VGA Fiber Optic Extender

1-Channel VGA + 1 Duplex Audio + 1 Duplex Data

1 → VGA

1 ↔ Audio

1 ↔ Data

Ethernet

System Design

VGA, Audio & Data Fiber Optic Extenders
VOS-1VGA-LADT/R provides for the digital transmission of 1-Channel uncompressed VGA computer video resolutions up to WUXGA 1920x1200 and HDTV RGB Component Video resolutions up to 1080p, support 1 duplex stereo audio, 1 duplex RS232/485 data, also support one VGA loopback output for local display and dual VGA outputs for two displays in the remote end.

Stand-alone or rack-mount. All VGA extenders over Fiber of VOS-1VGA-LADT/R comes in an insert card version. The cards can be inserted into our 16-slot, 19inch 4U rack-mountable card cage (VOS-CH04-HD16).
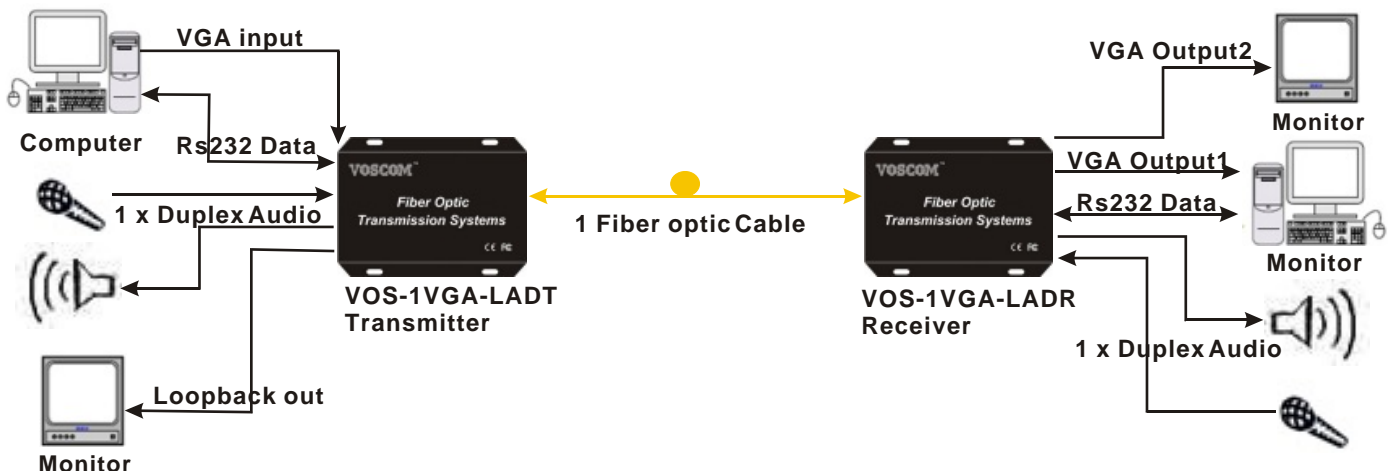
Single-Mode or Multi-Mode, VOS-1VGA-LADT/R only can support LC optical connector, support Single-mode 15km or Multi-mode 300m over one single-fiber.

Features

- Uncompressed VGA, stereo audio, and RS-232/485 data over one fiber
- Supports VGA resolutions up to WUXGA 1920x1200
- Supports HDTV resolutions of 480p, 720p and 1080p(RGBHV / RGB)
- Multi-mode Fiber Support for Distances up to 300m
- Single-Mode Fiber Support for Distances up to 15 km
- LED Status Provide Rapid Indication of Operating Parameters
- Requires no adjustments, equalization or de-skewing during installation
- No EMI or RFI and no ground loops
- Stand alone or rack-mount

Typical Configuration

Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-1VGA-LADT	VOS-1VGA-LADR	Multi-Mode	1310nm/1550nm	16dB	300m
		Single-Mode	1310nm/1550nm	12dB	15km

Note:

- The Optical Power Budget data fit Mulit-mode(62.5/125 μm), Single-Mode(9/125 μm).
- When using 50/125 μm multimode fiber, subtract 3 dB from the optical power budget.
- Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.
- Maximum transmission distance is also limited by fiber bandwidth.
- Power adapter is manufactured by third party and is supplied with fitted screw-terminal output cables. Power adapter included (for standalone) US, European, UK or Australian power plug.
- Please feel free to consult factory for any special requirement and customization

Specification

- **Video**

Number of Channels:	1-Ch VGA / RGB / RGBHV
Data Rate:	4.25Gbps
Maximum resolution:	1920x1200 or 1080P
Analog Video Output Level:	1V p-p
Signal-to-Noise Ratio(SNR):	> 60 dB

- **Audio**

Number of Channels:	1-Ch Duplex Analog Audio
Audio in/output impedance:	47k Ohm Unbalanced
Bandwidth:	20Hz ~ 20KHz
Bit Resolution:	24-Bit
Signal-to-Noise Ratio(SNR):	> 80 dB

- **Data**

Data Formats:	1-Channel Duplex RS232 & Rs485 Data
Data Rate:	DC to 115.2Kbps
Bit Error Rate:	10E-9

- **Connectors**

VGA Connector:	HD-15 Female
Audio Connector:	3.5mm mini-jack
Data Connector:	Terminal Block
Optical Connector:	LC Connector only
Stand-Alone Power:	Screw terminal block
Rack Power:	AC line cord

- **Electrical & Mechanical**

Input Power Requirements:	DC 5V@2A
Power Adapter:	AC 100V~240V
Power Consumption:	< 3W
Stand-Alone Dimensions:	200mm × 135mm × 33mm
Card for 4U Rack Dimensions:	145mm × 170mm × 20mm
Shipping Weight:	2.5kg (include TX & RX)

- **Environmental**

Operating Temperature:	-45° C~+75° C
Storage Temperature:	-45° C~+85° C
Relative Humidity:	0%~95% (non-condensing)
MTBF:	>100,000 hours