumption	145W (Approx.)
	Dimensions (WxHxD)	750 mm (W) x 459 mm (H) x 107,2 mm (D)
	Weight	14.5 kg
Video Input/Output	12G-SDI (BNC)	2 input / 2 output
	3G/HD-SDI (BNC)	4 input / 4 output, 3G Level-A/B, Square Division (1 input/1 output of them are also used as 12 G-SDI)
	HDMI	1 input (2.0 HDCP2.2)
Display Features	WFM	Available
	Vector scope	Available
	Split screen	Available
	Closed caption	Available
	User marker	Available

HEM-2570W



Rear connectors

25-inch Grade-1 OLED Master Monitor

The HEM-2570W is a Grade-1 OLED Monitor. Hi-Performance OLED panel and 12-Bit Display engine contributes to the characteristics of this Monitor, i.e. truer colour reproduction, deeper black and blur free motion pictures. ASP-100 Auto set-up probe can easily adjust and maintain the accurate colour reproduction.

- 10 Patterns x10 Scenes for User Markers
- USB Terminal for auto Setup & Saving Images
- Audio Speakers & Headphone Terminal
- Adjustable CRT Gamma
- Embedded Audio Levelmeter
- Audio Levelmeter
- User Marker Display Function
- Dot-by-Dot Display Function
- External Memory Function
- Shadow Function
- USB Mouse Control
- Display Comparison Function
- Downmix Function
- 2x / 4x Zoom Function
- Image and Test Signal Mix
- Remote Control
- Built-in Test Signal Function
- WFM/Vector Scope Display
- White Balance Adjustment Assist
- Time Code Display Function
- Closed Caption

RELATED ITEMS:

ASP-100 Auto Setup Probe | RCT-30A Infrared Remote Controller | SRC-400 | Serial Remote Controller | SP-70 SFP Module | CM-70 Component & PC-RGB Input module | RS-2450T Rackmount Adaptor | GR-1770 Grip | CC-E25 Hard Carrying Case

HEM-1770WR



Rear connectors

17-inch Grade-1 OLED Monitor

The HEM-1770WR is a Grade-1 OLED Monitor. Hi-performance OLED panel and 12-Bit Display engine contributes to the characteristics of this monitor, i.e. truer colour reproduction, deeper black and blur free motion pictures. ASP-100 Auto set-up probe can easily adjust and maintain the accurate colour reproduction.

- 17-inch 1920 x 1080 Native HD Resolution
- High Performance OLED Panel
- All-in-One Solution
- Integrated WFM, Vector Scope and Test Pattern Generator
- Supports AC/DC Battery Operation
- Embedded Audio Levelmeter
- User Marker Display Function
- Dot-by-Dot Display Function
- External Memory Function
- Shadow Function
- USB Mouse Control
- Display Comparison Function
- Remote Control
- Built-in Test Signal Function
- WFM/Vector Scope Display
- White Balance Adjustment Assist
- Time Code Display Function
- Closed Caption

RELATED ITEMS:

ASP-100 Auto Setup Probe | RCT-30A Infrared Remote Controller | SP-70 SFP Module | SRC-400 Serial Remote Controller | CM-70 Component & PC-RGB Input module | RS-1710/1710T Rackmount Adaptor | STD-1722M Stand | STD-1770/1770T Stand | GR-1750 Grip | GR-1770 Grip | BB-1750A IBattery Blakket (Anton Type) | BB-1750V Battery Bracket (V Type) | MH-1750 Hood | CC-E17 Hard Carrying Case

HLM-2450WB



Rear connectors

24-inch WUXGA Multi-Format LCD Colour Monitor

The HLM-2450WB employs a 24-inch wide LCD Panel and achieves thin size, light weight, and low power consumption. Supporting Multi-format SDI input, also DVI-D and VBS inputs as standard. By employing a WUXGA (1920 x 1200) LCD panel which has wide viewing angle, high brightness, high contrast, quick motion response and superb colour reproduction, the HLM-2450WB achieves real pixel allocation without resizing and superb gradation characteristics for various applications, including use in non-linear editing.

- High Performance Liquid Crystal Panel
- Diverse Input Sources
- Compatibility with embedded Audio
- Built-in Marker Function
- User Marker Display Function
- Shadow Function
- Various built-in Test Signal Function
- Time Code Display Function
- Waveform Monitor/Vectorscope Display Functions
- 2-Picture Split Display Function
- Dot-by-Dot Display Function
- Auto Setup

RELATED ITEMS:

D3G-240A | D3G-240D | CM-175/240WA
EA-240A | EA-240D | ASP-100 | SRV-301Z

NEW HLM-1760WR



Rear connectors

17-inch 3G Multi-Format LCD Colour Monitor

The HLM-1760WR is a space-saving 17-inch video monitor with low power consumption, wide critical viewing angle, excellent brightness and contrast, fast response time and faithful colour reproduction. Employing an LED-backlight Full HD (1920x1080) panel, it incorporates multi-format SDI, 3G-SDI, DVI-D and VBS inputs as standard.

- High Performance Liquid Crystal Panel
- Diverse Input Sources
- Compatibility with embedded Audio
- DC Operation
- Built-in Marker Function
- User Marker Display Function
- Shadow Function
- Various built-in Test Signals
- Waveform Monitor/Vectorscope Display Functions
- Timecode Display Function
- 2-picture Split Display
- Dot-by-Dot Display Function
- External Memory Function
- Auto Setup *New probe is under development
- 5.1ch Surround Down-Mix Output
- White Balance Adjustment Assist
- Image & Test Signal MIX Functions
- 2x/4x Zoom Function
- IMD/UMD *TSL V5.0 is under development
- Closed captioning *Under development

RELATED ITEMS:

RCT-30A Infrared Remote Controller | SRC-400 Serial Remote Controller | BB-1750A Battery Bracket Anton Bauer | BB-1750V Battery Bracket V-Mount | RS-1770(T) Rackmount Adaptor
STD-1760(T) Stand | STD-1722M Stand | GR-1770 Grip | MH-1750 Hood | CC-1760 Hard Carrying Case | PP-1760 Protection Panel

HLM-1751WR



Rear connectors

17-inch 3G Multi-Format LCD Colour Monitor

HLM-1751WR employs a 17-inch Full HD LED backlight Panel (1920x1080) with wide critical view angle, excellent brightness and contrast, fast response time, and faithful colour reproduction. Supporting Multi-Format SDI input, also 3G-SDI, DVI-D and VBS inputs as standard. It also achieves space-saving, light weight and low power consumption.

- High Performance Liquid Crystal Panel
- Diverse Input Sources
- Compatibility with embedded Audio
- Built-in Marker Function
- User Marker Display Function
- Shadow Function
- Various built-in Test Signal
- Time Code Display Function
- Waveform Monitor/Vectorscope Display Functions
- 2-picture Split Display
- Dot-by-Dot Display Function
- External Memory Function
- DC Operation
- Auto Setup
- 5.1ch Surround Down-Mix Output
- White Balance Adjustment Assist
- Image & Test Signal MIX Function
- 2x/4x Zoom Function

RELATED ITEMS:

ASP-100 Auto Setup Probe | RCT-30A Infrared Remote Controller | SP-70 SFP Module | SRC-400 Serial Remote Controller | CM-70 YCrCb & RGB & PC input | RS-1710/1710T Rackmount Adaptor | STD-1722M Stand | STD-1751/T Stand | GR-1750 Grip | PP-1750 Protection Panel | BB-1750A Battery Bracket Anton Bauer | BB-1750V Battery Bracket V-Mount | MH-1750 Hood | CC-1751 Hard Carrying Case

HLM-1705WR



Rear connectors

17-inch 3G Multi-Format LCD Colour Monitor

The HLM-1705WR employs a liquid crystal panel for reduction in thickness, weight and power consumption, and is designed for use in various spaces such as sub-control rooms, editing rooms, monitor walls, transmission control desks, and outside broadcast vans. This monitor is compatible with the functions and operation of the HTM/TM series CRT monitors, so that it can realize the functions necessary for a broadcasting service monitor with conventional operation.

- 17-inch 1920 x 1080 Native HD
- 3G Multi SDI Input
- 2 times/4 times Zoom Function
- Integrated WFM, Vector Scope and Test Pattern Generator
- User Marker Display Function
- User Preset Function
- FULL Screen Capture Function
- Supports AC/DC Battery Operation
- 5.1ch Surround Down-Mix Output
- Display Comparison Function
- Dot-by-Dot Function
- Time Code Display Function
- White Balance Adjustment Assist
- Image & TEST Signal MIX Function

RELATED ITEMS:

ASP-100 Auto Setup Probe | RCT-30A Infrared Remote Controller | SRC-400 Serial Remote Controller | SP-70 SFP Module | CM-70 YCrCb & RGB & PC input | RS-1710/1710T Rackmount Adaptor | STD-1722M Stand | STD-1751/T Stand | GR-1750 Grip | PP-1750 Protection Panel | BB-1750A Battery Bracket Anton Bauer | BB-1750V Battery Bracket V-Mount | MH-1750 Hood | CC-1751 Hard Carrying Case

NEW HLM-960WR



Rear connectors

9-inch 3G Multi-Format LCD Colour Monitor

A very compact and affordable solution for various broadcast monitoring applications, the HLM-960WR is a multi-format 9-inch monitor with Full HD (1920x1080) 8-bit LCD panel and LED backlight. 3G-SDI input comes as standard.

