EQUIPOS DE TELECOMUNICACION
OPTOELECTRONICOS, S.A.

Fibre optic transmission systems for CCTV



Digital video and bi-directional auxiliary signals optical receiver, A195 model

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03.A195.1.1S

OPTICAL PARAMETERS		
Optical Emitter / Receiver	Laser / PIN	
Output / input wavelength (see note 1)	1,550 / 1,310 nm	
Number and type of fibre	2 x Singlemode (9/125 μm) (optionally 1 single fibre)	
Average optical power (see notes 2 and 3)	≥ -4 dBm	
Sensitivity (see notes 3 and 4)	≤ -29 dBm	
Line rate	155.52 Mbits/s	
VIDEO ELECTRICAL PARAMETERS		
Output voltage	1 Vpp (75 Ω)	
Resolution	10 bits	
Bandwidth (-1 dB) (see note 2)	≥ 5.8 MHz	
Peak to peak differential gain / phase (see notes 1 and 2)	< 2.0 % / 2.0 °	
Signal to noise ratio (weighted) (see notes 1 and 2)	> 67 dB	
AUXILIARY SIGNALS ELECTRICAL PARAMETERS		
Number of auxiliary channels	3 (Bi-directional)	
Type of auxiliary channels available	1x Digital audio, 1x Asynchronous data, 2x Dry contacts	
Type of audio signal	Balanced audio (20 Hz – 20 kHz, 0 dBm nom. +10 dBm max)	
Resolution / Sampling frequency	16 bits / > 55 kHz	
Signal to noise ratio (weighted)	≥ 80 dB	
Input / output impedance (see note 1)	600 Ω or high impedance / 600 Ω or low impedance	
Type of data signal (user configurable)	RS-232, RS-422, RS-485 (2 or 4 w)	
Maximum binary rate	> 128 kbits/s (RS-232/422), > 19.2 kbit/s (RS-485)	
Type of input / output contact	Active by earth closing / dry contact	
POWER PARAMETERS		
Power requirements / Power consumption (see note 1)	Internal of P40W housing, <8 W	
MECHANICAL PARAMETERS		
Format	Plug-in module for 19” rack and 3U high	
Dimensions	10 TE wide, 160 mm deep (without connectors)	
Optical / video / auxiliary signal / power supply connector	FC/PC / BNC removable screw-on terminal for 8 / 2 contacts	
ENVIRONMENTAL CONDITIONS		
Operating temperature range	-40 °C to +74 °C	
Humidity range	0 a 95% without condensation	
INDICATOR AND ALARMS (see note 5)		
Unit in operation	Green	ON
No video at the remote input	Red	NV
Absence of input optical power	Red	APO
For each auxiliary channel	2 x Amber	A1-A, A1-B, .., A3-A, A3-B
Audio	A	Excessive input signal
Data	A/B	Data Output / Input
Contacts	A/B	Output relay 1/2 closed

Note 1.- Typical values as a production average

Note 2.- Actual values are given in the test sheet. These values are measured according to the test procedure for this device

Note 3.- 1 dB less in the single fibre version.

Note 4.- Value guaranteed for a BER $<10^{-9}$ in all the operating range

Note 5.- LED’s on the front side

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