TOPAS 4K

4K optical transmission for Panasonic AW-UE150

The users of the **Panasonic AW-UE150** PTZ camera are going to enjoy the featured **Ereca TOPAS 4K** allowing to transmit all signals over fibre and remote power the UE150 camera.

Topas 4K is specially designed and shaped to complete perfectly the UE150.
The mechanical interface of the transmitter enclosure has been precisely cut so it matches the camera bottom and mounting bracket for quick and easy installation while staying visually discrete.

The transmission module works with standard SMPTE cables (Lemo and Neutrik) and allows to power remotely the UE150 camera and the Topas 4K transmitter over 800 meters. The transmitter is also available with local power option and SC/APC connectors.

The receiver side comes with two options:
- A standalone half rack 1RU receiver with remote power capacity and basic diagnosis.
- For Cam Racer's owners, the Topas 4K transmitter has been made compatible with the Cam Racer basestation receiver (signals and power), offering a complete solution comfortable to use with embedded web management and detailed diagnosis.

Each TOPAS 4K system transmits the following signal set:

- 1 x 12G SDI signal from Camera,
- 1 x 3G SDI signal from Camera,
- 1 x HD SDI monitoring signal from Camera,
- 1 x HD SDI from basestation (return path),
- 1 x Genlock from basestation (Composite video / Black burst / Tri-level),
- 2 x Audio from basestation (can be optionally shared with LANC remote signal),
- 1 x Ethernet 10/100 Mbps,
- 1 x Serial data RS 232/422/485,
- 1 x Tally Contact closure from basestation.

A small internal silent fan provides cooling of the transmitter electronics and power supply section.

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Technical Specifications

Optical	
Dynamic range:	15 dB for control and 3G SDI, 10dB for 12G SDI.
Connector:	LEMO 3K (EDW / FXW) or NEUTRIK OpticalCon DUO, or SC/APC.

SDI Video HD to 12G	
Connector:	3G certified 75Ω BNC and 12G certified 75Ω BNC.
Standard:	HD, 3G, 6G, 12G
Amplitude:	Input: cable equalization on all channels including 12G, Output: 800 mV pp / reclocked.
Return loss:	Better than: - 15 dB for 0 to 1.5 Ghz, - 10 dB for 1,5G to 3G, -6dB for 3G to 12G.

Composite Video / GL	
Number, connector:	1 from basestation to camera, 75Ω BNC.
Standard:	Composite video, Black Burst, Tri-level (Bi / Tri level auto sense).
Performance:	BW > 5.8 MHz at +/- 0.2 dB, DgDp < 1%, < 1°, Group delay < 10 ns, SNR > 67 dB (CCIR567).

Analog Audio	
Number, connector:	2 channels from basestation, Jack2.5mm.
Impedance:	Input: 10 KΩ differential (non floating), Output: 20 Ω differential (non floating).
Amplitude:	+ 18 dBm maximium.
Bandwidth:	50 Hz to 15 KHz at +/- 0.5dB, (20 Hz to 20 KHz at -3 dB).
Distortion:	0.05% at 1Khz / 0 dBm.
Signal to noise ratio:	90dB, "A" weighted.

LANC	
Number, connector	1 bidirectionnal, Jack2.5mm / In place of audio output upon request.
Protocol	Standard LANC or RC-V100 remote protocol (5V open collector signaling).

Data	
Number, connector:	2 bidirectional channel, RJ 45 for Channel 1, Hirose 12 for channel 2.
Protocols:	RS485, RS422, RS232.
Data rate:	0 to 500 Kbd/s.

Ethernet	
Number, connector:	1 channel, RJ 45.
Protocols:	10 or 100 Mb/s, Full or Half-duplex (Auto sense), MDI or MDI-X (Auto sense).

Tally	
Number:	1 Tally
Tally output:	Relay (dry contact) shared with serial RJ45 (direct connection to UE150)
Tally input:	Contact input.

Power section	
Camera unit:	8 Watts + Silent fan cooling.
Camera power capacity	12V, 50W continuous.

Mechanical	
Transmitter:	33mm thickness / Size of the camera, weight 750 grams.
Receiver standalone:	1/2 RU 19" rack, depth 300mm excluding connectors, weight 1500 grams. (Availability Q4 2019).
Receiver (Cam racer)	1 RU 19" rack, depth 250mm excluding connectors, weight 3000 grams.
Operating Temp range:	From -20 to + 60°C. (Avoiding direct sun exposition).

High end receiver for illustration purposes (Cam Racer basestation with 12G receiver option).

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