- High Performance
- Liquid Crystal Panel
- Diverse Input Sources
- Compatibility with embedded Audio
- DC Operation
- Built-in Marker Function
- User Marker Display Function
- Shadow Function
- Various built-in Test Signals
- Waveform Monitor/Vectorscope Display Functions
- Time Code Display Function
- 2-picture Split Display
- Dot-by-Dot Display Function
- External Memory Function
- Auto Setup *ASP-100
- 5.1ch Surround Down-Mix Output
- White Balance Adjustment Assist
- Image & Test Signal MIX Functions
- 2x/4x Zoom Function
- IMD/UMD *TSL V5.0 is under development
- Closed captioning *Under development

RELATED ITEMS:

RCT-30A Infrared Remote Controller | ASP-100 Auto Setup Probe | SRC-400 Serial Remote Controller | DR-960(T) Dual Rackmount Adaptor | BP-960(T) Blank Panel | WR-960L/L3/L4/L5 Dual Rackmount Adaptor combined with WFM(LEADER) | WR-960A Dual Rackmount Adaptor combined with WFM(ASTRODESIGN) | R-960C Dual Rackmount Adaptor combined with WFM (TEKTRONIX) MH-904 Hood | CC-960 Hard Carrying Case | SO-106 Soft Carrying Case | STD-960(T) Stand | GR-904 Gri | BB-904V/A Battery Bracket V/A-mount | PP-960 Protection Panel

ULE-217/ULE-217R



Rear connectors

Full-HD 21.5-inch Grade III Monitor with 3G-SDI

The ULE-217 is a professional multi-purpose Full-HD Monitor with 3G/HD-SDI and HDMI interface. ULE-217 is ideal for PC applications, or HD video monitoring. With a VESA interface it can be easily racked, wall-mounted or used as a desktop. It is available with a protection screen (ULE-217) or without a anti resistant protection screen (ULE-217R).

- Full-HD 3G Multi-Format LED Monitor
- 3G/HD-SDI Input
- 3D Comb-Filter & De-Interlace
- Anti-resistant Coating Protection Cover
- Built-In Speakers
- Eco-friendly LED solution
- Built-In HDCP Encryption Engine
- Built-In Speakers
- R Type without Coating Protection

RATINGS/PERFORMANCE

LCD Type	21.5-inch Diagonal AM-TFT (Active-Matrix)
Pixel pitch	0.24825(H) x 0.24825(V)
Brightness	250cd/m2 (Typical)
Contrast ratio	1000:1 (Typical)
Viewing Angle	170°/160°(H/V)
Response time	5ms (Typ., on/off)
Resolution (HxV)	1920X1080@60Hz
Frequency horizontal	31~80kHz
Frequency vertical	56~75Hz
Active Screen Size	476.64mm x 268.11mm
Dimensions / Weight	580mm x 440mm x 145mm (W x H x D) / Net: 5.42Kg (11.95 lbs)
Electrical Ratings	1.8A @ 12V - (100-240V~, 50/60Hz)

NEW HLM-5013



Backside HLM-5013

NEW HLM-7012



Backside HLM-7012

Ikegami introduces a triple 5 inch/ dual 7 inch high performance, rack mount ready, professional broadcast monitor that features SD-SDI / HD-SDI / 3G-SDI Multi-Format Signal Inputs, 800 x 480 with LED Back Light panel resolution, Title Generator, Embedded Audio Level Indicators up to 16ch, Waveform Display, Vector Scope and many of the other advantages as higher level broadcast display offerings.

Ikegami

5-inch/7-Inch Dual HDTV/SDTV Multi Format LCD Monitor

- Resolution: Panel Resolution 800 x 480 with LED Back Light
- SMPTE Standards SD-SDI/HD-SDI/3G-SDI
- Title Generator
- Remote & Tally – DSUB15
- Embedded Audio Level Indicators up to 16ch Time Code Indicator
- Waveform Display
- Vector Scope Display
- Low Profile 2RU(HLM-5013WR) / 3RU(HLM-7012WR)
- Various Controls: Brightness, Contrast, Chroma, Aperture, HV Delays, Aspect Ratio, Scan Size, Area Markers, Safety Markers, Mono/Colour, Color Temperatures

RATINGS/PERFORMANCE		HLM-5013	HLM-7012
Display Panel	Type of Panel	LCD / LED Backlight	LCD / LED Backlight
	Effective Number of Pixel	WVGA (15:9) 800×480	WVGA (15:9) 800×480
	Number of Pixel in 16:9	800×450	800×450
	Display Size (Viewing Area)	5.0-inch	7.0-inch
	Display Size in 16:9	4.9-inch	6.9-inch
	Brightness	180 cd/m ²	290 cd/m ²
	Contrast Ratio (typical)	500:1	1000:1
	Display Colour	16.77 Million Colours / 8bit	16.77 Million Colours / 8bit
Rating & Performance	View Angle (typical)	176°	176°
	Power Requirement AC	AC 100-240 V (When using AC Adaptor)	AC 100-240 V (When using AC Adaptor)
		DC 12 V (10-19 V)	DC 12 V (10-19 V)
	Power Requirement DC	DC 12 V (10-19 V)	DC 12 V (10-19 V)
	Power Consumption AC	1.7 A	1.7 A
	Power Consumption DC	34 W	30 W
	Dimensions (WxHxD)	481 × 88.1 × 56.2 inch	481 × 132.6 × 56.2 inch
	Rack-mountable Space	2U	3U
Weight	Approx 1.7 kg (3.74 lbs)	Approx 2.1 kg (4.63 lbs)	
Input/Output	3G/HD/SD-SDI	2 Inputs, 1 Output	2 Inputs, 1 Output
Display Features	Embedded Audio Level Meter Display	16 ch	16 ch
	Marker	Safety Marker: 100% + 80~99% (Every 1% step) Area Marker: 4:3 (at 16:9), 13:9, 14:9, 15:9, 16:9 (at 4:3), 1.85:1, 2.35:1	Safety Marker: 100% + 80~99% (Every 1% step) Area Marker: 4:3 (at 16:9), 13:9, 14:9, 15:9, 16:9 (at 4:3), 1.85:1, 2.35:1
	WFM Display	Available	Available
	Time Code	Available (LTC / VITC1 / VITC2)	Available (LTC / VITC1 / VITC2)
	Vector	Available	Available

Monitor comparison table

	HQLM-3120W	HEM-2570W	HEM-1770WR	HLM-2450WB	HLM-1760WR	HLM-1751WR	HLM-1705WR	HLM-960WR	ULE-217/R
Panel Type	LCD Panel with LED backlight	Organic Electro-Luminescence Display (OLED)	Organic Electro-Luminescence Display (OLED)	Liquid Crystal Panel (LCD)	LCD Panel with LED backlight	LCD Panel with LED backlight	LCD Panel with LED backlight	LCD Panel with LED backlight	LCD Panel with LED backlight
Display Size / Type	"31.1-inch 4K UHD/ 4096x2160/10-Bit"	25-inch Full-HD / 1920x1080 / 10-Bit	17-inch Full-HD / 1920x1080 / 10-Bit	24-inch WUXGA / 1920x1200 / 10-Bit	16.5-inch Full-HD / 1920x1080 / 10-Bit	17-inch Full-HD / 1920x1080 / 10-Bit	17-inch Full-HD / 1920x1080 / 10-Bit	9-inch Full-HD / 1920x1080 / 8-Bit	21.5-inch Full-HD / 1920x1080 / 8-Bit
Aspect Ratio	17:9	16:9 / 4:3	16:9 / 4:3	16:9 / 4:3	16:9 / 4:3	16:9 / 4:3	16:9 / 4:3	16:9 / 4:3	16:9 / 4:3
Rack Mountable Space	750x459x120mm ³	9U	7U	(10U)	7U	7U	7U	4U	7U
View Angle	178° H/V	178° H/V	178° H/V	178° H/V	178° H/V	176° H/V	178° H/V	178° H/V	170° H/V
Contrast Ratio	1450:1	5000:1	5000:1	1000:1	1500:1	1000:1	1000:1	700:1	1000:1
Multi-SDI	–	2x Input, 1x Output	2x Input, 1x Output	2x Input, 1x Output	2x Input, 2x Output	2x Input, 1x Output	2x Input, 1x Output	2x Input, 2x Output	1x Input, 1x Output
3G HD-SDI	1x Input/1x Output	Standard	Standard	Option	Standard	Standard	Standard	Standard	1x Input, 1x Output
12G-SDI	2x Input / 2x Output	NA	NA	NA	NA	NA	NA	NA	NA
VBS	NA	2x Input, 2x Output	2x Input, 2x Output	2x Input, 2x Output	1x Input, 1x Output	2x Input, 2x Output	1x Input, 1x Output	1x Input, 1x Output	1x Input
RGB/YPbPr	NA	Option (1x Input)	Option (1x Input)	Option (1x Input)	–	Option (1x Input)	–	–	–
Analog PC	NA	Option (1x Input)	Option (1x Input)	Option (1x Input)	–	Option (1x Input)	–	–	1x Input
DVI-D	NA	1x Input	1x Input	1x Input	–	1x Input	–	–	1x Input
HDMI	1x Input	Option (1x Input)	Option (1x Input)	–	Standard	Option (1x Input)	–	Standard	1x Input
External Sync	NA	Option (1x Input)	Option (1x Input)	Option (1x Input)	–	Option (1x Input)	–	–	–
Analog Audio Input	NA	2x RCA	2x RCA	2x RCA	Mini jack	2x RCA	Mini jack	Mini jack	2x RCA
Embedded Analog 2ch Output	2xRCA	2x RCA	2x RCA	Option	–	2x RCA	–	–	–
Embedded AES/EBU 8ch Output	–	–	–	Option	–	–	–	–	–
Embedded Digital Audio Display	Built-in (0CH)	Built-in (8ch)	Built-in (8 ch)	Built-in (8 ch)	Built-in (8 ch)	Built-in (8 ch)	Built-in (8 ch)	Built-in (8 ch)	–
Speaker Output (Analog Audio)	Built-in (Stereo)	Built-in (Stereo)	Built-in (Stereo)	Built-in (Stereo)	Built-in (Monaural)	Built-in (Stereo)	Built-in (Monaural)	Built-in (Monaural)	Built-in (8ch)
Speaker Output (Embedded Signal)	NA	Built-in (Stereo)	Built-in (Stereo)	Built-in (Stereo)	Built-in (Monaural)	Built-in (Stereo)	Built-in (Monaural)	Built-in (Monaural)	–
User Marker Display	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	–
Test Signal	Built-in (7types)	Built-in (7 types)	Built-in (7 types)	Built-in (3 types)	Built-in (7 types)	Built-in (7 types)	Built-in (7 types)	Built-in (7 types)	–
Shadow Function	–	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	–
Time Code Display	Built-in (VITC,HD-SDI)	"Built-in (VITC, HD-SDI)"	"Built-in (VITC, HD-SDI)"	"Built-in (VITC, HD-SDI)"	"Built-in (VITC, HD-SDI)"	"Built-in (VITC, HD-SDI)"	"Built-in (VITC, HD-SDI)"	"Built-in (VITC, HD-SDI)"	–
Waveform Monitor Display	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	–
Vector Scope Display	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	–
Dot-by-Dot Display	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	–
2 Screen Display	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	–
Auto Setup Function	Built-in via ASP-100 (Option)	Built-in via ASP-100 (Option)	Built-in via ASP-100 (Option)	Built-in via ASP-100 (Option)	Built-in (Option)	Built-in via ASP-100 (Option)	Built-in via ASP-100 (Option)	Built-in via ASP-100 (Option)	–
Power Requirement	AC200 to 240V	AC200 to 240V	AC200 to 240V / DC 12V	AC200 to 240V	AC200 to 240V / DC 12V	AC200 to 240V / DC 12V	AC200 to 240V	AC200 to 240V / DC 12V	AC200 to 240V

