

Fibre optic 8-bit digital video multichannel transmission



**4 video channels optical receiver and data
transceiver, A452 model**

GENERAL FEATURES

Type of transmission	Digitised video (8-bit resolution) without compression
Received video signals	4 x NTSC / PAL
Bi-directional data channel	1 x asynchronous data (RS-232, RS-422, RS-485 2/4 w)

OPTICAL PARAMETERS

Optical receiver / emitter	PIN / LED
Input / output wavelength (see note 1)	850 nm / 1,310 nm
Number and type of optical fibre	1 x Multimode (62,5/125 µm)
Output optical power at 850 nm (see note 2)	≥ -0 dBm
Input sensitivity at 1,310 nm (see note 2)	≤ -6 dBm (BER <10 ⁻⁹ in all the operating range)

VIDEO ELECTRICAL PARAMETERS

Output amplitude / impedance (see note 1)	1 V _{pp} / 75 Ω
A/D converter resolution	8 bit
Differential gain / phase (see notes 1 and 2)	< 3.5 % / < 2.0 ° (peak to peak)
Bandwidth (see notes 1 and 2)	> 5.8 MHz
Signal to noise ratio (weighed) (see notes 1 and 2)	> 60 dB

DATA CHANNEL PARAMETERS

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)

POWER PARAMETERS

Power requirements	12 Vdc / Internal (stand-alone / housing option)
Consumption (see note 1)	< 5.0 W

MECHANICAL PARAMETERS

Available formats	Stand-alone / Plug-in module for 19" rack 3U high
Dimensions	160 x 130 x 65 mm box (stand-alone version) 10 TE module, 160 mm deep (without connectors)
Optical / video / data channel connector	1 x ST / 4 x BNC / 1 x 8-pole terminal

ENVIRONMENTAL CONDITIONS

Operating temperature range	-40 °C to +74 °C
Humidity range	0 to 95% without condensation

INDICATORS AND ALARMS

Unit in operation	Green	ON
Absence of input optical power	Red	AP
No video at A451 input	4 x Red	NV1...NV4
Data transmission	1 x Green	Tx
Data reception	1 x Green	Rx

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