

## BVT / BVR 65 series

Twisted Pair – Video Transmission



The Ernitec Series 65 is a range of units capable of transmitting colour and black and white video signals on twisted pair cables up to a distance of 1000 m.

The Series 65 twisted pair transmission equipment can be used in a variety of applications, such as linking a camera to a matrix, transmitting video from a remote matrix to a main matrix or from a matrix to a remote monitor.

The transmitter unit has a galvanic separator thereby eliminating hum problems.

The loss introduced by the cable length is compensated on the receiver by means of five potentiometers which must be adjusted at the time of installation.

The Series 65 is fully compatible with other Ernitec twisted pair video equipment. However the specified technical data including transmission distance assumes the use of Series 65 equipment only

### Ancillary Products

**CHM-PSTP/2** The Ernitec CHM-PSTP/2 is a small power supply and twisted pair transmitter, designed for supply of 12 VDC CCD cameras and fits into the Ernitec CHM/N-housings.

The built-in twisted pair video transmitter with galvanic separation can be used on cable distances up to 1500 meters for colour signals and 2000 meters for B/W signals. The CHM-PSTP/2 is fully compatible with all other Ernitec twisted pair equipment.

1.000 m

IP65

-20° C

# Specification

<b>Transmitter specifications (BVT-65)</b>	
<i>Coax video input</i>	
Nominal video input level	1 Vpp @ 75 Ω
Max. video input level	1.5 Vpp @ 75 Ω
<i>Twisted pair video output</i>	
Video output level	typ. 2 Vpp, balanced in 124 Ω
Frequency response	15 Hz to 8 MHz, ±3 dB
Signal to noise ratio, weighted	> 60 dB
<b>Receiver Specifications (BVR-65)</b>	
<i>Twisted pair video input</i>	
Min. input voltage level	> 0.5 Vpp, balanced
Max. input voltage level	< 3.0 Vpp, balanced
Transmission distance	< 1000 m @ 0.6 mm twisted, 25°C
<i>Coax video output</i>	
Nominal video output level	1 Vpp @ 75 Ω
Max. video output level	1.2 Vpp @ 75 Ω
Frequency response	15 Hz to 8 MHz, ±3 dB
Signal to noise ratio, weighted	> 60 dB @ 24 dB equalisation
<b>General Specifications</b>	
Power supply, 230 VAC version	207 to 253 VAC, 45 to 60 Hz
Power supply, 115 VAC version	104 to 126 VAC, 45 to 60 Hz
Power consumption (BVT)	< 5 VA
Power consumption (BVR)	< 6.5 VA
Temperature range	-20° C to +55°C
Humidity	< 85 %RH
Dimensions, D x W x H	122 x 120 x 55 mm
Enclosure	IP 65
Cable glands	1 x PG13.5, 1 x PG9, 1 x PG7
EMC / EMI	EN 50081-2, EN 50130-4
Safety	EN 60065

## Recommended twisted pair cable specifications

Description	Min.	Typ.	Max.	Unit
Solid conductors, diameter (Ø)	0,5	0,6	1,0	mm
Characteristic impedance	110	120	130	Ω
Capacitance			90	nF/km
Capacitance, unbalanced			800	pF/km
Inductance			0,7	mH/km
Isolation	500			M <sub>Ω</sub>
Loop resistance			130	Ω
Attenuation @ 5 MHz			30-36	dB/km
Twists	5			pcs./m