ACCESSORIES FOR MONITORS

For HEM-2570WR/HLM-2450WB

RS-2450T

19-inch Rackmount Adaptor



For HEM-1770WR /HLM-1751WR

RS-1770/T

19-inch Rackmount Adaptor
(/T: with Tilt Mechanism)



STD-1770/T

Desktop Stand
(/T: with Tilt Mechanism)



GR-1770

Grip Handle



BB-1750A/V

Battery Bracket (A: Anton
Bauer/ V: V-mount)



MH-1750

Folding Hood



For HLM-1760WR

RS-1770/T

19-inch Rackmount Adaptor
(/T: with Tilt Mechanism)



STD-1760/T

Desktop Stand
(/T: with Tilt Mechanism)



GR-1770

Grip Handle



BB-1750A/V

Battery Bracket (A: Anton
Bauer/ V: V-mount)



MH-1750

Folding Hood



For HLM-1705WR

RS-1770/T

19-inch Rackmount Adaptor
(/T: with Tilt Mechanism)



STD-1517/T

Desktop Stand
(/T: with Tilt Mechanism)



GR-1750

Grip Handle



BB-1750A/V

Battery Bracket (A: Anton
Bauer/ V: V-mount)



MH-1750

Folding Hood



For HLM-960WR

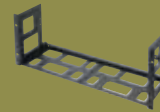
STD-960/T

Desktop Stand (/T: with
Tilt Mechanism)



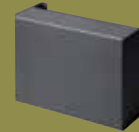
DR-960/T

Dual Rackmount Sdaptor
(/T: with Tilt Mechanism)



BP-960/T

Blank Panel



GR-904

Grip Handle



BB-904A/V

Battery Bracket (A: Anton
Bauer/ V: V-mount)



MN-904

Folding Hood



For all current products

SRC-400

Serial Remote Controller



ASP-100

Auto Setup Probe with USD I/F
*except for HLM-1760WR



RCT-30A

Infrared Remote Controller



Superb high picture technology and true to life colour for high precision surgical video operations, Microscopes and Endoscopes

REVEAL
SMALLEST
DETAILS OF LIFE



NEW MKC-750UHD**4K**

3CMOS 4K Medical Grade Camera

- 3 Chip CMOS progressive Image Sensor
- High Quality 4K image (3840 x 2160 pixels)
- Various Video Outputs
- Ultra Compact Camera Head: W34 x H40 x D40 mm
- OEM Possibility
- High Quality Image Output
- New Digital Processor
- Mirror, Flip and Rotate Function
- Digital Zoom, Scene File, Level Indicator
- Anti-biotic Coating (Antibacterial Coating Material)

Ikegami has developed Medical Grade 4K Camera MKC-750UHD to be suitable for surgical video operations, Microscopes or Endoscopes. MKC-750UHD is the first developed medical 4K 3 sensors camera from Ikegami. With the latest 3-CMOS and Ultra HD resolution (3840x2160pixels), the MKC-750UHD gives the superb high picture quality. The camera will be available for OEM, the camera head, Camera Control Unit and Medical grade cable will be offered as per customer's required specifications.

RATINGS / PERFORMANCE

Image sensor	1/3-inch 3CMOS	
Lens Mount	C-mount	
Sensitivity	2000 lx F8 / 3200 K or better	
S/N	58 dB (Gamma / * Detail OFF)	
Output signal	4K	3G-SDI 4 ch
	HDTV	HD-SDI (1920 x 1080 i/p) BNC 2 ch DVI (1920 x 1080 i/p) 1 ch
	External Synchronization	HDTV Tri-Level SYNC 1 ch
Auto GAIN	Available	
Auto White	Available	
Auto Iris	Available	
Auto Shutter	1/100 - 1/10000	
Shading Correction	Available	
Digital Zoom	Max. 4 position	
Camera Cable	5 m, 10 m Extension Cable (maximum length 15 m)	
DC Iris Control	Available (from CCU)	
External Control	RS-232C 1 ch	
Operating Temperature	0 to 40 °C	
Power Requirement	AC 100 - 120, 200 - 240 V ± 10% 50/60 Hz	
Weight	Camera Head: less than 100 g; CCU: less than 3 kg	
Dimensions	Camera Head: W 34 x H 40 x D 40 mm; CCU: W 210 x H 80 x D 270 mm	



Example of application

RELATED ITEMS:

DUAL FOOT PEDAL | MDR-600HD
MICROSCOPE ADAPTORS WITH C-MOUNT CFA-400 | CFA-400IR | CFA-400RIR

NEW MKC-704KHD



3CMOS High Sensitive Full-HD Medical Grade Camera

- 3 Chip CMOS progressive Image Sensor
- High Quality 4K image (3840 x 2160)
- Valious Video Outputs
- Ultra Compact Camera Head
W34 x H40 X D40mm
- New Digital Processor
- Ultra High Sensitivity
- Mirror, Flip and Rotatre Function
- Digital Zoom, Scene File, Level Indicator
- Dynamic Contrast Correction
- Image Correction Function

RATINGS/PERFORMANCE

Image sensor		1/3-inch CMOS
Lens Mount		C-mount
Sensitivity		2000lx F1/ 3200°K or better
S/N		58 dB (Gamma /* Detail OFF)
Output signal	4K	3G-SDI 4 ch
	HDTV	HD-SDI (1920 x 1080 i/p) BNC 2 ch DVI (1920x x1080 i/p) 1 ch
	External Syn-chronization	HDTV Tri-level SYNC 1 ch
Auto GAIN		Available
Auto White		Available
Auto Iris		Available
Auto Shutter		1/100 - 1/10000
Shading Correction		Available
Digital Zoom		Max. 4 position
Camera Cable		5 m, 10 m Extension Cable (maximum length 15 m)
DC Iris Control		Available (from CCU)
External Control		RS-232C 1 ch
Operating Temperature		0 to 40°C
Power Requirement		AC 100 - 120, 200 - 240V ± 10% 50/60 Hz
Weight		Camera Head: less than 100g; CCU: less than 3 kg
Dimensions		Camera Head: W34 x H40 x D40 mm; CCU: W210 x H80 x D270 mm

MKC-704KHD is a medical grade high sensitivity (2,000lx/F17 Line Mix On) model Full HD camera. MKC-704KHD employs 3CMOS sensors for providing both of full HD (1920 x1080) and 4K (3840 x 2160) resolution image with the high sensitivity.

RELATED ITEMS:

DUAL FOOT PEDAL | MDR-600HD
MICROSCOPE ADAPTORS WITH C-MOUNT CFA-400 | CFA-400IR | CFA-400RIR

PRELIMINARY



Native 4K single chip Medical Grade Camera

- Single CMOS progressive Image Sensor
- High Quality 4K image (3840 x 2160)
- Valious Video Outputs
- Ultra Compact Camera Head
W34 x H40 X D40mm
- New Digital Processor
- OEM Possibility
- Ultra High Sensitivity
- Mirror, Flip and Rotatre Function
- Digital Zoom, Scene File, Level Indicator
- Dynamic Contrast Correction
- Image Correction Function

Ikegami is developing a medical grade new 4K single chip camera employs single chip netive 4K sensors for providing 4K (3840 x 2160) resolution image with extreamly high quality.

