

# Fiber Transmission Products

## (8-Bit) Single-Channel Video Transmitter/Receiver

### Overview

The video and data series fiber transmission products (Micro Type) deliver optical transmission of 8-Bit PCM coded video through one fiber either in multi-mode or single-mode for convenience and flexibility. Adjustment and maintenance free, these modules are universally compatible with major CCTV camera manufacturers and support data interface.

The unit's unique modular design for in field configuration also accommodates installation and system growth and delivers long operating distances of up to 60 Km. The Micro Type products feature robust construction well suited for harsh environments and are available in wall mount configuration. Plug-and-Play design ensures ease of installation requiring no electrical or optical adjustments.

### Standard Features

#### Video

- Non-compressed 8-Bit Digitally Encoded Video Transmission
- Support NTSC & PAL video systems
- No video degradation over max. operating distance

#### LEDs

- LED indicators on the front and rear of the unit for the convenience of observation

Single-Channel Video

## (8-Bit) Transmitter/Receiver

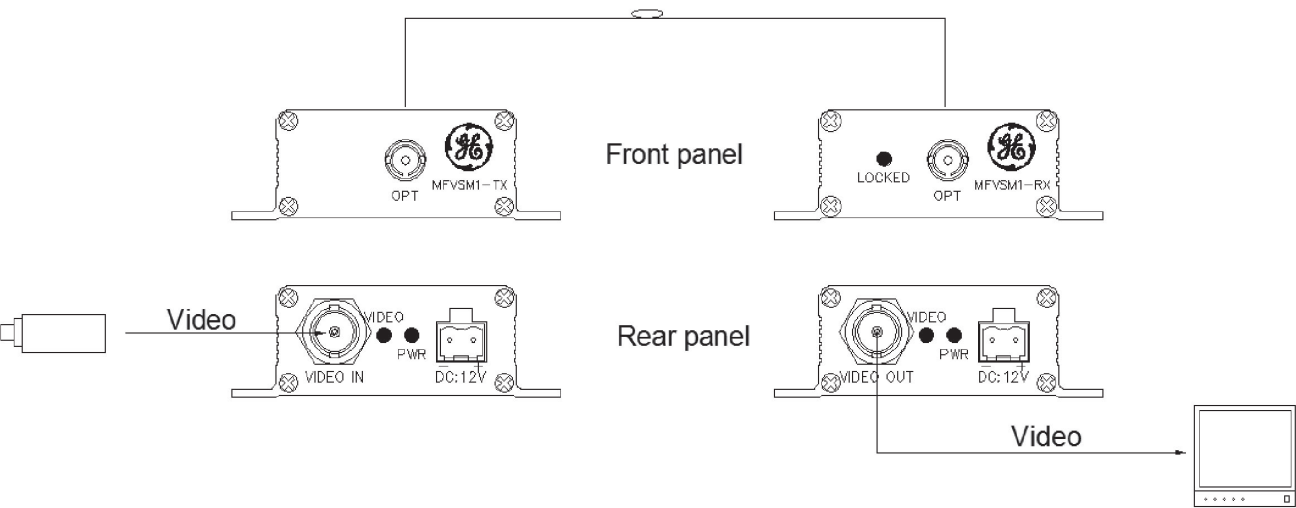


# Specifications

Video		
Number of Channels	1	
Color Systems	NTSC	PAL
I/O Impedance	75 Ohm	75 Ohm
I/O Composite Video Level	1Vp-p ± 5.5 IRE	700mVp-p ± 40 IRE
Sync Amplitude	40± 4 IRE	300± 30 IRE
Burst Amplitude	40± 4 IRE	300± 30 IRE
Bandwidth	≥4.6MHz	≥5.8MHz
Differential Gain	<2%	<2%
Differential Phase	<1 Degree Typical	<1 Degree Typical
SNR-CCIR weighted	≥ 53dB	≥ 53dB
Tilt	<1 %	<1 %
K-factor	1%	1.5%
Signal Indication (Video Presence/ Absence)	Green/Red LED lit	Green/Red LED lit
Input/output Connectors	BNC	BNC
Optical		
Wavelength	1310	
Number of Fiber	1	
<b>Tx Output Power:</b>		
Single Mode (40Km)	1310nm	-9dBm± 3 dBm
Multi-mode (4Km)	1310nm	-7dBm ± 3 dBm
<b>Optical Budget:</b>		
Multi-mode (62.5µm/125µm)	12dB	
Single-mode (9µm/125µm)	18dB (wavelength in 1310nm)	
Single-mode (9µm/125µm) Long Haul	25dB (wavelength in 1310nm)	
<b>Transmission Distance:</b>		
Multi-Mode (Limited by Fiber Bandwidth)	4Km	
Single-Mode	40Km	
Single-Mode (Long Haul)	60Km	
Fiber Connector (Standard Supply)	ST	
Mechanical		
Dimensions or Module H x W x D in mm	70 x 107 x 23.6	
Shipping weight	0.20 kg	
Environmental		
MTBF	>100,000 hours	
