



C-FX-CWDM Series

Fiber Optic 8/10-bit Digitally Encoded N Video with N Audio, N Data,
N Ethernet Transmission System



Features

- 8/10 Bit Digitally Encoded Modulation
- NTSC, PAL, SECAM Compatible
- SMT and Surface Mount Technology
- Industrial grade Design
- Lightning-proof Up to 4,000V
- Overload and Short Circuit Protection
- Anti-Electromagnetic
- Signal status intelligent indication
- 600, 10K, 47K Ohm Unbalance or Balance
- 10db Budget with 50/125 μ
- 13db Budget with 62.5/125 μ
- 36db Budget with Single-mode Fiber
- 20KM (SM) & 2KM (MM), Max to 100KM
- **5 years Warranty**

Applications

- Smart Buildings
- Security and Surveillance
- Intelligent Transportation System (ITS)

Ease Of Operation

- Free standing and Rack-mounted Optional
- Hot Swappable Rack-mount Cards
- Automatic Resettable Fuses
- Highest Optical Dynamic Range

Order Information

Multi-mode (2KM ; 1310nm)(850nm Optional)

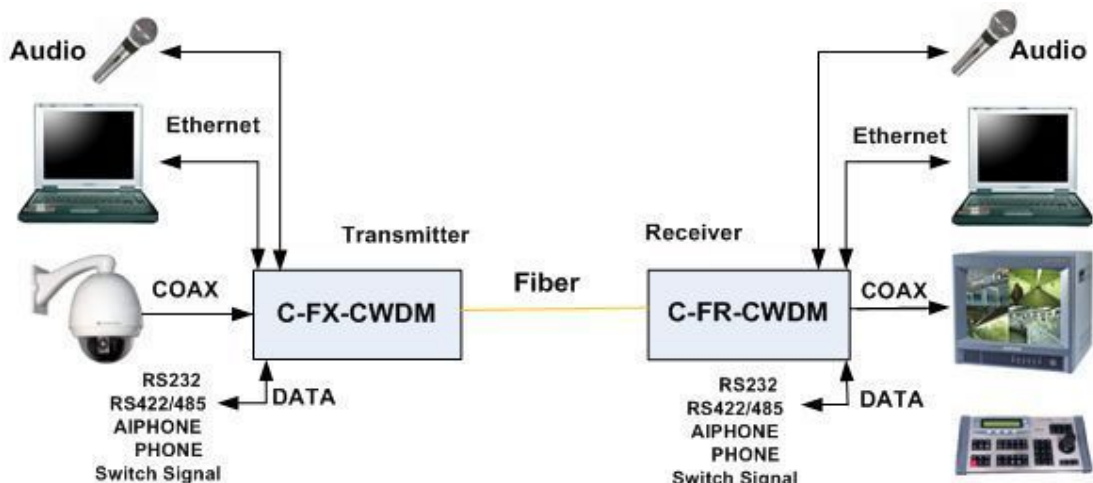
- C-FX**N**VMA Digital N-Channel Video;
C-FX**N**V01D-MA Digital N-Ch Video with 1-Ch Reverse direction Data (PTZ);
C-FX**N**V01D1A-MA Digital N-Ch Video with 1-Ch Reverse direction Data (PTZ) and 1-Ch Bi-direction Audio;
.....(N : Max to 128 channel)
C-FX**N**Vn**A**n**D**-E-MA Digital N-Ch Video with n-Ch Bi-direction Audio (Data) with 1-Ch Ethernet

Single-mode (20KM ; 1310/1550nm)(20,40,60,80,100KM Optional)(1270-1610nm Optional))

- C-FX**N**V-SA Digital N-Channel Video;
C-FX**N**V01D-SA Digital N-Ch Video with 1-Ch Reverse direction Data (PTZ);
C-FX**N**V01D1A-SA Digital N-Ch Video with 1-Ch Reverse direction Data (PTZ) and 1-Ch Bi-direction Audio;
.....(n : Max to 128 channel)
C-FX**N**Vn**A**n**D**-E-SA Digital N-Ch Video with n-Ch Bi-direction Audio (Data) with 1-Ch Ethernet