RELATED ITEMS:

DUAL FOOT PEDAL | MDR-600HD
MICROSCOPE ADAPTORS WITH C-MOUNT CFA-400 | CFA-400IR | CFA-400RIR

MKC-700HD



3CMOS High Sensitive Full-HD Medical Grade Camera

- High quality image
- High sensitivity
- Indocyanine Green (ICG) mode
- Full-HD 1920 x 1080 video and still Image Recording
- FTP Server Function for Downloading the File
- Scene Files
- Flip and Turn Function
- Anti-biotic Coating

Ikegami has developed a new high-end medical grade camera which is used for surgical microscope, shadowless lamp, including the operative field camera system. It has a progressive scan Full-HD 3CMOS that can take advantage of a variety of medical situations.

RATINGS/PERFORMANCE

Scanning System		1920 x 1080 50/59.94 Progressive
Image sensor		1/3-inch CMOS
Lens Mount		C-mount
Limiting Resolution		1000 TV Lines
Sensitivity		2000lx F16/ 3200°K
S/N		56 dB (Gamma/Detail OFF)
GAIN		Up to 18 dB
Output signal	HDTV	HD-SDI BNC 2 ch DVI(1920x1080i/p) 1 ch
	SDTV	Composite (VBS) BNC 1 ch S-Video S-terminal 1 ch
	IP Ethernet	RJ45 1 ch
SD card interface		Available (IP Ethernet option board)
Camera cable		Multi-core cable 5 m + 10 m
DC Iris Control		Available (from CCU)
External Control		RS-232C 1 ch
Operating Temperature		0° C to +40° C
Power Requirement		DC 12V ±10%
Weight		Camera Head: less than 100g; CCU: less than 3 kg
Dimensions		Camera Head: W34 x W40 x D40 mm; CCU W210 x H80 x D270 mm



Example of application

RELATED ITEMS:

DUAL FOOT PEDAL | MDR-600HD
MICROSCOPE ADAPTORS WITH C-MOUNT CFA-400 | CFA-400IR | CFA-400RIR

MKC-310HD



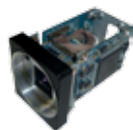
The MKC-310HD employs 3x 2.1Mega pixel Full-HD 1/3-inch CMOS Sensor to provide 1000 lines of high definition video images through 3G-SDI output interface, coupled with High Sensitivity performance of F10/2000 lux providing the optimal video quality required for special applications.



Recording Board



CCU Mainboard



3CMOS
Camera Head



1CMOS
Camera Head

RELATED ITEMS:

IP BOARD | RECORDING BOARD
DUAL FOOT PEDAL | MDR-600HD
MICROSCOPE ADAPTORS WITH C-MOUNT CFA-400
CFA-400IR | CFA-400RIR

3CMOS Full-HD Medical Grade Camera

- 3 Chip CMOS progressive Image Sensor
- 1/3-inch Full-HD (1920x 1080)
- FPGA based
- High Resolution: Horizontal 1000 TV lines, S/N 54dB
- High Sensitivity: F10 at 2000 lx
- Ultra Compact Camera Head: W34 x H40 x D40 mm
- Digital output: 3G HD-SDI 1080P
- OEM Possibility

RATINGS/PERFORMANCE

Scanning System		1920 x 1080 50 / 59.94 Progressive
Image Sensor		1/3-inch 3 CMOS
Lens Mount		C-mount
Limiting Resolution		1000 TV Lines
Sensitivity		2000 lx F10 / 3200 °K
S/N Ratio		54 dB (Gamma/Detail OFF)
GAIN		0 dB, +6 dB, +12 dB, +18 dB, +24 dB, +30 dB
Output Signals	HDTV	3G/HD-SDI BNC 2 ch DVI (1920x1080 i/p) 1 ch (2 nd Output as Option) Genlock BNC 1 ch, Sync Output BNC 1 ch
	SDTV	Composite (VBS) BNC 1 ch S-Video S-Terminal 1 ch
	IP Ethernet	RJ45 1 ch (Option)
SD card Interface		Available (IP Ethernet Option Board)
Camera Cable		5 m or 7 m single (selectable depending on the Compositing)
DC Iris Control		Available (from CCU)
External Control		RS-232C 1 ch
Operating Temperature		0°C to +40°C
Power Requirement		DC 12V ±10%
Weight		Camera Head: 100g; CCU: 1.1 kg
Dimensions		Camera Head: W34 x H40 x D40 mm, CCU: W170 x H58 x D200 mm

MKC-210HD



The MKC-210HD employs 2.1 Mega pixel Full-HD 1/3-inch CMOS sensor to provide 900 lines of high definition video images, and the optimal video quality required for high-end medical video systems.

1CMOS Full-HD Medical Grade Ultra Compact Camera

- 1 Chip CMOS progressive Image
- 1/3-inch Full-HD (1920x 1080)
- FPGA based
- High Resolution: Horizontal 900 TV Lines, S/N 50 dB
- High Sensitivity: F7 at 2000 lx
- Ultra Compact Camera Head: W 31 x D 31 x D 36 mm
- Excellent Operability for Use in the Medical Field
- OEM Possibility



Recording Board



CCU Mainboard

RATINGS/PERFORMANCE

Scanning System		1920 x 1080 50/59.94 Progressive
Image Sensor		1/3-inch CMOS
Lens Mount		C-mount
Limiting Resolution		More than 900 TVL
Sensitivity		2000 lx F7/3200°K
S/N Ratio		50 dB (Gamma/Detail OFF)
GAIN		Up to 18 dB
Output Signals	HDTV	HD-SDI BNC 2ch DVI (1920x1080 i/p) 1 ch (2 nd Output as Option)
	SDTV	Composite (VBS) BNC 1 ch S-Video S-Terminal 1 ch
	IP Ethernet	RJ45 1 ch (Option)
SD Card Interface		Available (IP Ethernet Option Board)
Camera Cable		5 m or 10 m single (selectable depending on the Compositing)
DC Iris Control		Available (from CCU)
External Control		RS-232C 1 ch
Operating Temperature		0°C to +40°C
Power Requirement		DC 12V ±10%
Weight		Camera Head: 60 g; CCU: 1.1 kg
Dimensions		Camera Head: W31 x H31 x D36 mm; CCU: W170 x H58 x D200 mm

RELATED ITEMS:

IP BOARD | RECORDING BOARD
 DUAL FOOT PEDAL | MDR-600HD
 MICROSCOPE ADAPTORS WITH C-MOUNT CFA-400
 CFA-400IR | CFA-400RIR

NEW CFA-400/CFA-400R/CFA-400RIR

CFA-400



CFA-400R



CFA-400RIR



Surgery Microscope High Resolution Adaptors for 3 chips Full-HD/4K Cameras

- Higher resolution of the optical lens even for 4K cameras
- The new optical design is developed for the brighter optics
- The optical iris can be adjusted automatically - contribute to perform deeper focal length
- Deeper Focal Depth
- Dedicated Design for 3 Chips Cameras
- The remote controller can easily control the focus adjustment even during the surgery (CFA400R/CFA-400RIR)
- One pushing button on the remote controller can automatically switch the integrated filter to move to ICG mode with Ikegami MKC cameras (CFA-400RIR)

Ikegami has developed new surgery microscope adaptors, CFA-400 series, for 3 chips Full HD (High Definition) and 4K cameras with the higher optical resolution. They equip the optical auto iris function and perform the deeper focus depth with Ikegami MKC camera series.



Example of application

RATINGS/PERFORMANCE

Model	CFA-400RIR	CFA-400R	CFA-400
Camera Sensor	1/3-inch recommended	1/3-inch recommended	1/3-inch recommended
Lens Mount	C-mount	C-mount	C-mount
Focal length	Fixed, 53mm	Fixed, 53mm	Fixed, 53mm
Iris Power	DC 12V ± 10%; 120 mA or less	DC 12V ± 10%; 120 mA or less	DC 12V ± 10%; 120 mA or less
Focus	Remote Focus	Remote Focus	Manual Focus
X-Y Axis Adjustment	Available	Available	Available
Filter Change	One push automatic	N/A	N/A
Size	113.5 x 79 x 45 mm	113.5 x 79 x 45 mm	113.5 x 79 x 45 mm
Weight	450 g or less	450 g or less	450 g or less

MDR-600HD



Various type of video signals (SD & HD) can be recorded by simple operation. Reliable simultaneous recording and playback feature on Internal HDD or External USB-device is also available.

