

Fibre optic transmission systems for CCTV



Digital video and bi-directional auxiliary signals optical emitter, A194 model

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03.A194.1.1S

OPTICAL PARAMETERS		
Optical Emitter / Receiver	Laser / PIN	
Output / input wavelength (see note 1)	1,310 / 1,550 nm	
Number and type of fibre	2 x Singlemode (9/125 µm) (optionally 1 single fibre)	
Mean optical power (see notes 2 and 3)	≥ -4 dBm	
Sensitivity (see notes 3 and 4)	≤ -29 dBm	
VIDEO ELECTRICAL PARAMETERS		
Video specification	PAL / SECAM / NTSC	
Input voltage	1 Vpp ± 3 dB (75 Ω)	
Resolution / Sampling frequency	10 bits / > 14 MHz	
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)	+10,5 to +14 Vdc, < 650 mA	
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 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

EQUIPOS DE TELECOMUNICACIÓN OPTOELECTRÓNICOS, S.A.

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