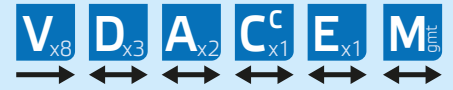


Eight channel video modem

For high performance uncompressed real time video transmission.
 CEV is a common nominator for next generation video modems in the CFO OP-X CWDM platform.



New CEV video modems are basic building blocks for multi-channel video transmission system providing uni-directional transmission of 8 zero-delay video channels together with bi-directional audio, data, contact closure and Fast Ethernet channels over one single-mode fibre.

Evolving from the CVM series, the new generation CEV video modems bring the CFO system 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 CEV modems have a built-in Fast Ethernet Bridge to carry IP services as well. CEV series is fully managed and shall offer a remote access over IP via command line interface or alternate Web user interface. Also SNMP support shall be made available to facilitate the exchange of management information over the networks.

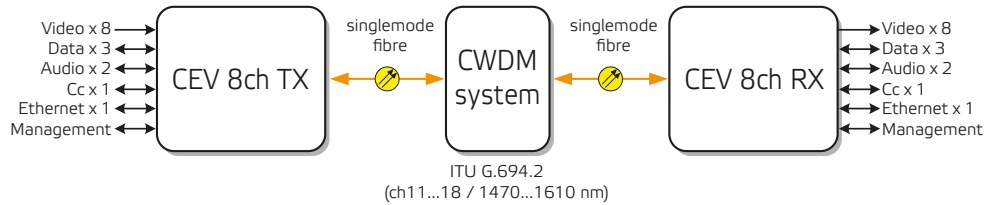
CEV Video modems are fully compatible with CFO platform mechanics. Standard CSR series racks and CMA series module adapters are available for easy installations.

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

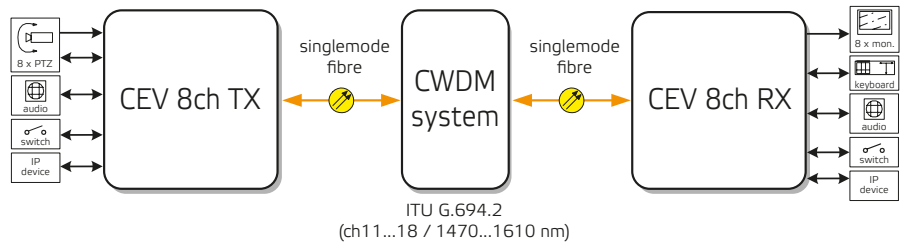
Features

- High performance uncompressed real time digital video transmission, SNR 67 dB typical, 10 bit video sampling
- Eight CVBS (PAL/NTSC) or four 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
- Complies to ITU G.694.2 CWDM grid from ch 11 to ch 18
- In-band configuration and management
- Card format applicable both for rack mount and stand-alone installations
- Mechanically compact and ruggedised
- EMC and environmental conformance

Block diagrams



Application example



Technical specifications *(Typical values unless otherwise stated)*

Optical			Contact Closure		
CWDM wavelengths	1470 nm...1610 nm	ITU G.694.2 *	Number of channels	1	bi-directional
Output power	-1 dBm		Input	dry contact	
Received power	-5 dBm	max	Output	30V / 1A (relay)	max
	-21 dBm	min	Switching frequency	5 Hz	
Video			Ethernet Bridge		
Number of channels	8	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	Management		
Impedance	75 ohm		CLI	RS232 and/or TCP/IP	
Sampling	10 bits / 15.55 MHz		SNMP	V2, MIB II	
Bandwidth	6.5 MHz	- 3 dB	General		
C/L gain inequality	3 %		Supply voltage	10.5...14 V DC	regulated
C/L delay inequality	40 ns	max	Current consumption (max)	850 mA	steady state
Differential gain	2 %	max	Dimensions (H x W x D)	3U ● 15HP ● 190 mm	
Differential phase	2°	max	Weight	0.995 kg	
S/N ratio	67 dB	unified, weighted	Connectors		
Data			Video	BNC female	
Number of channels	3	bi-directional	Data/audio/cc/mgmt/Ethernet	RJ-45 female	
Data 1 & 2 format	R5232/422/485	selectable	Optical	SC/APC 8°	
Data 3 format	R5232	fixed	Operating temperature	-34...+74 °C	
Data rate	0...230 kbps	all channels	Storage temperature	-34...+74 °C	
Dwelltime setting	50...10000 µs	RS485 2-wire	Humidity	0...95 %	non condensing
Audio			EMC compatibility	EN61000-6-4, EN50130-4, CE	
Number of channels	2 bi-directional	unbalanced / balanced	Notes		
Sampling frequency	60.5 kHz		* channel to be specified when ordering		
Sampling resolution	16 bits		Class 1M Laser Product		
Input impedance	600/10k ohm	selectable			
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			