

Vi51000 & Vi51001

HD Fiber Optics Media Converters
PRELIMINARY



Features

- Provides a single channel HD coax to Fiber conversion for easy installation
- Interfaces with most common existing fiber installations
- Provides an easy and cost effective method for upgrading existing analog fiber installation to HD
- Provides for separate transmission of RS 485 and video
- Interfaces with all MSA compliant SFP most commonly installed fiber
- Perfect solution for long distance data transmission
- Extended temperature operation up to -20°C to +75°C

Applications

- Upgrading analog fiber installations to HD without changing cables
- Solution for long distance high bandwidth requirements
- Expanding networks in industrial environment
- CCTV system for casinos, airports, school campuses, and many more

Vigtron's Vi51000 and Vi51001 are media converters that enable HD-TVI, HD-CVI, and AHD signals along with RS485 data to be transmitted over fiber optic cables at long distances. They can be used with single-mode or multi-mode fiber optic cables, new or existing analog fiber connections. The Vi51000 is a transmitter and the Vi51001 is a receiver. No electronic or optical adjustments are required. The ability to transmit RS485 makes the Vi51000 and Vi51001 the perfect solutions for long distance data transmission.

The Vi51000 series is an ideal solution for converting existing analog fiber infrastructures to HD systems. They are compatible with 720p/50, 720p/60, 1080p/25, and 1080p/30 and provide lossless non-compression real time transmission.

This series provides a unique, reliable, and cost effective solution to combine a variety of transmission methods to meet any application requirement.



The Smart Choice for Transmission Solutions

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Application Diagrams

Electrical

Optical fiber	50/125u multimode, 62.5/125u multimode, 9/125u single mode
Wavelength	1310nm, 1550nm
Optical Output	-9~3dBm
Receiver sensitivity	-24dBm
Optical Connector	LC
Distance	Multi-mode cable: up to 550M Single-mode cable: up to 20Km
Video Output/Input	BNC 75 (unbalance)
Video voltage	1.0Vp-p
Video Bandwidth	60MHz
Differential Gain	< ±1.5%
Differential Phase	< ±1°
Power Source	12VDC @ 1A
Status LEDs	Power Fiber Link Video Present RS485 Data
Connectors	Video: 75 Ohm BNC Fiber Optics: LC Data: 3-pin Pluggable Terminal Block Power: Circular power connector

Regulatory

Safety	CE
Environmental	RoHS, WEEE

Environmental

Humidity	0 to 95%, non-condensing
Temperature	Operating: -20°C to +75°C Storage: -40°C to +85°C

Mechanical

Dimensions	0.97x1.76x3.96 in., 2.5x4.5x10.06 cm (HxWxL)
Weight	0.24 lb (107 g)
Housing	Aluminum

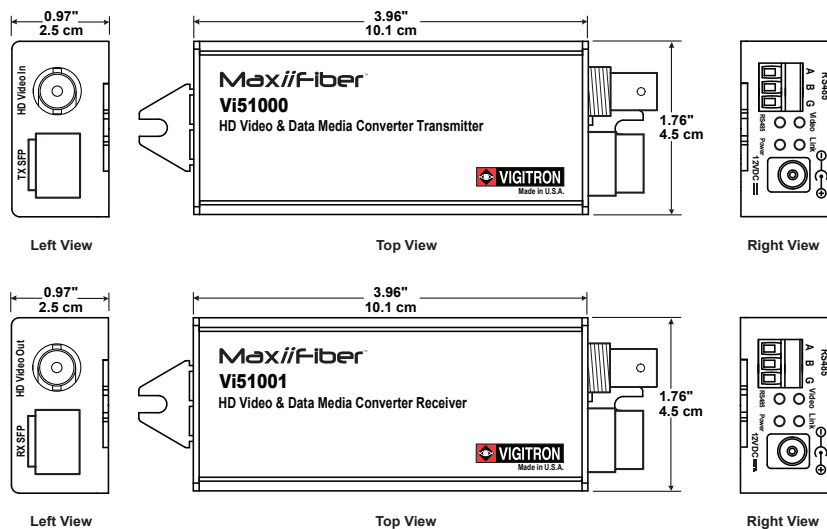
*Specifications subject to change without notice.

Ordering Information

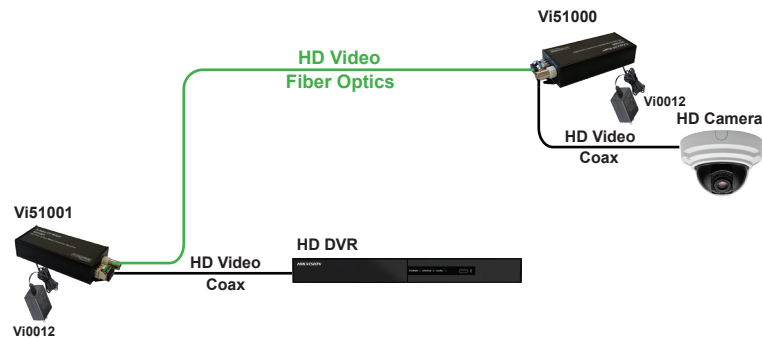
PART No.	Description
Vi51000	HD Video and Data Media Converter TX
Vi51001	HD Video and Data Media Converter RX
Vi0012	12VDC @ 1 Amp for non-PoE Applications

Status LEDs

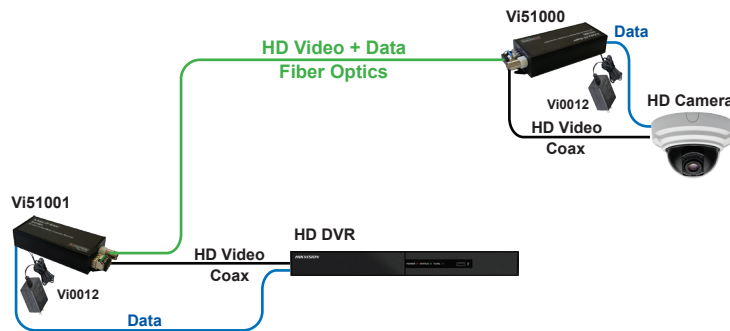
LED Name	Color	Status	Function
Power	Green	OFF	Power is off
		ON	Power is on
HD Video	Green	OFF	No video
		ON	Video is present
Fiber Link	Green	OFF	Fiber link is off
		ON	Fiber is connected
		FLASHING	Traffic is present
RS485	Green	OFF	No Traffic
		ON / FLASHING	Traffic is present



Technical Specification*



The Vi51000 transmitter transmits HD video to the Vi51001 receiver over single-mode or multi-mode fiber optics at long distances.



The Vi51000 transmitter transmits HD video and RS485 data to the Vi51001 receiver over a single single-mode or multi-mode fiber optics cable at long distances.