4-in-1 Video over Gigabit Fiber Bundle Kit

Product Features

- Compliant with hybrid video (AHD/TVI/CVI/CVBS)
- Long-distance data transmission of 20km
- Status indication for power supply, optical signal and video
- High-speed synchronous digital transmission technology
- Guarantees safe transmission under poor electromagnetic environment
- Video and data transmission over Gigabit fiber optic cable
- PAL, NTSC, SECAM compatible
- Data type: RS485
- 8-/10-bit digital Video Signal sampling
- Standalone or work with PLANET MC-700/1500/1500R media converter chassis
- Compact size, wall-mount design, easy installation

Long Distance Analog Surveillance Transmission System

To deploy AHD/CVI/TVI/CVBS analog camera in a remote place efficiently and provide high video quality and reliable signal, PLANET has developed the video over Gigabit fiber media converter kit, VF-101G/102G/106G-KIT, which is ideal for extending the distance and signal conversion by transmitting the AHD/CVI/TVI/CVBS video and data over the fiber-optic cable. Adopting the intelligent encoding/decoding technology and with the compact box, the VF-101G/102G/106G-KIT video over fiber media converter enables videos to be delivered in high quality over a distance of up to 20km long.

Fiber Optic Communication for Video and Serial Data

This Video over Gigabit Fiber Converter kit consists of a Video Transmitter and a Video Receiver:

- VF-101G/102G/106G-T: 1-channel Video over Gigabit Fiber Transmitter
- VF-101G/102G/106G-R: 1-channel Video over Gigabit Fiber Receiver

Model Name	Video Type	Fiber Speed	Optical Distance	Optical Connector
VF-101G				ST
VF-102G	AHD/TVI/CVI/CVBS	1.25G/84M	20km in single mode	FC
VF-106G				WDM-SC

The VF-101G/102G/106G-KIT is a digital fiber-optic transmission system that brings users a cost-effective solution for transmission of 1 channel uncompressed digital video and one reverse RS485 async data over one single fiber cable. The VF-101G/102G/106G-KIT is an adjustable free device providing high-quality and real-time video transmission. It can be widely used in intelligent transportation systems (ITS), traffic surveillance, security monitoring, automation control, intelligent residential districts, etc.
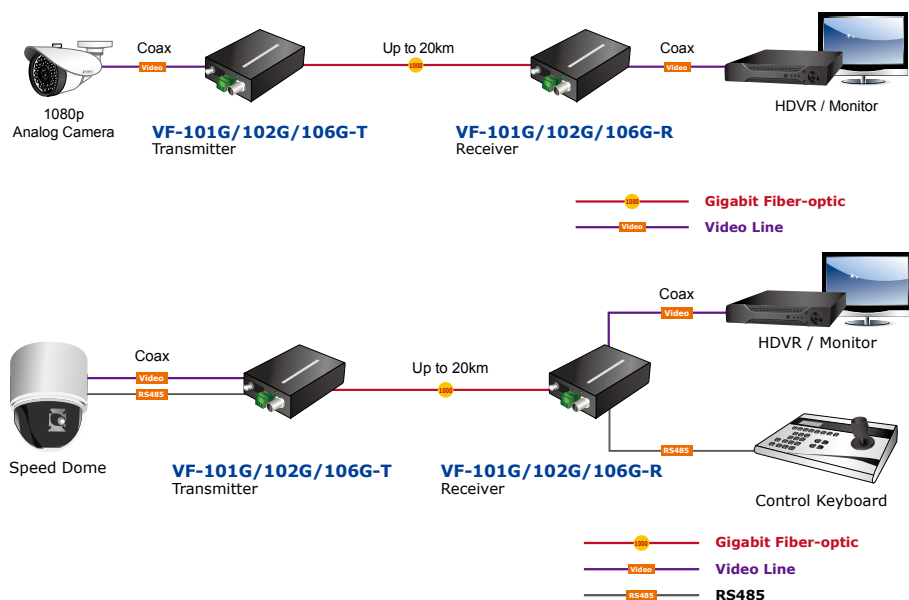
Easy Installation

Simply by Plug and Play, the installation of the VF-101G/102G/106G-KIT media conversion is quite easy. They can be used as a stand-alone unit or as a slide-in module to the PLANET Media Converter Chassis (MC-700, MC-1500 and MC-1500R). When working with the media converter chassis, the media converter chassis provides DC power to VF-101G/102G/106G-T or VF-101G/102G/106G-R to maintain the video over fiber-optic transmission system at the central location.
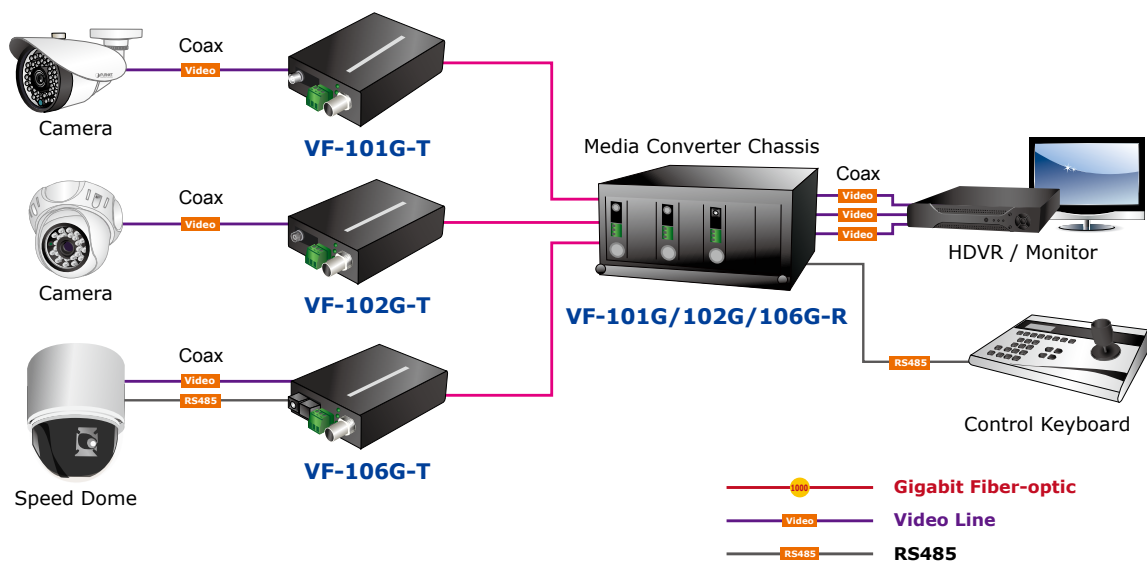