Medical Grade Digital Video Recorder

- Full-HD 1920 x 1080 Video and Still Image Recording
- Multi-Interface
- Built-in LCD Monitor
- Various Search Feature
- Image Data Transfer
- Back-up Power for Momentary Stop

RATINGS / PERFORMANCE															
Internal	2.5-inch HDD (Data Capacity 450 GByte)														
External	USB Drive (Flash Memory or HDD)														
Display	3.5-inch, Full Colour LCD														
Input Signals / Output Signals															
Video	<table border="1"> <tr> <td>Composite</td> <td>1.0Vp-p 75Ω</td> </tr> <tr> <td>S-Video</td> <td>1.0Vp-p 75Ω luminance Signal</td> </tr> <tr> <td>NTSC</td> <td>0.286Vp-p 75Ω chrominance Signal</td> </tr> <tr> <td>PAL</td> <td>0.3Vp-p 75Ω chrominance Signal</td> </tr> <tr> <td>SD</td> <td>SD-SDI NTSC (480i), PAL (576i)</td> </tr> <tr> <td>HD-SDI</td> <td>1080 p, 1080i, 720 p</td> </tr> <tr> <td>DVI-D</td> <td>640 x 480 - 1920 x 1200 (1920x1200 will be reduced to 1728x1080)</td> </tr> </table>	Composite	1.0Vp-p 75Ω	S-Video	1.0Vp-p 75Ω luminance Signal	NTSC	0.286Vp-p 75Ω chrominance Signal	PAL	0.3Vp-p 75Ω chrominance Signal	SD	SD-SDI NTSC (480i), PAL (576i)	HD-SDI	1080 p, 1080i, 720 p	DVI-D	640 x 480 - 1920 x 1200 (1920x1200 will be reduced to 1728x1080)
Composite	1.0Vp-p 75Ω														
S-Video	1.0Vp-p 75Ω luminance Signal														
NTSC	0.286Vp-p 75Ω chrominance Signal														
PAL	0.3Vp-p 75Ω chrominance Signal														
SD	SD-SDI NTSC (480i), PAL (576i)														
HD-SDI	1080 p, 1080i, 720 p														
DVI-D	640 x 480 - 1920 x 1200 (1920x1200 will be reduced to 1728x1080)														
Audio	- 8 dBs 10 kΩ or more, unbalance SDI Video Input Terminal														
LAN	RJ45 (100Base-TX/1000Base-T)														
USB-A	Recording x 2 (Front USB 2.0)														
USB-B	For PC Connection x 1 (Rear USB 2.0)														
Remote	2.5-inch Mini-Jack														
Contact Switch	3.5-inch Mini-Jack, Video x 1, Photo x 1														
USB Drive	Flash Memory or HDD														
Format	FAT32														
Still Image	JPEG														
Video Compression	MPEG-4 AVC/H.264														
File Format	mov														
Recording Time	90 hours. Internal HDD: 500GB, EQ: Economy Quality														
Compression	LPCM														
Sampling Freq.	48 KHz														
Quantifying Bit Number	16-Bit														
Power	AC 100V - 240V ±10% 50/60Hz 0.62A - 0.35A														
Operating Environment	Temperature	5°F to 40°F (32°F to 104°F)													
	Humidity	5% to 80% RH (non-condensing)													
Dimension	210.5 W x 88.5 H x 235 D mm (incl. rubber foot)														
Weight	2.6 kg (5.7 lbs)														
Accessories	Power Cord x 1 Instruction Manual (with Warranty)														

Optional Units:



Barcodereader

Remote Controller

USB Cardreader

Foot Switch

4K MLW-2750UHD

PRELIMINARY



27-inch 4K Multi-Format high Luminance LED Colour Monitor

- Fully compliant with medical safety directives
- New Full Flat design for Front panel
- New IPS panel with LED backlight (800 cd/m²)
- Multi display function
- Various input interface



4K MLW-3110U

PRELIMINARY



31.5-inch 4K LED Colour Monitor

- Fully compliant with medical safety directives
- New Full Flat design for Front panel
- New IPS panel with LED backlight (525 cd/m²)
- Multi display function
- Various input interface

NEW MLW-2627C-DC



Side Connectors of MLW-2627C-DC



Bottom connectors of MLW-2627C-DC

26-inch Full-HD 3G Multi-Format high Luminance LED Colour Monitor

MLW-2627C-DC is a wide screen 26" LCD monitor with the high resolution 1920 (H) x 1080 (V) Full HD LCD panel, maximum intensity of 900 cd/m² and wide angle of 178 degrees. Also, MLW-2627C-DC employs the touch switch control panel to improve the operability during operation.

- Fully compliant with medical safety directives
- New Full Flat design for Front panel
- New IPS panel with LED backlight (900 cd/m²)
- High Resolution, True colour display (1.07 Billion Color gradient)
- Jaggy-less I / P Conversion Process Function
- Multi display function

RELATED ITEMS:
TS-300 DESKTOP STAND

NEW MLW-2627C-3D



Side Connectors MLW-2627C-3D



Rear Side Connectors MLW-2627C-3D

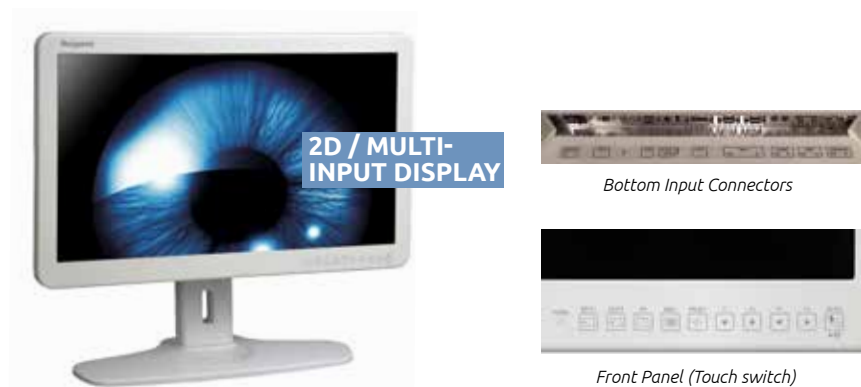
26-inch Full-HD 3D LED Colour Monitor

MLW-2627C-3D is a wide screen 26" LCD monitor with the high resolution 1920 (H) x 1080 (V) Full HD LCD panel, maximum intensity of 450 cd/m² and wide angle of 178 degrees. Also, LED backlight panel supports high brightness & contrast. Furthermore HD-SDI 3G signal can be input for the true progressive imaging and more suitable to natural images. High performance with 3D HD quality is provided for medical specialists and experts.

- Fully compliant with medical safety directives
- New Full Flat design for Front panel
- New IPS panel with LED backlight (450 cd/m²)
- Switchable between 2D and 3D
- High Resolution, True Colour Display (1.07 Billion Colour gradient)
- Jaggy-less I / P Conversion Process Function
- Multi display function
- Built-in 3D Composer
- Dual inputs interface

RELATED ITEMS:
TS-300 DESKTOP STAND

MLW-2624C-DC



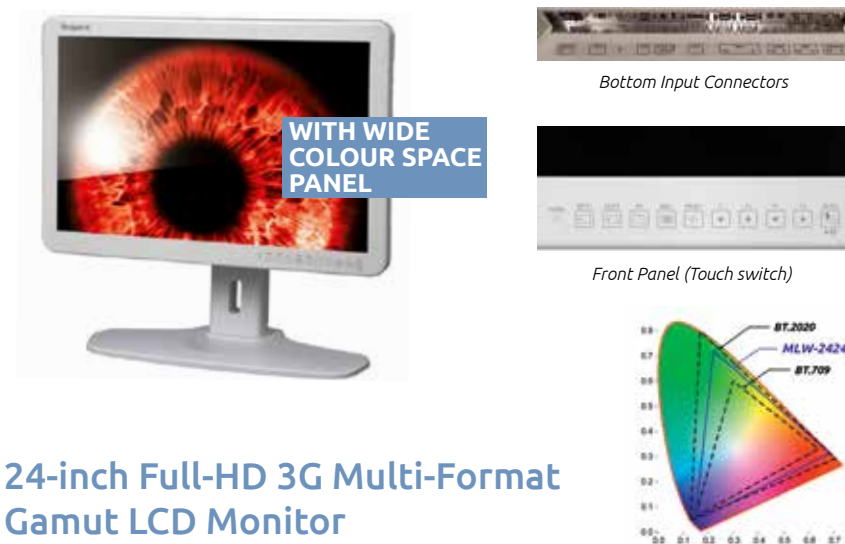
26-inch Full-HD 3G Multi-Format LCD Colour Monitor

MLW-2624C is a wide screen 26-inch LCD monitor with the high resolution 1920 (H) x 1080 (V) Full HD LCD panel, maximum intensity of 450 cd/m² and wide angle of 178 degrees. Also, MLW-2624C-DC employs the touch switch control panel to improve the operability during operation.

- Fully compliant with medical safety directives
- New IPS panel with LED backlight (450 cd/m²)
- High Resolution
- True Colour Display (1.07 Billion Color gradient)
- New Full Flat design for Front panel
- Jaggy-less I / P Conversion Process
- Multiple Input and Format Capabilities

RELATED ITEMS:
TS-321 DESKTOP STAND

MLW-2424C-DC



24-inch Full-HD 3G Multi-Format Gamut LCD Monitor

The MLW-2424C-DC is a 3G Multi-Format 24-inch LCD Monitor for specialist applications where high quality picture and true colour rendition with wide colour gamut are needed. Also, MLW-2424C-DC employs the touch switch control panel to improve the operability during operation.

- Fully compliant with medical safety directives
- Wider color gamut than EBU/AMPTC standard (102% NTSC)
- New Full Flat design Panel
- Jaggy-less I / P Conversion Process
- High Resolution
- New IPS panel with LED backlight (400 cd/m²)
- True Colour Display (1.07 Billion Color gradient)
- Multiple Input and Format Capabilities

RELATED ITEMS:
TS-321 DESKTOP STAND

MLW-3225C/-3D



32-inch HDTV/SDTV Multi-Format LCD Colour Monitor/3D

MLW-3200C/-3D is a large Widescreen 32-inch LCD Monitor with high resolution Full-HD LCD Panel, 1 Billion colour graduation and wide angle of 178 degrees. MLW-3225C-3D is the latest development for surgical operation 3D monitoring systems.

