

Video over Fiber Media Converter Kit



To help the analog cameras deployment in long distances with high video transmission quality and reliable signal, PLANET develops the Video over Fiber media converter which successfully integrates the **video** signal and **fiber optic** transmission in a compact size mini box. The Video over Fiber media converter enables the videos to be delivered in high quality up to 20km long distance by the intelligent encoding / decoding technology. It is ideal for extending the distance and signal conversion by transmitting the Video and data over the fiber-optic cable.

Fiber Optic Communication for VIDEO and SERIAL DATA

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

- **VF-102-T:** 1-channel Video over Fiber **Transmitter**
- **VF-102-R:** 1-channel Video over Fiber **Receiver**

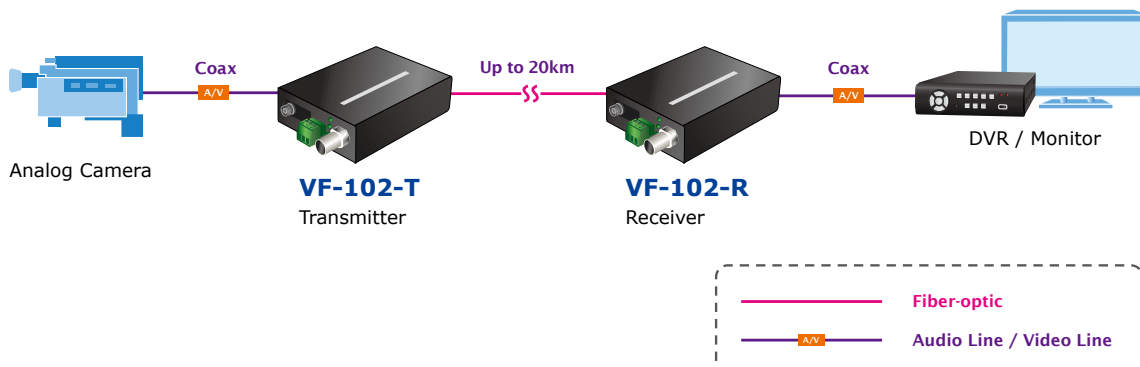
It is a digital **fiber-optic transmission system** which brings customer a cost-effective solution for transmission of 1 channel uncompressed digital video and 1 reverse **RS-422/485** async-data over one single fiber cable. It is an adjustment free device while providing high quality and real-time video transmission.

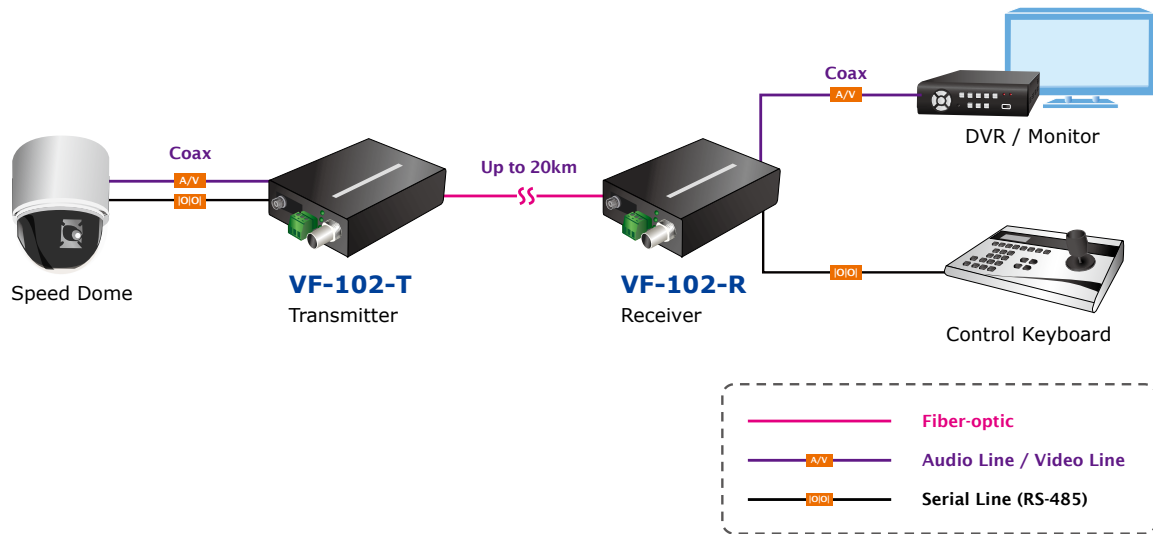
KEY FEATURES

- Video and Data over fiber transmission
- 8 bit Video Signal digital sampling
- PAL, NTSC, SECAM compatible
- 20km max. transmission distance over single fiber
- Data Type: RS-422 / RS-485
- Standalone or work with PLANET MC-700/1500/1500R media converter chassis
- Compact in size, wall-mount design, Plug and Play installation

