# Twisted Pair – Video Transmission Series 65



# Description

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 consists of a range of a transmitter and a receiver, as listed below. 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.

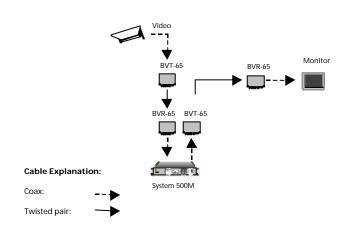
Туре	Description
BVT-65	Boxed video transmitter with built-in 115 or 230 VAC power supply
BVR-65	Boxed video receiver with built-in 115 or 230 VAC power supply

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

### MVT-600 Mini transmitter

The Ernitec MVT-600 miniature twisted pair transmitter is designed for transmission of colour and B/W composite video signals on cable lengths of up to 1500 meters (1000 meters when used with BVR-65). This is a compact video transmitter and due to low power consumption can be connected to a built-in BNC plug and powered by a camera. The MVT-600 is fully compatible with all other Ernitec twisted pair equipment.

### 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.

# Specifications

Transmitter specifications (BVT-65)							
Coax video input							
Nominal video input level	1 Vpp @ 75 Ω						
Max. video input level	1.5 Vpp @ 75 Ω						
Twisted pair video output	•						
Video output level	typ. 2 Vpp, balanced in 124 $\Omega$						
Frequency response	15 Hz to 8 MHz, ±3 dB						
Signal to noise ratio, weighted	> 60 dB						
Receiver Specifications (BVR-65)							
Twisted pair video input							
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						
Coax video output							
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						
General Specifications							
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						

Please find specifications for MVT-600 mini transmitter and CHM-PSTP/2 power supply/transmitter in separate data sheet (Data sheet for Series 225 Twisted Pair Equipment)

# 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			$M_{\Omega}$
Loop resistance			130	Ω
Attenuation @ 5 MHz			30-36	dB/km
Twists	5			pcs./m

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