- Fully compliant with medical safety Directives
- True Colour Display
- Jaggy-less I/P Conversion Process
- Various Gamma Characteristics
- Display Power Management
- Anti-Reflection Hard Coat Screen
- Dual Display Function
- DVI-D Cable (Max. length 30 m)
- Strong, lightweight construction
- **MLW-3225C-3D Additional Features**
- Passive 3D with Xpol® Polarization Filter
- Built-in 3D Composer, Dual Inputs Interface (HD-SDI 2ch)
- Switchable between 2D and 3D

RELATED ITEMS:
TS-321 DESKTOP STAND

MLW-2150HD



21.5-inch Full-HD 3G Multi-LED Monitor

The MLW-2150HD is a medical grade Full -HD LED Monitor with 3G/HD-SDI and HDMI interface. MLW-2150HD is ideal for HD video monitoring or PC applications. With a VESA interface it can be easily racked, wall-mounted or used as a desktop.

- Fully compliant with medical safety Directives
- 21.5-inch Full-HD 3G Multi-Format LED Monitor
- High Resolution Display
- Eco-Friendly LED Solution
- 3D Comb-Filter & De-Interlace
- Slim and lightweight Design
- Multi-adjustable Desktop Stand

ALL INCLUSIVE:
Desktop Stand
LED Backlight
All common video inputs

Monitor Comparison Table

		MLW-3225C-3D	MLW-3225C	MLW-2627C-3D	MLW-2627C-DC	MLW-2624C-DC	MLW-2424C-DC	MLW-2150HD
LCD Diagonal Size		32-inch 698 mm (H) x 393 mm (V)	32-inch 698 mm (H) x 393 mm (V)	26-inch 576 mm (H) x 324 mm (V)	26-inch 576 mm (H) x 324 mm (V)	26-inch 576 mm (H) x 324 mm (V)	24-inch 518 mm (H) x 324 mm (V)	21.5-inch 476.64mm(H)x268.11mm(V)
Pixels		1920(H)x1080(V) FHD	1920(H)x1080(V) FHD	1920(H)x1080(V) FHD	1920(H)x1080(V) FHD	1920(H)x1080(V) FHD	1920(H)x1080(V) FHD	1920(H)x1080(V) 16:9
Brightness		200 cd/m ²	500 cd/m ²	450 cd/m ²	900 cd/m ²	450 cd/m ²	400 cd/m ²	250 cd/m ²
Contrast Ratio		1300:1	1300:1	1400:1	1400:1	1400:1	1500:1	1000:1
View Angle		178°	178°	178°	178°	178°	178°	170°
3D effect		Passive 3D (Line by Line) with Xpol® Polarization Filter	N/A	Passive 3D (Line by Line, Side by Side, Top and Bottom, SIMAL (Simultaneous)) with Xpol® Polarization Filter	N/A	N/A	N/A	N/A
Input Video Signal	3D	2ch (BNC incl. Looping out)	N/A	2ch (BNC, DVI-D incl. Looping out)	N/A	N/A	N/A	N/A
	3G / HD-SDI	1ch (BNC incl. looping out), 1.5G	1ch (BNC incl. looping out), 1.5G	2ch (BNC incl. Looping out)	2ch (BNC incl. Looping out)	1ch (BNC incl. looping out), Multi-SDI (1.5G, 3G)	1ch (BNC incl. looping out), Multi-SDI (1.5G, 3G)	1ch (BNC incl. looping out), Multi-SDI (1.5G, 3G)
	DVI-D	1ch(DVI-D)	1ch(DVI-D)	2ch (BNC incl. Looping out)	2ch (BNC incl. Looping out)	1ch (DVI-D)	1ch (DVI-D)	1ch (DVI-D)
	HDMI	N/A	N/A	N/A	N/A	N/A	N/A	1ch
	Composite, Y/C	1ch (BNC, Y/C incl. looping out), NTSC/PAL	1ch (BNC, Y/C incl. looping out), NTSC/PAL	1ch (BNC, Y/C incl. looping out), NTSC/PAL	1ch (BNC, Y/C incl. looping out), NTSC/PAL	1ch (BNC, Y/C incl. looping out), NTSC/PAL	1ch (BNC, Y/C incl. looping out), NTSC/PAL	1ch (BNC incl. looping out), NTSC/PAL
	Analogue	1ch (BNC incl. looping out)	1ch(BNC incl. looping out)	1ch(BNC incl. looping out)	1ch (BNC incl. looping out)	1ch (BNC incl. looping out)	1ch (BNC incl. looping out)	N/A
	PC	1ch (D-Sub 15pin), Analogue R, G, B (VGA to WUXGA)	1ch (D-Sub 15pin), Analogue R, G, B (VGA to WUXGA)	1ch (D-Sub 15pin), Analogue R, G, B or Y, Pb, Pr	1ch (D-Sub 15pin), Analogue R, G, B or Y, Pb, Pr	1ch (D-Sub 15pin), Analogue R, G, B or Y, Pb, Pr	1ch (D-Sub 15pin), Analogue R, G, B or Y, Pb, Pr	1ch (D-Sub 15pin), Analogue R, G, B, (VGA to WUXGA)
Multi Input		Picture-in-Picture, Side-by-Side	Picture-in-Picture, Side-by-Side	Picture-in-Picture, Side-by- Side, Swap Display is available	Picture-in-Picture, Side-by- Side, Swap Display is available	Picture-in-Picture, Side-by- Side, Swap Display is available	Picture-in-Picture, Side-by- Side, Swap Display is available	
Video Process Engine		10-Bit	10-Bit	10-Bit	10-Bit	10-Bit	10-Bit	10-Bit
Colour Space		72% (of NTSC)	72% (of NTSC)	72% (of NTSC)	72% (of NTSC)	72% (of NTSC)	99% (of Adobe RGB)	72% (of NTSC)
Colour Gradinet		10-Bit (1 Billion colours)	10-Bit (1 Billion colours)	10-Bit x 3 (1.06 Billion colours)	10-Bit x 3 (1.06 Billion colours)	10-Bit x 3 (1.06 Billion colours)	10-Bit x 3 (1.06 Billion colours)	8-Bit (16.7 Million colours)
Power Requirement		AC100V-120V, 200-240V ±10% 50/60Hz	AC100V-120V, 200-240V ±10% 50/60Hz	DC24V / 3.3A	DC24V / 3.3A	DC24V / 3.3A	DC24V / 3.3A	AC adaptor AC100V-120V, 200-240V ±10% 50/60Hz
Weight / Dimensions		Approx. 13kg / W780 x H493 x D117,5 mm	Approx. 13kg / W780 x H493 x D117,5 mm	Approx. 8kg / 640 (W) x 405 (H) x 84 (D) mm	Approx. 8kg / 640 (W) x 405 (H) x 84 (D) mm	Approx. 8kg / W640 x H405 x D84 mm	Approx. 7kg / W584 x H400 x D83 mm	Approx. 4.35g / W515 x H390 x D182 mm

ACCESSORIES

Optional: IP Encoder Board | Recorder Board | Desktop Stand

IP Encoder Board



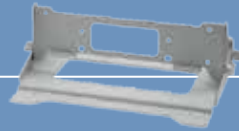
OPTIONAL IP ENCODER BOARD FOR MKC-210HD | MKC-310HD

Recorder Board



OPTIONAL RECORDER BOARD FOR MKC-210HD | MKC-310HD

TS-321



Desktop stand for MLW-3225C/-3D

TS-300



Desktop stand for MLW-2627C-DC | MLW-2624C-DC | MLW-2424C-DC

Ultra high sensitivity camera systems which are excellent in low light conditions. Wide dynamic range and exceptional colour reproduction.

NOTHING
ESCAPES - EVEN
IN THE DARK



ISD-2500HD



Newly developed CMOS Sensor is employed to achieve superb picture quality. The 1.47 Megapixel CMOS Sensor have wide dynamic range and, in principle, no smear. The Sensors include significant circuitry within the sensor itself, resulting in a digital video interface between sensor and Ikegami Camera DSP, all in a very small device with low power consumption. HD-SDI (59.94i, 50i, 30p, 25p) and NTSC or PAL (4:3) can be output simultaneously. RS-485 also available.

Ultra High Sensitivity CMOS Colour Single-Chip HD-SD Camera

- Ultra High Sensitivity
0.00016 lx F1.2 50% (Colour)
0.00004 lx F1.2 50% (B&W)
- Wide Dynamic Range Adjustment
- De-fog
- Focus EZ Function

RATINGS/PERFORMANCE

Image Sensor	2/3-inch CMOS Sensor
Effective Pixel	1280 (H) X 720 (V)
Pixel Size	7.1 um x 7.1 um
Synchronization	Internal and External
Video Output	HD: HD-SDI 1080 (59.94i/50i/30p/29.97i/25p) 720 (60p/59.94p/50p/30p/29.97p/25p) SD: VBS NTSC/PAL
External Control	RS-485
Limiting Resolution	650 TV Lines or more
Sensitivity	F22 at 2000lx
Minimum Illumination	0.00016 lx / F1.2 (IRE 50%, Colour mode); 0.00004 lx / F1.2 (IRE 50%, B/W mode)
Auto Iris	DC Iris
Auto Gain Control	ON (AGC, Hyper-AGC)/OFF (low, MID, HIGH)
Electronic Shutter	OFF, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000, variable
Automatic Electrical Shutter	Fast, slow, response
Slow Shutter	X1, x2, x4, x6, x8, x12, x16, x24, x32, x64, OFF / AUTO / MANUAL
Backlight Compensation	Selectable 9x5 Areas
White Balance	ATW1/ATW2/AWC/Manual
Wide Dynamic Range	OFF/WDR / AUTO KNEE/ AUTO BLACK STRETCH
De-fog	OFF/ ON
Gamma Correction	0.45 / 0.75 / 1
Noise Reduction	Available
Electrical Zoom	X1, x2, x3, x4, x5, x6, x7, x8, x9, x10
Privacy Mask	Available, maximum 8 Areas (GREY, WHITE, BLACK)
Focus EZ	Available
Image Flip	Normal/ Flip / Mirror / Flip & Mirror
Lens Mount	CS-mount
Lens Flange Back	Available with adjustment Mechanism
Power Requirement	DC 12V / AC 24V
Dimensions/Weight	W 78 x H 58 x D 1400 mm / 650 g



Example of application

ISD-220HD



The ISD-220HD is the latest addition to Ikegami's renowned stable high resolution 1/3" CMOS Sensor 1920(H) x 1080(V) Camera and Ikegami wide dynamic Range which allows to provide the optimal video quality required for Professional Security Systems.

