

# CFO SERIES - CF0441

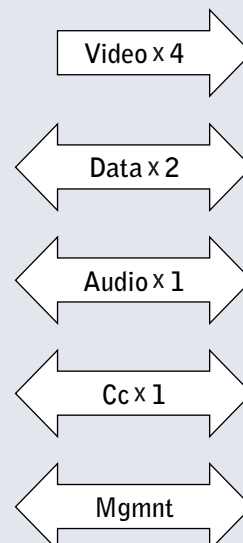
## SINGLEMODE 4CH VIDEO DUPLEX AUDIO/DATA LINK

The CF0441 link provides transmission of 4 video channels uni-directionally and 2 data, 1 audio and 1 contact closure channel bi-directionally on 1 singlemode optical fibre at 1310nm for up to 50km. The product utilises the latest uncompressed digital technology to provide very high performance video and audio transmission and reliable error free data services. All common data protocols are supported and are easily selectable from the same unit. As with all CFO Platform products the unit meets all international EMC and environmental requirements.



### FEATURES AND BENEFITS

- Four Channel Video Multiplexer
- High Performance Uncompressed Digital Video
- PAL/NTSC/CBVS or Y/C (2) Video Input
- Bi-directional Audio/Data/Contact Closure Transmission (CRT <--> CRR)
- Supports All Common Protocols in Same Unit
- Bi-directional on 1 Singlemode Fibre up to 50km
- True Plug and Play - No Adjustments, Switches, etc.
- In-band Configuration and Management
- Same Units for Rackmount or Standalone
- Mechanically Compact and Ruggedised
- International EMC and Environmental Conformance
- Compatible with all CFO Installation Systems
- CE Approved



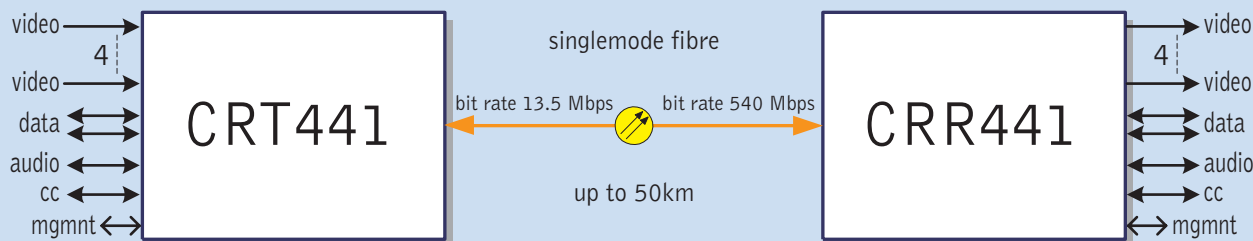
**CFO SERIES - CF0441**  
**SINGLEMODE 4CH VIDEO, DUPLEX AUDIO/DATA LINK**



**SYSTEM SPECIFICATIONS** (Typical values unless otherwise stated)

PARAMETER	VALUE	UNIT	COMMENTS	PARAMETER	VALUE	UNIT	COMMENTS
<b>Optical</b>				<b>Data</b>			
Output/Input Wavelength	1310	nm		Number of Channels	2		bi-directional
Output Power	-1	dBm	into 9/125 µm fibre	Data 1 Format	RS232		non-selectable
Spectral Width	3	nm		Data Rate	0...120	kbps	
Received Power (Min)	-21	dBm	to meet specifications	Data 2 Formats	RS422/485/TTL		selectable
Received Power (Max)	-1	dBm	to meet specifications	Data Rate	0...160	kbps	
Link Budget	20	dB		Oversampling Rate	1.6	MHz	
Bit Rate (Forward)	540	Mbps	CRT to CRR	Data Jitter	10	%	at max data rate
Bit Rate (Return)	13.5	Mbps	CRR to CRT	Dwelltime Setting	50...10000	µs	RS485
<b>Video</b>				<b>Contact Closure</b>			
Number of Channels	4		uni-directional	Number of Channels	1		bi-directional
Sampling Frequency	13.5	MHz		Data Rate	15	Hz	
Sampling Resolution	8	bits		Latency	200	ms	
Source and Load Impedance	75	ohm		<b>Management</b>			
Return Loss	30	dB	0.1MHz to 5.5MHz	Protocol	VT100/102, ANSI		
Input and Output Signal Levels	1	Vp-p		Data Format	RS232		
Input Overload Level	1.5	Vp-p	DC component	Communication	CRT <-> CRR		bi-directional
Insertion Gain	± 10	%	1 V	<b>Electrical</b>			
Bandwidth	5.5	MHz	3dB	Supply Voltage	10.5...14	V DC	regulated
Line Time Distortion	2.5	%	25µs Bar 'K' rating	Current Consumption (Max)	800	mA	steady state
Short Time Distortion	2.5	%	2T Pulse 'K' rating	<b>Mechanical</b>			
Short Time Distortion	5	%	2T Pulse to Bar ratio	Dimensions (H x W x D)	3U x 10HP x 190mm		
C/L Crosstalk	0.2	%	n/a for S-Video	Weight	0.7	kg	
Luminance Non Linearity	3.5	%		<b>Connectors</b>			
C/L Gain Inequality	3	%		Video	BNC female		
C/L Delay Inequality	90	ns		Audio/Data/Management	HD15 female		
Differential Gain	1	%		Optical	FC/PC		
Differential Phase	1	°	n/a for S-Video	<b>Environmental</b>			
S/N Ratio	60	dB	unified, weighted	Operating Temperature	-10...+55	°C	
<b>Audio</b>				Storage Temperature	-30...+70	°C	
Number of Channels	1		bi-directional	Humidity	0...95	%	non condensing
Sampling Frequency	52	kHz		Vibration	EN 50130-5: 1995		
Sampling Resolution	16	bits		Damp Heat	BS2011 p2.1, test dB, 95%rh 25...40	°C	
Input Impedance	600/>10k	ohm	selectable	<b>Electromagnetic Compatibility (EMC)</b>			
Output Impedance	10	ohm		Emissions	EN 50081-1, EN 55022-B		
Nominal Level	+6	dBm		Susceptability	EN 50130-4, EN 50082-1		
Clipping Level	+12	dBm					
Insertion Gain	± 1	dB	0 dBm				
Frequency Response	0.02...20	kHz					
Harmonic Distortion	0.1	%					
S/N Ratio	75	dBq	CCIR weighted				

**BLOCK DIAGRAM**



**CONTACT OFFICES**

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