Panasonic CONNECT



The CCU supports UHD and HD simultaneous output while still having a compact size. HD mode enables output in 240p, 180p and 120p during normal filming.

AK-UCU600

With the AK-UCU600 Camera Control Unit (CCU), uncompressed longdistance transmission of 4K/HD video signals via optical fiber is supported. The AK-HRP1000GJ/1005GJ Remote Operation Panels (ROP) are equipped with a color LCD display that provides excellent visibility and functions for quick response. This system achieves high-quality video and excellent operability. In cases where power is supplied by the CCU, it is possible to transmit at a long distance of up to approx. 2,000 m between the camera and the CCU. The distance can be extended up to 10,000 m by providing a local power supply at the camera head and using general-purpose single mode optical fiber.

Key Features

Contains a dual UHD 12G-SDI system, and supports 3G -SDI quad link and two-sample interleave

Optical fiber transmission of uncompressed video signals over a distance of approx. 2,000 m between camera and CCU

Supports TICO over SDI (4K over 3G-SDI) output (4K signal can be transferred by a conventional 3G-SDI cable)

Supports HDR/SDR simultaneous output and HDR BT2020/B709 simultaneous output

Supports IP streaming (100 Base-T)











Camera Control Unit (CCU) -> General AK-UCU600PJ/AK-UCU600PSJ 100 V - 120 V AC, 50 Hz/60 Hz