Full-HD Wide Dynamic Range Camera

- High Sensitivity and high Resolution 1/3-inch CMOS Sensor
- Resolution: CS-mount Lens adaptive 1920 x 1080
- Scanning: Progressive Smearless/ Automatic Electronic Shutter
- Backlight Correction/Internal Sync
- Auto White Balance / Auto Iris (DC Iris)
- Privacy Masking
- RS-485 I/F/Flange Focus adjustable
- Focus EZ Function

RATINGS / PERFORMANCE

Sensor	1/3-inch CMOS
Effective Pixel Number	1920 (H) X 1080 (V)
Synchronization	Internal: Crystal lock
Aspect Ratio	16 : 9
Video Output	HD-SDI VBS 1.0 Vp-p / 75 Ω
Limiting Resolution	1000 TV Lines or more
Scanning	Progressive
Minimum Illumination	0.7 lx / F 1.4 (59.94 i, Sens-up off, IRE 50 %, Colour) 0.35 lx / F 1.4 (30 p, Sens-up off, IRE 50 %, Colour) 0.022 lx / F 1.4 (59.94 i, Sens-up on, IRE 50 %, Colour) 0.07 lu / F 1.4 (59.94 i, Sens-up off, IRE 50 %, B/W) 0.035 lx / F 1.4 (30 p, Sens-up off, IRE 50 %, B/W) 0.0022 lx / F 1.4 (59.94 i, Sens-up on, IRE 50 %, B/W)
Auto Gain Control	ON (AGC, Hyper-AGC) / OFF (low, MID, HIGH)
Electronic Shutter Speed	1/30 to 1/10000 sec. FL (Flicker less)
White Balance	ATW1 / ATW2 / AWC / Manual
Backlight Correction	Available (ON / OFF / SPOT Level Adj.)
Lens Mount	CS mount
External Control	RS-485
Iris Control	DC iris
Day / Night	Removable IR-cut Filter
Privacy Mask	Availavle max. 8 Zones setting
Digital Output	HD-SDI 1080i (59.94 / 50), 720P (59.94 / 50)
Analogue Output	1 Vp-p Composite Signal 75 Ω BNC; DC 12V / AC 24V; W 75 x H 65 x D 136 mm / 650g

IEN-200HD



IDE-200HD



The IEN-200HD/IDE-200HD are the Stand Alone PoE Network Video Codec's from Ikegami, which deliver high quality video utilizing the highly efficient H.264 compression format. The IEN-200HD encoder and IDE-200HD decoder support up to 1920x1080 Full-HD image size.

HDTV/SDTV Network Video Encoder

- HD-SDI Video Input
- Full Frame Rate
- SD Card On-board
- Privacy Masking
- Power over Ethernet
- Support up to Full-HD (1920x1080) Video Format

RATINGS/PERFORMANCE

Video Input	HD-SDI, 1080i(50/59.94), 720p(50/59.94), SD-SDI, 480i, 575i
Audio Interface	Stereo 1 ch in/output (Duplex), Embedded audio 1 ch input (Digital)
Compression Method	H.264, JPEG (Dual Codec)
Picture Size	1920 x 1080, 1280 x 720, 720 x 575, 720 x 480
Bit Rate / Frame Rate	384 Kbps-12 Mbps (CVR/VBR) / 7 steps (max. 30 fps at 1080i format)
Audio	Stereo 1 ch in/output (duplex), Embedded audio 1 ch input (Digital)
Embedded Audio	2 ch based on SMPTE-299M
Streaming	Unicast, Multicast
Alarm Input	Pre-alarm, Post-alarm
Interface/SD Card Interface	Ethernet (10 base-T / 100 base-TX) / Available
Privacy Protection	Privacy Mask Function
Dimensions/Weight	W 132 x H 44 x D 180 mm / 880 g
Power Consumption/Power Requirement	5 W or less / PoE, DC 12 V, AC 24 V

HDTV/SDTV Network Video Decoder

- HD-SDI Video Output
- Full Frame Rate
- SD Card On-board
- Power over Ethernet
- Support up to Full-HD (1920x1080) Video Format

RATINGS/PERFORMANCE

Video Output	HD-SDI, 1080i(50/59.94), 720p(50/59.94), SD-SDI, 480i, 575i
Audio Interface	Stereo 1 ch in/output (duplex), Embedded audio 1 ch input (digital)
Compression Method	H.264, JPEG (Dual Codec)
Picture Size	1920 x 1080, 1280 x 720, 720 x 575, 720 x 480
Frame Rate	7 steps (max. 30 fps at 1080i format)
Audio	Stereo 1 ch in/output (duplex), Embedded audio 1 ch input (digital)
Embedded Audio	2 ch based on SMPTE-299M
Interface/SD Card Interface	Ethernet (10 base-T / 100 base-TX) / Available
Dimensions/Weight	W 132 x H 44 x D 180 mm / 880 g
Power Consumption/Power Requirement	5 W or less / PoE, DC 12 V, AC 24 V

ICD-809P



1/3-inch High Resolution & Performance True Day/Night Camera

RATINGS / PERFORMANCE

Pickup Device (H x V)	1/3-inch interline Transfer CCD (752 x 582)
Sync System	INT / Line-Lock (Phase adjustable)
Scanning System	2:1 interlaced PAL
Video Output	VS 1.0Vp-p / 75 Ω
Limiting Resolution	540 TV Lines (Colour), 570 TV Lines (B/W)
S/N Ratio	52 dB or better
Min. Illumination	0.15 lx / F1.2 (Colour), 0.015 lx (B/W)
Day / Night Function	Auto / Remote / Manual selectable
Back Light Compensation (BLC)	On / Off switchable (Level adjustable)
Auto Gain Control	On (AGC, Hyper AGC) / Off (Low / Mid / High) switchable
Auto Iris Function	Video / DC selectable (DC iris level adjustable)
Menu Control	On Screen Display / RS-485
Lens Mount	CS-mount (C-mount adaptor can be used)
Dimensions / Weight	W 62 x H 55 x D 122 mm / 660 g (AC 230V), 420 g (ACDC)
Power Requirement	AC 230V ± 15% 50 Hz, AC 24V ± 10%, DC 10.5V to 28V

ICD-879P



1/2-inch High Resolution & Performance True Day/Night Camera

RATINGS / PERFORMANCE

Pickup Device (H x V)	1/2-inch interline Transfer CCD (752 x 582)
Sync System	INT / Line-Lock (Phase adjustable)
Scanning System	2:1 interlaced PAL
Video Output	VS 1.0Vp-p / 75 Ω
Limiting Resolution	540 TV Lines (Colour), 570 TV Lines (Monochrome)
S/N Ratio	52 dB or better
Min. Illumination	0.11 lx / F1.2, 0.0037 lx / F1.2 (x32 Electronic Sensitivity) (Colour) 0.011 lx / F1.2, 0.00037 lx / F1.2 (x32 Electronic Sensitivity) (B/W)
Day / Night Function	Auto / Remote / Manual selectable
Back Light Compensation (BLC)	On / Off / Spot switchable (Level adjustable)
Auto Gain Control	On (AGC, Hyper AGC) / Off (Low / Mid / High) switchable
Auto Iris Function	Video / DC selectable (DC iris level adjustable)
Menu Control	On Screen Display / RS-485
Dimensions / Weight	W 62 x H 55 x D 122 mm / 660 g (AC 230V), 420 g (ACDC)
Power Requirement	AC 230V ± 15% 50 Hz, AC 24V ± 10%, DC 10.5V to 28V

ULE-217



The ULE-217 is a professional multi-purpose Full HD monitor with HD-SDI and HDMI interface. ULE-217 is ideal for PC applications, or HD video monitoring. With a VESA interface it can be easily racked, wall-mounted or used as a desktop.