Operating Temperature	-40° C to +75° C	
Storage Temperature	-40° C to +85° C	
Relative Humidity	0 to 95% non-condensing	
Power Requirement		
Supply Voltage	12V DC (Standalone: derived from an external adaptor via the 2-pin connector at rear of the module. Rack chassis: derived from the chassis PSU via the 30-pin connector at rear of the module.)	
Card Protection	Poly Fuse (1 A)	
Current Consumption	Max. 500mA	

# Application Diagrams

Cable connection of MFVSM1-TX, MFVSML1-TX, MFVMM1-TX  
(with MFVSM1-RX, MFVSML1-RX and MFVMM1-RX)



For DC rated Units: This product is intended to be supplied by a UL Listed Direct Plug-In Power Unit marked “Class 2” or “LPS” and output rated 12 VDC, 1 Amp minimum.

MFVSM1-TX	MFVSM1-RX
MFVSML1-TX	MFVSML1-RX
MFVMM1-TX	MFVMM1-RX

North America  
T 888-GE-SECURITY  
888-437-3287  
F 503-691-7566

Asia  
T 852-2907-8108  
F 852-2142-5063

Australia and New Zealand  
T 613-9239-1200  
F 613-9239-1299

Europe  
T 32-2-719-98-47  
F 32-2-719-98-46

Latin America  
T 305-593-4301  
F 305-593-4300

Specifications subject to  
change without notice.

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## Ordering information

Fiber Type	Part Number	Description	Opt. PWR. Budget dB	Max. Distance Km
1310nm				
(i) Single-mode (9/125µm)	(i) MFVSM1-TX	1-Ch. Video Transmitter	18	40
	(i) MFVSM1-RX	1-Ch. Video Receiver	18	40
(ii) Single-mode (9/125µm For Long Distance)	(ii) MFVSML1-TX	1-Ch. Video Transmitter	25	60
	(ii) MFVSML1-RX	1-Ch. Video Receiver	25	60
(iii) Multi-mode (62.5/125µm)	(iii) MFVMM1-TX	1-Ch. Video Transmitter	12	4
	(iii) MFVMM1-RX	1-Ch. Video Receiver	12	4

Accessories	DFR. 19' Rack mount chassis purchased separately for housing modules
Options	ST type connector is standard
Notes: Transmission distance will suffer if additional losses are introduced by the optical connectors, fusions, splices and the fibers within the network. Operating distance of multimode is limited by the characteristics of the fiber bandwidth	

## Model Number Key

DF	10 bit rack/module	SM	Single mode	First digit	Number of video channels
F	8 bit rack/module	MM	Multimode	Second digit	Number of audio channels
MF	8 bit module only	MF	8 bit module only	Third digit	Number of data channels
V	Video	L	Long distance	Forth digit	Number of contact closures
D	Data	D	Duplex	T	Transmitter
A	Audio			R	Receiver
CC	Contact Closure				

## Part Number Key

