

One channel video link

With duplex data and contact closure

CFO First Mile series consist of fibre optic modems which provide a high quality and lossless video transmission for variety of CCTV applications over multimode fibre



CFO321 link offers a 10-bit video transmission with one bi-directional data and one contact closure channel over one multimode fibre.

High quality video signal can be achieved over distances up to 5 km depending on the bandwidth of the multimode fibre in use.

The primary application is a point-to-point transmission from camera to

monitoring centre. In advanced video network systems the CFO321 offers a flexible way for first mile transfer to the nearest collection point of a larger scale network.

The first offering in CFO321 range will be a compact size and temperature hardened transmitter CPT321 and a standard 5HP rack card receiver CRR321.

CPT321 is meant for stand-alone installations and has an option for DIN mount rail installation as well.

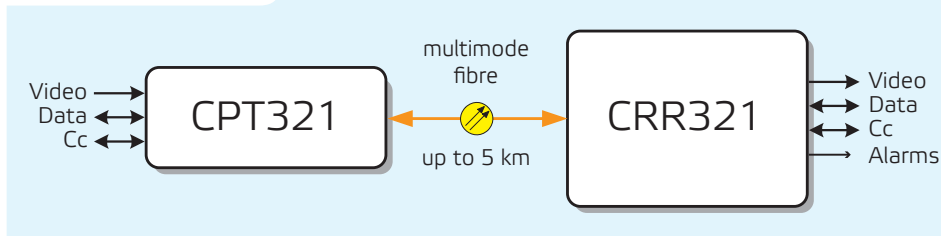
Both units are configurable on data settings by means of a simple DIP switch operation.

As with all CFO Platform products the units meet all standard EMC and environmental requirements.

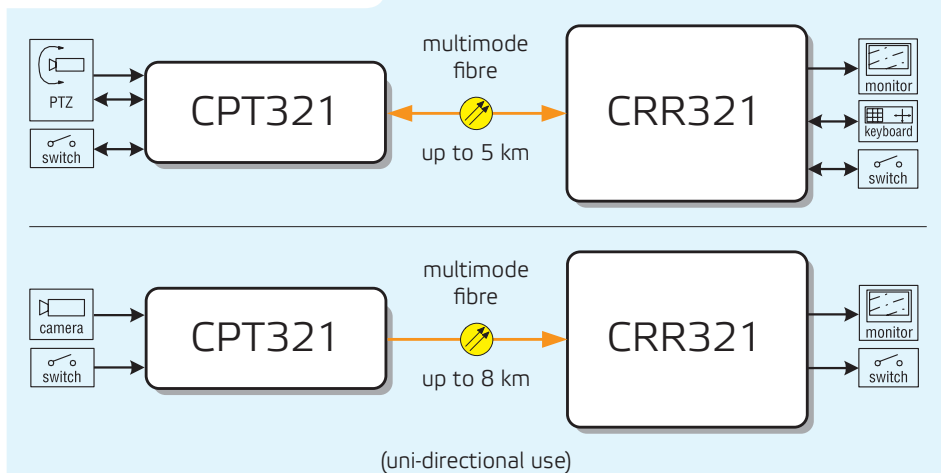
FEATURES

- >> High performance uncompressed zero delay digital video transmission, SNR 67 dB typical, 10 bit video sampling
- >> One CVBS (PAL/NTSC) video channel
- >> One bi-directional data interface, compatible with EIA232/422/485
- >> Data rate up to 230 kbps
- >> One bi-directional contact closure
- >> Transmission on one multimode fibre up to 5 km (up to 8 km uni-directionally)
- >> Units for rack mount or stand-alone installations
- >> Mechanically compact and ruggedised
- >> Transmitter unit available in a special small-size stand-alone design (CPT)
- >> International EMC and environmental conformance
- >> Feasible for temperature hardened operation (-34...+74 °C)

BLOCK DIAGRAM



APPLICATION EXAMPLE



TECHNICAL SPECIFICATIONS

Optical, forward			Contact Closure		
Output wavelength	1310 nm	62.5/125 µm fibre	Number of channels	1	bi-directional
Output power	-3 dBm		Input	dry contact	
Input sensitivity	-16 dBm		Output	24V / 1A (relay)	max
Bit rate	202.5 Mbps		Switching frequency	5 Hz	
Optical connector type	ST		Contact closure connector	screw terminal	
Optical, return			Alarms		
Output wavelength	850 nm	62.5/125 µm fibre	Hardware	A alarm	CRR321
Output power	-3 dBm		Optical input signal	B alarm	CRR321
Input sensitivity	-18 dBm		General		
Bit rate	20.25 Mbps		Supply voltage	10.5...14 VDC	regulated
Optical connector type	ST		16...28 VAC	CPT321	
Video			Supply voltage connector	screw terminal	CPT321
Number of channels	1	uni-directional	Current consumption	250 mA	max
Standard	PAL/NTSC	CVBS	<u>Dimensions (H x W x D)</u>		
Input level	1 Vpp		CRR321	3U ● 5HP ● 190 mm	without CMA
Input overload level	1.75 Vpp		CPT321	35 ● 48 ● 62 mm	without connectors
Impedance	75 ohm		Weight	0.2 kg	CPT321
Sampling resolution	10 bit			0.5 kg	CRR321
Sampling rate	13.5 MHz		Video & link status	LED displays	
Bandwidth	5.5 MHz	-1 dB	Operating temperature	-34...+74 °C	field-hardened
Insertion gain	+/-1 dB		Storage temperature	-40...+80 °C	recommended
C/L gain inequality	4 %		Humidity	0...95 %	non condensing
C/L delay inequality	40 ns		EMC compatibility	EN61000-6-3, EN50130-4, CE	
Differential gain	2 %		Notes		
Differential phase	1°		Class 1M Laser Product		
SNR	67 dB	weighted	<i>Typical values unless otherwise stated</i>		
Video connector	BNC female				
Data					
Number of channels	1	bi-directional			
Data format	RS232/422/485	selectable			
Data rate	0...230 kbps				
Sampling rate	16 MHz				