ernitec

BVT / BVR 250 series

Multimode fiber – Video Transmission



The Ernitec Series 250 is a range of units capable of transmitting video signals on multimode fibres up to a distance of 3000 m, depending on the fibre type.

The various types of transmitters and receivers are fully compatible, meaning for example that a BVT transmitter can send to an EVR receiver without any problems.

The transmitter units have a composite video input and a fibreoptic output.

In addition, the EVT-250 has a video monitoring coax output with a selectable 1.0 Vpp or 1.2 Vpp video output.

The receiver units have a composite coax video output (two outputs on the EVR-250) and a fibreoptic input. The video output level can be set to 1.0 Vpp or 1.2 Vpp and the frequency response may be lifted by 3 dB @ 5 MHz, all by means of jumper settings.

The receivers have built-in AGC which automatically compensates for the loss in the optical fibre, thereby eliminating the need for adjusting the receiver to the length of the optical fibre.



Specification

Video Specifications ¹	
Video type: 525 or 625 line composite, colour or monochrome	
Connector type: 75 ohm BNC	omposite, colour of monocinome
Nominal video input level (BVT):	1 Vpp (max. 1.5 Vpp)
Video output level (BVR):	1 Vpp nominal, 1.2 Vpp by jumper setting
Video output HF boost (BVR):	+3 dB @ 5 MHz by jumper setting
Number of video outputs:	TO GE & THE EST JUMPON COLLING
1	
Bandwidth: 10 Hz to 8 MHz	
Signal to noise ratio, 5 dB attenuati	ion: > 55 dB unweighted
K-factor: < 0.5 %	
2T pulse/bar ratio:	> 93%
Luminance non-linearity:	< 3% pp
Field time distortion:	< 0.5%
Differential gain @ 4.43 MHz:	< 3 %
Differential phase @ 4.43 MHz:	< 2 %
Group delay, 100 Hz to 5 MHz:	$<\pm$ 10 nsec.
Fibreoptic Specifications (All types)	
Connector type: ST	
Fibre type: 62.5/125 µm or 5	50/125 μm²
Transmitter type: LED	
Wavelength: 820 nm nominal	
Power budget: 7 dB	
Output voltage: 12 VDC	
Current: 750 mA	
General Specifications	
Supply voltage and power consum	
Enclosure:	Boxed, IP65
EMI / EMC: EN 50081-1, EN	50130-4
Safety: EN 60950	
Humidity: < 85 % relative @ 1 bar	
Temperature range:	
-25° to +55°C	
Size (W x H x D): 120 x 55 x 122 m	nm

 $^{^{\}rm 1}\,{\rm All}$ video specifications are for the equipment installed back-to-back, except where noted.