

Fibre optic transmission systems for CCTV



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

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08.A194.1.0S

OPTICAL PARAMETERS

Optical Emitter / Receiver	Laser / PIN (singlemode) ; Laser / PIN (multimode)
Output / input wavelength (see note 1)	1,310 / 1,550 nm (singlemode); 1.310 / 850 nm (multimode)
Number and type of fibre	1 x singlemode; 1 x multimode (62,5 / 125 µm) C version
Average optical power	≥ -4 dBm
Receiver sensitivity (see note 2)	≤ -29 dBm (singlemode); ≤ -17 dBm (multimode)
Line rate	155,52 Mbits/s

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)	≥ 5.8 MHz
Peak to peak differential gain / phase (see note 1)	< 2.0 % / 2.0 °
Signal to noise ratio (weighted) (see note 1)	> 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
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MECHANICAL PARAMETERS

Format	Stand-alone (Optional: plug-in module for 19" rack and 3U high)
Dimensions	Box 160 x 130 x 65 mm.
Optical connector	FC/PC (singlemode); ST (multimode)
Video / auxiliary signal / power supply connector	BNC / 8-pole removable screw-on terminal / 2 contacts

ENVIRONMENTAL CONDITIONS

Operating temperature range (in operation)	-40 °C to +74 °C
Humidity range	0 a 95% without condensation

INDICATOR AND ALARMS (see note 3)

Unit in operation	Green	ON
No input video	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.- Value guaranteed for a BER <10⁻⁹ in all the operating range

Note 3.- LED's on the front side

EQUIPOS DE TELECOMUNICACIÓN OPTOELECTRÓNICOS, S.A.

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