Applications

The VF-101G/102G/106G-KIT consists of 1 channel video over fiber optic transceiver and receiver to transmit video and RS485 signal through a reliable single mode or single fiber link. It is an ideal cost-effective solution for surveillance system that requires high display quality and high-performance signal transmission over long distances. The VF-101G/102G/106G-KIT can be installed easily by way of "Plug and Play", meaning the operator does not need to configure the pair of the video over fiber transmission in advance.

The transmitter and receiver can work as standalone or can be slotted into a rack-mountable media converter chassis. The flexible and maintenance-free design fits in with different installation environments. With one VF-101G/102G/106G-KIT, video cameras can be deployed over a distance of up to 20km, which ideally suits the following applications:

• Intelligent Transportation Systems (ITS)

• Toll Collection

• Traffic Surveillance

• Air Traffic Management (ATM)

• Rail Signaling

• Perimeter Alarms and Area Monitors

• Telemedicine and Teleconference

• Industrial Surveillance

• Intelligent Buildings

Specifications

Model	VF-101G-KIT	VF-102G-KIT	VF-106G-KIT
Video Characteristics			
Video Channel	1 channel bi-direction		
Signal Mode	NTSC/PAL/SECAM		
Video Connector	BNC		
Supported Video Type	1080p: AHD/TVI/CVI 480p: CVBS		
Video Input/Output Impedance	75ohm/unbalanced interface		
Video Input/Output Voltage	1.0 Vpp/typical peak-to-peak value		
Video Bandwidth	60MHz		
Video Digital Bit Width	8/10 bit		
Differential Gain (DG)	< 1.3% (typical value)		
Differential Phase (DP)	< 1.3° (typical value)		
SNR Weighted	> 67dB (typical value)		
Data Interface			
Data Channel	1 channel		
Physical Protocol	RS485		
Operation Mode	Simplex		
Data Connector	3-pin terminal block with screw clamps		
Data Rate	DC-115.2Kbps		
Data Distance	RS485: 0-1200m		
Bit Error Rate (BER)	< 10ns		
Optical Interface			
Optical Connector	ST	FC	WDM-SC
Distance	20km for single mode		
Optical Wavelength	VF-101G-T	VF-102G-T	VF-106G-T
	TX: 1310nm, RX: 1550nm	TX: 1310nm, RX: 1550nm	TX: 1310nm, RX: 1550nm
	VF-101G-R	VF-102G-R	VF-106G-R
	TX: 1550nm, RX: 1310nm	TX: 1550nm, RX: 1310nm	TX: 1550nm, RX: 1310nm
Launch Power (dBm)	Max.: 0, Min.: -9		
Receive Sensitivity (dBm)	-26		
Max. Input Power (dBm)	-3		
Cable	9/125μm single mode cable		
Hardware Specifications			
LED Indicators	• Power • Video • Link (fiber optic)		
Dimensions (W x D x H)	94 x 70 x 26 mm		
Weight	200g		
Power Requirement	5V DC, 2A		
Power Consumption	4.8 watts (maximum)		
Mechanical	Metal		
Installation	Wall-mountable, DIN-rail (with optional kit), chassis installation (with optional chassis)		
Compatible Converter Chassis	MC-700/MC-1500/MC-1500R		
Standards Conformance			
Regulatory Compliance	FCC, CE		
Standards Conformance			
Operating	Temperature: -25 ~ 75 degrees C Relative Humidity: 0 ~ 95% (non-condensing)		
Storage	Temperature: -30 ~ 80 degrees C Relative Humidity: 0 ~ 95% (non-condensing)		
Standard Accessories			
Packet Contents	VF-101G/102G/106G-T x 1 VF-101G/102G/106G-R x 1 User's manual x 1 5V, 2A power adapter x 2		

Ordering Information

VF-101G-KIT	1-Channel 4-in-1 Video over Gigabit Fiber Bundle Kit (VF-101G-T + VF-101G-R)
VF-102G-KIT	1-Channel 4-in-1 Video over Gigabit Fiber Bundle Kit (VF-102G-T + VF-102G-R)
VF-106G-KIT	1-Channel 4-in-1 Video over Gigabit Fiber Bundle Kit (VF-106G-T + VF-106G-R)

Accessories

RKE-DIN	DIN-Rail Mounting Kit

Related Products

MC-1500	15-Slot Media Converter Chassis
MC-1500R	15-Slot Media Converter Chassis (AC Power)
MC-1500R48	15-Slot Media Converter Chassis (DC Power)
MC-700	7-Slot Media Converter Chassis
VF-402-KIT	4-Channel Video over Fiber Bundle Kit
CAM-AHD325	AHD 1080p IR Bullet Camera
CAM-AHD425	AHD 1080p IR Dome Camera

VF-10xG-KIT