

Four channel video link

High performance uncompressed real time digital video transmission

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



New CFO421 video links are basic building blocks for multi-channel video transmission system providing uni-directional transmission of 4 zero-delay video channels together with bi-directional audio, data, contact closure and Fast Ethernet channels over one multimode fibre.

Evolving from the CFO422 series, the new generation CFO421 video

transmitters and receivers bring the CFO First Mile into an entirely new era of modern fibre optic transmission. In addition to enhanced 10 bit video, multiple data RS-data channels and dual audio capacity, the CFO421 units have a built-in Fast Ethernet Bridge to carry IP services as well. CFO421 units are fully managed and shall offer a remote access over IP via command line interface.

CFO421 units are fully compatible with CFO platform installation mechanics. Standard CSR series racks and CMA series module adapters are available for easy installations.

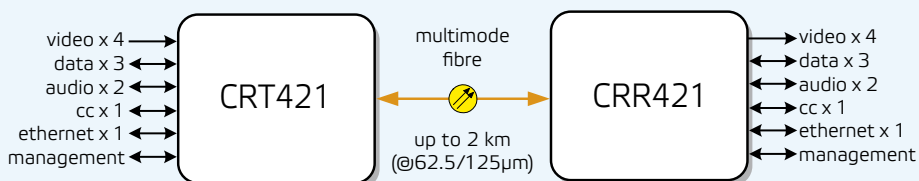
As with all CFO platform products these specific models do meet all typical EMC as well as other environmental and manufacturing related requirements.



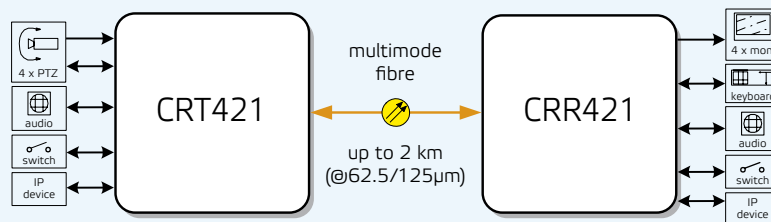
FEATURES

- >> High performance uncompressed real time digital video transmission, SNR 67 dB typical, 10 bit video sampling
- >> Four CVBS (PAL/NTSC) or two Y/C video channels
- >> 1 x 10/100Base-Tx full duplex Ethernet
- >> 3 x bi-directional data interfaces, compatible with EIA232/422/485
- >> User data rate up to 230 kbps / channel
- >> 2 x bi-directional audio, support unbalanced or balanced wiring
- >> 1 x bi-directional contact closure
- >> In-band configuration and management
- >> Card format applicable both for rack mount and stand-alone installations
- >> Mechanically compact and ruggedised
- >> EMC and environmental conformance
- >> CE approved

BLOCK DIAGRAM



APPLICATION EXAMPLE



TECHNICAL SPECIFICATIONS

Optical			Contact Closure		
Wavelength	1310 nm	forward	Number of channels	1	bi-directional
	1550 nm	return	Input	dry contact	
Max distance	2 km	62.5/125 µm MMF	Output	30V / 1A (relay)	max
			Switching frequency	5 Hz	
Video			Ethernet Bridge		
Number of channels	4	uni-directional	Number of ports	1	bi-directional
Standard	PAL/NTSC or Y/C	CVBS	Port type	10/100Base-TX	configurable
Input and output signal levels	1 Vp-p		Compliant	IEEE802.3, IEEE802.3U	
Input overload level	1.5 Vp-p	DC component			
Impedance	75 ohm				
Sampling	10 bits / 15.55 MHz				
Bandwidth	6.5 MHz	- 3 dB			
C/L gain inequality	3 %				
C/L delay inequality	40 ns	max			
Differential gain	2 %	max			
Differential phase	2°	max			
S/N ratio	67 dB	unified, weighted			
Data			Management		
Number of channels	3	bi-directional	CLI	RS232 and/or TCP/IP	
Data 1 & 2 format	RS232/422/485	selectable			
Data 3 format	RS232	fixed			
Data rate	0...230 kbps	all channels			
Dwelltime setting	50...10000 µs	RS485 2-wire			
Audio			General		
Number of channels	2 bi-directional	unbalanced / balanced	Supply voltage	10.5...14 V DC	regulated
Sampling frequency	60.5 kHz		Current consumption (max)	750 mA	steady state
Sampling resolution	16 bits		Dimensions (H x W x D)	3U ● 10HP ● 190 mm	without CMA
Input impedance	600/10k ohm	selectable	Weight	0.770 kg	
Output impedance	10 ohm				
Nominal level	0 dBm				
Clipping level	+20 dBm				
Frequency response	0.02...20 kHz	- 3 dB, ref. 1 kHz			
S/N ratio	70 dBq	CCIR weighted			
			Connectors		
			Video	BNC female	
			Data/audio/cc/mgmt/Ethernet	RJ-45 female	
			Optical	SC/PC	
			Operating temperature	-34...+74 °C	
			Storage temperature	-34...+74 °C	
			Humidity	0...95 %	non condensing
			EMC compatibility	EN61000-6-4, EN50130-4, CE	
			Notes		
			Class 3R Laser Product		
			<i>Typical values unless otherwise stated</i>		

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