TO complete part # add: ex: C-FXNV-SA-M= Free standing; C-FXNV-SA-I= Rack-mounted
M= Free standing; I= Rack-mounted

Layout Diagram



SPECIFICATIONS

Video Performance	
Sampling Resolution	8Bit/10Bit PCM
Sampling Frequency	15MHz
Output/Input Signal Levels	1Vp-p 75 Ohm
Input Overload Level	1.5Vp-p 75 Ohm
Input Bandwidth	5Hz~8MHz
Video In/Output Impedance	75 Ohm(Unbal)
Differential Gain	≤1% Type
Differential Phase	≤1° Type
Signal to Noise Ratio(S/N)	≥70dB (weighted)

Optical Performance	
Input/Output wavelength	SM 1310/1550nm
	MM 850/1310nm
	CWDM 1270-1610nm
Output Power	0 dBm~-5 dBm
	-8 dBm~-15 dBm
Sen(Receiver Sensitivity)	> -24 dBm (Video)
Sen(Receiver Sensitivity)	> -24 dBm (Ethernet)
Sen(Receiver Sensitivity)	> -36(D) dBm (Data)
Sen(Receiver Sensitivity)	> -36(D) dBm (Audio)

Data Performance	
Data Format	RS485 (PTZ)(Simplex)
Data Rate	RS232 120kbps/300kbps
	RS422 120kbps/300kbps
	RS485 120kbps/300kbps
Bit Error Rate	< 10 ⁻¹³
Lightening-proof	4 KV
Connector	5 PIN

Electrical Performance	
Power Voltage(M)	9V DC
Power Voltage (I)	9V DC
Power Supply(M)	2W or 2.5W
Power Supply(I)	Max<120W
2 Power Protection	Optional

Audio Performance	
Interface	5 PIN or AV
Input/Output	600 Ohm Unbalance/Balance
	10K,47KOhm Unbalance/Balance
Input/Output	-6-+6dBm
Frequency	10Hz-20Khz
S/N	>60dB(weighted)

System Performance	
MTBF	>120,000 Hours
LED Indication	Power LED
	Video LED
	Data LED
	Optic Link LED
	Ethernet LED
EMI	Standard GJB151-97,SC
Operating Temperature	- 40° C to +74° C
Operating Humidity	0 to 95% Non-condensing

Ethernet Performance	
Interface	RJ45(With LED Indication)
Mode	10M/100M(Auto Adapt)
Standard	IEEE 802.3/802.3U
Function	Feedback diagnose

Machine Performance	
Free standing	205mm(L)*135mm(W)*33mm(H)
Rack(slots)	172mm(L)*128mm(W)*28mm(H)
Rack Standard	19"X3U
Rack	Number=18 slots
Material	Aluminium Alloy
Color	Iron grey

DESCRIPTION

Transition Network's Analog Video + Data (Audio; Ethernet) TX and RX units transport analog composite video and Data (Audio; Ethernet) simultaneously over multimode or single mode fiber. The TX device receives the video output from the camera and transmits it over the fiber. In addition, the TX device receives the Data (Audio; Ethernet) stream over fiber and transmits it to the camera to control PTZ (Audio device and computer) functionality. The RX device receives the video signal on fiber and converts it back to an analog composite video stream and outputs the video on coaxial cable to the monitor. In addition, the RX device receives the Data (Audio; Ethernet) stream from the PTZ controller (Audio device and computer) and transmits it over the fiber to the other end of the link.

All the conversion is performed in real time. Automatic gain control installed on both Transmitter and Receiver maintains desired quality of video's contrast and brightness for extended distance. No field adjustments are necessary.