AK-UCU600

https://latam.connect.panasonic.com/mx/es/ak-ucu600

-> Power Supply Camera Control Unit (CCU) -> Genera	AK-UCU600EJ/AK-UCU600ESJ 100 V - 240 V AC, 50 Hz/60 Hz
-> Power Consumption	ar 500 W (Without camera connected. 50 W)
· · · · · · · · · · · · · · · · · · ·	al 240 V AC (tolerance: 5 %), 1.46 A , 50 Hz / 60 Hz
-> Capacity for Supplying Power to a	
Camera	
Camera Control Unit (CCU) -> Genera	al 0 °C to 40 °C (32 °F to 104 °F)
-> Operating Temperature	
Camera Control Unit (CCU) -> Genera	al 10 % to 90 % (no condensation)
-> Humidity	
Camera Control Unit (CCU) -> Genera	al Approx. 8.9 kg (19.6 lb)
-> Weight	
Camera Control Unit (CCU) -> Genera	al W 424 mm x H 88 mm x D 401 mm (16-5/8 inches x 3-7/16 inches x 15-13/16 inches)
-> Dimensions	(excluding protrusions)
Camera Control Unit (CCU) ->	3G/HD-SDI:5 lines (embedded audio is supported only for HD signals)
Input/Output -> Video Output	12G/6G/3G/HD-SDI:2 lines
	HD-SDI:1 line (shared with picture monitor output)
	Analog composite:2 lines (1 line shared with picture monitor output *1)
Camera Control Unit (CCU) ->	HD-SDI 1 line (HD TRUNK output)
Input/Output	3G/HD-SDI 1 line (TICO output)
Camera Control Unit (CCU) ->	3G-HD/HD/SD-SDI 4 lines (RET1 input has active-through output)
Input/Output -> Return Input	Analog composite 1 line
Camera Control Unit (CCU) ->	HD-SDI 1 line (with active-through output)
Input/Output -> Prompter Input	Analog composite 2 lines (through output of 1 and input of 2 share the connector *1)
	It is not terminated when the unit is turned OFF. No through output.
Camera Control Unit (CCU) ->	BB (black burst) / tri-level *3: 1 line
Input/Output -> Reference Input	(automatic termination, connect to upper connector; BB signal and tri-level *3 signal
	automatically recognized, with loop-through output)
Camera Control Unit (CCU) ->	0 dBm/600 Ω, 2 lines (XLR, 3-pin, male)
Input/Output -> Microphone Output	
Camera Control Unit (CCU) ->	Intercom input/output (ENG / PROD, 0 dBm, 600 Ω (4 W) /1 V [p-p], 200 Ω (RTS), 4 W / RTS
Input/Output -> Communication	CLRCOM);2 lines *1 PGM input (0 dBm/600 Ω);2 lines *1
Company Control Unit (CCII)	Tally input (red, green, yellow):1 input each
Camera Control Unit (CCU) -> Input/Output -> AUX	WFM control 6-bit (open collector output *1, terminal shared with camera microphone gain setting *1)
	Camera microphone gain setting input
	5-bit (photo-coupler input *1, terminal shared with WFM control *1)
	Down-conversion system setting input 2-bit (photo-coupler input)
Camera Control Unit (CCU) ->	RS-422 / RS-232C 2 lines
Input/Output -> TRUNK *1	
Camera Control Unit (CCU) ->	RS-422
Input/Output -> ROP	1 line, 16 V DC output (only one of this and FRONT/REAR ROP can be selected at one tim
	via the menu or the [ROP FRONT/REAR] selection switch on the front panel)
Camera Control Unit (CCU) ->	RS-422 1 line, GPI for control
	RS-422 1 line, GPI for control
Input/Output -> MSU	RS-422 1 line, GPI for control LAN connection with camera side via an optical cable *4
Input/Output -> MSU Camera Control Unit (CCU) ->	
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK	LAN connection with camera side via an optical cable *4
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) ->	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) ->	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer)
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN IP/12G/3G Interface Kit AK-NP600G	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer)
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) ->0 °C to 40 °C (32 °F to 104 °F)
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature IP/12G/3G Interface Kit AK-NP600G	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) ->0 °C to 40 °C (32 °F to 104 °F)
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature IP/12G/3G Interface Kit AK-NP600G General -> Operating Humidity	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) ->0 °C to 40 °C (32 °F to 104 °F)
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature IP/12G/3G Interface Kit AK-NP600G General -> Operating Humidity IP/12G/3G Interface Kit AK-NP600G	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) >>0 °C to 40 °C (32 °F to 104 °F) >>10% to 90% (no condensation)
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature IP/12G/3G Interface Kit AK-NP600G General -> Operating Humidity IP/12G/3G Interface Kit AK-NP600G General -> Weight	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) >0 °C to 40 °C (32 °F to 104 °F) ->10% to 90% (no condensation) ->Approx. 284 g (0.63 lbs) (including radiator fins) ->W 175.5 mm x H 28.8 mm x D 138.5 mm
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature IP/12G/3G Interface Kit AK-NP600G General -> Operating Humidity IP/12G/3G Interface Kit AK-NP600G General -> Weight IP/12G/3G Interface Kit AK-NP600G	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) >>0 °C to 40 °C (32 °F to 104 °F) ->10% to 90% (no condensation) ->Approx. 284 g (0.63 lbs) (including radiator fins)
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature IP/12G/3G Interface Kit AK-NP600G General -> Operating Humidity IP/12G/3G Interface Kit AK-NP600G General -> Weight IP/12G/3G Interface Kit AK-NP600G General -> Weight IP/12G/3G Interface Kit AK-NP600G General -> Dimensions	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) >0 °C to 40 °C (32 °F to 104 °F) ->10% to 90% (no condensation) ->Approx. 284 g (0.63 lbs) (including radiator fins) ->W 175.5 mm x H 28.8 mm x D 138.5 mm
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature IP/12G/3G Interface Kit AK-NP600G General -> Operating Humidity IP/12G/3G Interface Kit AK-NP600G General -> Weight IP/12G/3G Interface Kit AK-NP600G General -> Dimensions IP/12G/3G Interface Kit AK-NP600G SIP/12G/3G Interface Kit AK-NP600G	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) ->0 °C to 40 °C (32 °F to 104 °F) ->10% to 90% (no condensation) ->Approx. 284 g (0.63 lbs) (including radiator fins) ->W 175.5 mm x H 28.8 mm x D 138.5 mm (6-29/32 inches x 1-1/8 inches x 5-7/16 inches)
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature IP/12G/3G Interface Kit AK-NP600G General -> Operating Humidity IP/12G/3G Interface Kit AK-NP600G General -> Weight IP/12G/3G Interface Kit AK-NP600G General -> Dimensions IP/12G/3G Interface Kit AK-NP600G SIP/12G/3G Interface Kit AK-NP600G	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) ->0 °C to 40 °C (32 °F to 104 °F) ->10% to 90% (no condensation) ->Approx. 284 g (0.63 lbs) (including radiator fins) ->W 175.5 mm x H 28.8 mm x D 138.5 mm (6-29/32 inches x 1-1/8 inches x 5-7/16 inches)
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature IP/12G/3G Interface Kit AK-NP600G General -> Operating Humidity IP/12G/3G Interface Kit AK-NP600G General -> Weight IP/12G/3G Interface Kit AK-NP600G General -> Dimensions IP/12G/3G Interface Kit AK-NP600G >> Input/Output -> < UHD/HS/HD SDI OUT1 > terminal IP/12G/3G Interface Kit AK-NP600G	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) ->0 °C to 40 °C (32 °F to 104 °F) ->10% to 90% (no condensation) ->Approx. 284 g (0.63 lbs) (including radiator fins) ->W 175.5 mm x H 28.8 mm x D 138.5 mm (6-29/32 inches x 1-1/8 inches x 5-7/16 inches)
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature IP/12G/3G Interface Kit AK-NP600G General -> Operating Humidity IP/12G/3G Interface Kit AK-NP600G General -> Weight IP/12G/3G Interface Kit AK-NP600G General -> Dimensions IP/12G/3G Interface Kit AK-NP600G > Input/Output -> < UHD/HS/HD SDI OUT1 > terminal IP/12G/3G Interface Kit AK-NP600G > Input/Output -> < UHD/HS/HD SDI	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) ->0 °C to 40 °C (32 °F to 104 °F) ->10% to 90% (no condensation) ->Approx. 284 g (0.63 lbs) (including radiator fins) ->W 175.5 mm x H 28.8 mm x D 138.5 mm (6-29/32 inches x 1-1/8 inches x 5-7/16 inches) - BNC x 1, 12G / 6G / 3G /1.5G HD SDI : 0.8 V [p-p], 75 Ω
General -> Weight IP/12G/3G Interface Kit AK-NP600G - General -> Dimensions IP/12G/3G Interface Kit AK-NP600G - > Input/Output -> < UHD/HS/HD SDI OUT1 > terminal IP/12G/3G Interface Kit AK-NP600G - > Input/Output -> < UHD/HS/HD SDI OUT2 > terminal	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) >> 0 °C to 40 °C (32 °F to 104 °F) -> 10% to 90% (no condensation) -> Approx. 284 g (0.63 lbs) (including radiator fins) -> W 175.5 mm x H 28.8 mm x D 138.5 mm (6-29/32 inches x 1-1/8 inches x 5-7/16 inches) - BNC x 1, 12G / 6G / 3G /1.5G HD SDI: 0.8 V [p-p], 75 Ω
Input/Output -> MSU Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK Camera Control Unit (CCU) -> Input/Output -> LAN TRUNK IP/12G/3G Interface Kit AK-NP600G General -> Operating Temperature IP/12G/3G Interface Kit AK-NP600G General -> Operating Humidity IP/12G/3G Interface Kit AK-NP600G General -> Weight IP/12G/3G Interface Kit AK-NP600G General -> Dimensions IP/12G/3G Interface Kit AK-NP600G -> Input/Output -> < UHD/HS/HD SDI OUT1 > terminal IP/12G/3G Interface Kit AK-NP600G >> Input/Output -> < UHD/HS/HD SDI OUT1 > terminal	LAN connection with camera side via an optical cable *4 1 line, 100BASE-TX, 1000BASE-T Personal computer connection for distribution via the Web *4 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer) ->0 °C to 40 °C (32 °F to 104 °F) ->10% to 90% (no condensation) ->Approx. 284 g (0.63 lbs) (including radiator fins) ->W 175.5 mm x H 28.8 mm x D 138.5 mm (6-29/32 inches x 1-1/8 inches x 5-7/16 inches) - BNC x 1, 12G / 6G / 3G /1.5G HD SDI : 0.8 V [p-p], 75 Ω