Rear connectors

Full HD 21.5-inch Security Surveillance TFT Monitor with HD-SDI

- Full HD with HD-SDI Interface
- 3D Comb-Filter & De-Interlace
- 5ms Response Time
- 250 cd/m²/ 1000:1 Contrast
- Built-in Speakers
- Eco-friendly LED Solution
- Built-In HDCP Encryption Engine

RATINGS/PERFORMANCE

Display Panel	21,5-inch TFT LCD
Aspect Ratio	16:9
Display Pixel (H x V)	1920 x 1080 @ 60Hz
Display Colour	16.7 Million
Brightness	250 cd/m ²
Contrast Ratio	1000:1
Response Time	< 5 msec
View Angle (H/V)	170° / 160°
Filter Type	3D Comb Filter
HD-SDI Input/Output	1 ch / 1 ch, BNC
Video Input/Output (Composite)	2 ch / 1 ch, 1.0Vp-p, 75Ω terminated, BNC type
VGA Input	1 ch
DVI-D/HDMI Input	1 ch/1 ch
Trigger Input	1 ch
Audio-In	1 ch (RCA Typ)
Multi Display Function	PIP/PBP/VOV
SDI-In/Out	1 ch/1 ch
De-Interlacing	YES
Audio Input	3 ch, RCA
Multi Language	English, Spanish, French, German, Italian, Danish, Portuguese, Dutch
Built-in Speakers	Yes (2 W x 2)
VESA Mount Interface	100 mm pitch, VESA standard
Dimensions/Weight	W 580 x H 440 x D 145 mm / Approx. 5.42 kg
Power Requirement	DC12V (AC 100V - 240V (50/60Hz))

ULM-193



19-inch/17-inch/15-inch Security Surveillance TFT Monitor

- High Resolution (More than 500TVL) and high Contrast
- Rapid Response Time
- Various Video and Audio Inputs
- Colour Reproduction: 16 Million Colours

RATINGS/PERFORMANCE

Type Number	ULE-193	ULE-173	ULE-153
LCD Panel Size (HxV)	19-inch TFT (1280 x 1024 pixel A)	17-inch TFT (1280x1024pixel SXGA)	15-inch TFT (1024 x 768 pixel GA)
Max. Brightness	250 cd/m ²		
Contrast	800:1	800:1	700:1
View Angle	170°	170°	170°
Limiting Resolution	500TV Lines	500TV Lines	500TV Lines
Response Time	5 msec	5 msec	8 msec
Filter Type	3D Comb Filter		
Video Signal	Composite	2 ch input/output	
	S-Video	1 ch input/output (Y/C)	
	PC input	Analogue RGB (VGA-SXGA)	
Audio Signal	PC audio	Mini-jack x1ch	
	Audio input	RCA connector x 2ch	
	Speaker	Stereo 4W (2W x 2ch)	
VESA Interface	100 mm pitch, VESA standard		
Dimensions	W 430 x H 371 x D 62 mm	W 382 x H 330 x D 60 mm	W 351 x H 348 x D 200 mm
Weight	Approx. 5.5 kg	Approx. 5.0 kg	Approx. 3.7 kg (w. Stand)
Power Supply	AC 100V - 240V		
Operating Temperature	0°C to +40°C		




ULM-173



ULM-153





Our technology has the capability of inspecting tablets for fine hairs and fibres, diffuse stains and many other defects with a high degree of accuracy

LIFE INSURANCE FOR VALUABLE GOODS

TIE-Series



By adopting the newly developed optical system A.I.I., the TIE-9000 series has the capability of inspecting tablet for diffuse stains, printing defects, and many other defects with a high degree of accuracy. The new developed high quality color line sensor is equipped with the camera unit. Also, combined the high quality image processing technology, the detection accuracy of color stain is significantly improved. The TIE-9000 series can contribute greatly to improving product quality, consistency and safety, as well as helping to improve overall production efficiency.

- RGB Colour line sensor
- Colour processing technology allows diffuse stains and printing defects to be easily detected
- High accuracy detection of small defects, foreign matter and fiber in or attached to the tablet
- Extensive supply of tablet
- Feeding section
- Stable high-speed transportation by 2 rows belt transportation section
- High speed and stable supply
- Colour touch panel

Colour Visual Tablet Inspection Equipment

- Operate while Checking Transportation Section
- Camera for High Accuracy Inspection (Option)
- Process Data Store in PC connected to LAN
- Easy Setting of pre-set Threshold (Option)
- Display Sample on Touch Panel

RATINGS / PERFORMANCE		
Applicable Tablets		Plain tablet, Film-coated tablet, Sugar-coated tablet, Irregular-shaped tablet (Division-lined tablet, Engraved tablet, Printed tablet <Oneside/Both sides>)
Applicable Sizes	Shape	[Round tablet] 5mm to 12mm, [Irregular-shaped] length max. 21mm
	Thickness	2mm to 8mm *Other sizes may be applicable with customer's requirement
Colour		White color to Dark Brown color
Inspection Items	Front/Back/Sides Inspection	Stain, Printing smudge, Printing blur, Chipping, Cracking, Deformation, Color stain, Discoloration, Color difference, Printing color difference, Hair, Fiber
Inspection Accuracy	Front/Back/Sides	50µm or larger corresponding to black spot
Processing Capacity	TIE-9000	Max 250,000 to 300,000 tablets/hour, *Depends on the shape and size of tablet.
	TIE-9500	Max 500,000 to 600,000 tablets/hour, *Depends on the shape and size of tablet.
Lighting	Standard Inspection	Lighting method: High brightness LED diffuse illumination (optical diffusion built-in reflective plate), Light intensity adjustment function, Life estimated: more than 30000h
	Special Front/Back Inspection	Lighting method: High brightness LED oblique direct illumination, Light intensity adjustment function, Life estimated: more than 30000h
Camera	Standard Inspection	High sensitivity color line sensor, lense: F=2.8 f=52mm, Scanning method: one axis self-scanning method
	Special Front/Back Inspection	High sensitivity color line sensor, lense: F=2.8 f=52mm
Judging Process		Real-time parallel processing method
Power	Power Requirement	Three phase AC200V ±10% 3Φ 50Hz/60Hz, more than 5KW [TIE-9000] (Inside the inspection equipment, AC200V/210V/220V is selectable at transformer tap)
	Power Consumption	TIE-9000: Less than 3kW
	Connection	Terminal block: M6 screw R/S/T/FG 4terminal
Air	Pressure	More than 0.5Mpa
	Consumption	Approx. 400 liter per minute
	Connection Caliber	High coupler socket (400SH, NITTO KOHKI), Inspection equipment side: 400PM NITTO KOHKI
Operating Temperature		+20°C to +30°C
Operating Humidity		30% to 70% (non-condensing)
External dimensions		Approx. W1780 x H1751 x D1060 mm
Weight		Approx: 1400kg
Option		3D inspection, Block removal function, csv support, Powder removal system (SUS spec., coating spec.), Printing software, Operation management system, Setting of Sensitivity support function, Simulation Function

POIE-Series



The POIE-8000C Colour Powdered/Granulated Medicine Inspection Device combines the colour processing technology developed for tablet inspection equipment with technology for screening powdered and granulated medicines for impurities, thereby boosting the precision with which coloured foreign matter can be detected. This new device also allows for certain colours to be specified for the detection of foreign matter that colour. The device also comes equipped with a “linear feature extraction processing function”, which facilitates the high-precision detection of fine fibers and hairs. With this new equipment wcomes a marked increase in processing capacity thanks to the wide inspection conveyor belt that provides a stable, constant supply of sample material and the five-speed conveyor belt action (top speed is approximately 18m/minute). In addition, the exclusion mechanism employs a reliable rotary nozzle system. This ensures that accurate pinpoint suction is provided only around the foreign substance, thereby boosting the recovery ratio of quality product.

Colour Powdered/Granulated Medicine Inspection Device

- Max. Output : 200kg /h
- 5000 Pixel RGB Colour line sensor / 20 µm resolution
- Detect fiber/hair/foreign material
- Colour processing
- Fiber lighting for uniform and high intensity illumination
- Stable and constant feeding with 2nd transfer unit
- Spot vacuum with rotary nozzle system
- Spot vacuum with rotary nozzle
- Correct rejection control
- Easy operation with touch panel
- Detection image memory

RATINGS/ PERFORMANCE		
Applicable Particle		Powder, Fine Granule, Granule etc., Coloured
Inspection Throughput		20 to 100 kg / hour
Inspection Objects		Black or coloured foreign particle of over 40 to 60 µm (diameter) Black or coloured fiber and hair of over 30 µm (diameter) x 3 mm (Inspection accuracy depends on inspection throughput and object)
Transport Section	Transport Belt / Speed	1 row /Approx. 9 to 18m / minute (5 steps selectable)
	Transported Particle Thickness	Step Gain :-6, -3, 0, +3, +6, +9, +12 dB
	Inspection Area	Approx. 392 mm in width
	Transported Particle Thickness	Approx. 0.3 to 0.7mm (1 layer)
Camera Section	Limit Of Resolution	5,000 pixel RGB CCD line sensor camera x 4 units – 20 µm
Lighting Section	System/Source/Position	Fiber guide/Halogen lamp x 12/2 spots at top, 1 spot at bottom
	Lamp Sytem	DC lighting system (lighting level variable at 16 steps)
	Lighting Control	Manual, Auto control selectable
	Expected Lamp Life	1,000 to 1,500 hours
Power Source	Power Supply	Three phase 200V ± 10%, 50 /60 Hz
	Power Consumption	5 kVA or less
	Connection	Terminal fixed with 6 mm-screw
Air	Pressured Air Pressure	0.5 M pa or more
	Consumption	0.7 NL / minute or less (clean dry air)
	Coupling Socket Size	Quick-connect air coupler socket 20 SH
External Dimensions	Control Unit / Main Unit	W 570 x H 1850 x D 710 mm / W 1708 x H 2050 x D 1149 mm
	Air-Vacuuming Unit	W 750 x H 1333 x D 532 mm
Weight	Control Unit / Main Unit	Approx. 150kg (330 lbs) / Approx. 1,000 kg (2,203 lbs)
Environment Condition	Temperature	15°C to 20°C (59 -77 degree F)
	Humidity	30 to 60%
Vacuumed Air Exhaust	Negative Pressure	4 Kpa or more
	Exhaust Air Emission	10 cubic meter / minute

Our reflection creates the perfect image

Ikegami **image**

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