APPLICATIONS

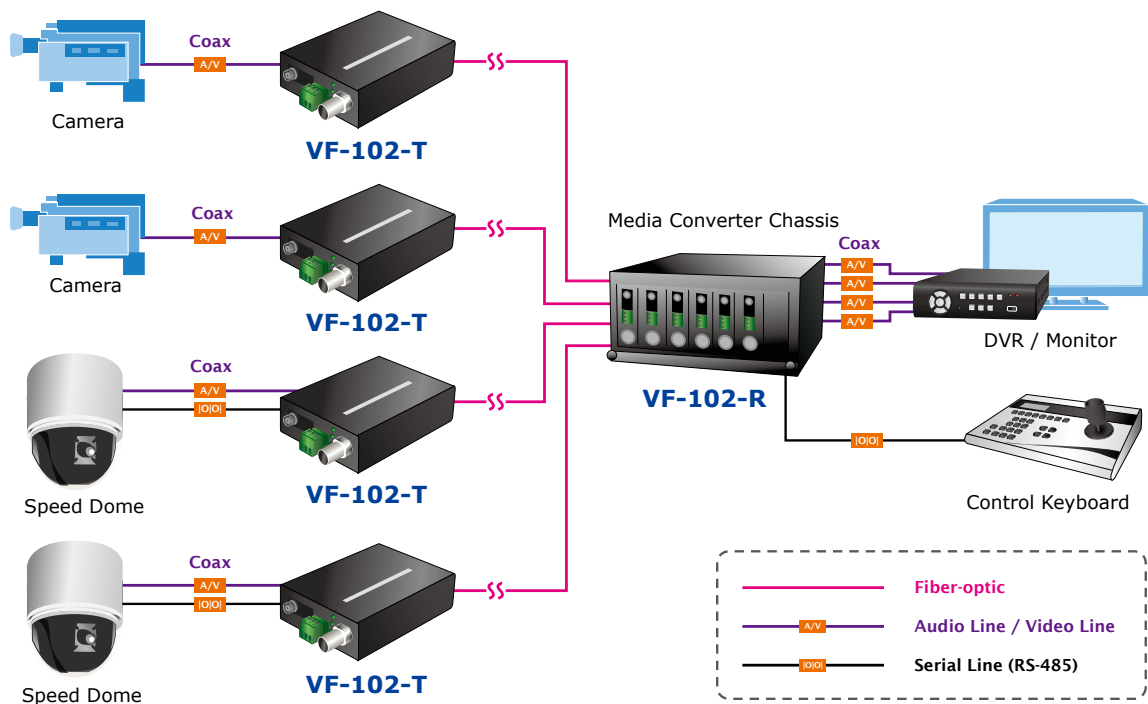
The VF-102-KIT consists of 1 channel video over fiber optical transceiver and receiver to transmit **video** and **RS-422/485** signal through a reliable single mode / single fiber link. It is an ideal cost-effective solution for surveillance system that requires high display quality and high performance signal transmission over long distances. The VF-102-KIT can be installed easily and **plug and play**; that means the operator does not need to configure the pair of the video over fiber transmission.





The transmitter and receiver can work **stand-alone** or slotted into a **rack-mountable media converter chassis**. The flexible and maintenance-free design fits with different installation environments. Up to 20km distance of video camera deployment with one VF-102-KIT ideally suites 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 Building



SPECIFICATION

Product	Video over Fiber Media Converter Kit	
Model	VF-102-T	VF-102-R
Video Characteristic		
Video Channel	1 channel Bi-direction	
Signal Mode	NTSC / PAL	
Video Connector	BNC	
Video Input/Output Impedance	75ohm / unbalanced interface	
Video Input/Output Voltage	1.0 Vpp / Typical peak-peak value	
Video Bandwidth	6.5MHz	
Video Digital Bit Width	8/10 bit	
Differential Gain(DG)	<1.3% (Typical Value)	
Differential Phase(DP)	<1.3° (Typical Value)	
SNR Weighted	63dB (Typical Value)	
Data Interface		
Data Channel	1 channel	
Physical Protocol	RS-422 / RS-485	
Operation Mode	Simplex	
Data Connector	3 Pin terminal block with screw clamps	
Data Rate	DC-115.2Kbps	
Data Distance	RS-485: 0-1200m	
Bit Error Rate (BER)	< 10ns	
Optical Interface		
Optical Connector	FC	
Fiber Type	Single mode, single fiber	
Distance	20km for single mode	
Optical Wavelength	TX: 1310nm RX: 1550nm	TX: 1550nm RX: 1310nm
Launch Power (dBm)	Max. : -7 Min. -14	
Receive Sensitivity (dBm)	-32dBm	
Max Loss Budget	18dB	
Max. Input Power (dBm)	0	
Cable	9/125µm single-mode cable	
Hardware Specification		
LED Indicators	<ul style="list-style-type: none"> • One Power • One for Video <ul style="list-style-type: none"> - Green, Link • One for Fiber Optic <ul style="list-style-type: none"> - Green, Link 	
Dimension (W x D x H)	94 x 70 x 26 mm	
Weight	215g	
Power Requirement	5V / 2A	
Power Consumption	4.8Watts (maximum)	
Mechanical	Metal	
Compatible Converter Chassis	MC-700 / MC-1500 / MC-1500R	
Standards Conformance		
Regulation Compliance	FCC Part 15 Class A, CE	
Environment		
Operating	Temperature:	-10 ~ 60 Degree C
	Relative Humidity:	0 ~ 95% (non-condensing)
Storage	Temperature:	-40 ~ 85 Degree C
	Relative Humidity:	5 ~ 95% (non-condensing)

ORDERING INFORMATION

VF-102-KIT	Video over Fiber Media Converter Kit
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RELATED PRODUCTS
Analog Camera

CAN-BX53	Hi-Resolution CCD Box Camera
CAM-IR338	30-meter Infrared Camera
CAM-ISD48	23x Indoor Speed Dome Camera
CAM-IVP52V	25-meter Infrared Vari-Focal Vandal-Proof Camera

Media Converter Chassis

MC-700	7-Slot Media Converter Chassis
MC-1500	15-Slot Media Converter Chassis
MC-1500R	15-Slot Media Converter Chassis with Redundant Power