IP/12G/3G Interface Kit AK-NP600G - BNC x 1, 3G / 1.5G HD SDI: 0.8 V [p-p], 75 Ω

> Input/Output - > < UHD/HS/HD SDI

OUT4 > terminal

IP/12G/3G Interface Kit AK-NP600G - BNC x 1, 1.5G HD SDI when HD TRUNK, 3G / 1.5G HD SDI when TICO: 0.8 V [p-p], 75 Ω

> Input/Output - > < HD TRUNK/TICO

IP/12G/3G Interface Kit AK-NP600G - BNC x 1, 1.5G HD SDI: 0.8 V [p-p], 75 Ω

> Input/Output - > < HD SDI/PROMPT

IN > terminal

OUT > terminal

IP/12G/3G Interface Kit AK-NP600G - SFP+ x 1, 10GBASE-LR

> Input/Output - > < SFP+1 > slot

IP/12G/3G Interface Kit AK-NP600G - SFP+ x 1, 10GBASE-LR

> Input/Output - > < SFP+2 > slot

IP/12G/3G Interface Kit AK-NP600G - RJ-45 x 1

> Input/Output - > < LAN2 > terminal

IP/12G/3G Interface Kit AK-NP600G -> Pillar (M3 x H20) x 1, Options rear panel x 1, Power cable x 1, Heat-transfer sheet x 1, Bundled Items askets x 2

Footnote Description

- 1. Depending on the setting, only one of them can be selected at one time.
- 2. For details on output formats, please see the "Supported formats".
- The BB (black burst) signal and tri-level sync signal of the reference input are recognized automatically.
- 4. IP video cannot be transmitted when [CCU MODE] is set to [2160/23.98p], [2160/23.98PsF], [1080/23.98p], or [1080/23.98PsF].