

# OP-4ETH\*96VO

## Fiber Multiplexers for Ethernet and Voice

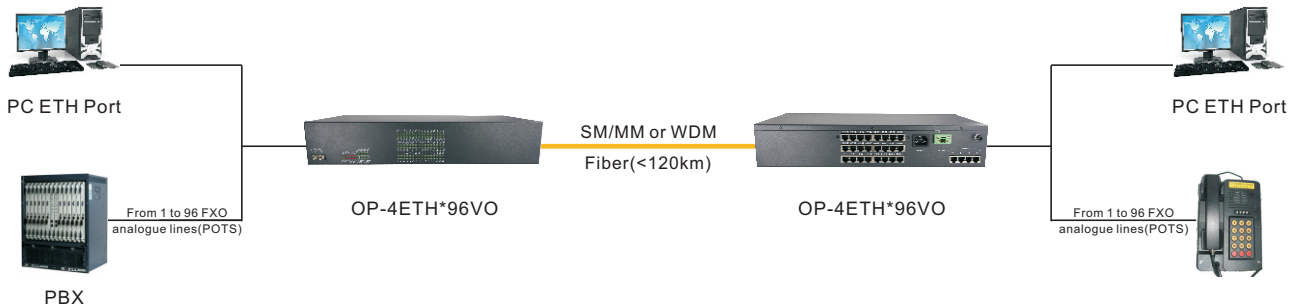


- > Up to 96 Voice and full bandwidth 100 Mbps Ethernet traffic multiplexed into fiber optic uplink
- > Single-mode, multimode, single-mode over single fiber
- > 64-96 Channel voice access, supports caller ID feature and reverse polarity billing functions
- > Range of up to 120 km
- > -48VDC/110/220VAC flexible redundant power inputs

## Overview

96 Voice Optical Multiplexer Series provides a simple and cost-effective solution for 100M Ethernet, distances up to 120 kilometers.

## Typical Applications



In private networks, 96 Voice Optical Multiplexer shares services such as Voice, Ethernet, in P2P topologies over fiber. 96 Voice Optical Multiplexer establishes TDM and Ethernet connectivity between the remote branches and headquarters for educational, financial, military sectors.

## Specifications

### Fiber Interface

- Number of Ports: 1
- Optical wavelength : 850/1310nm for multi-mode fiber, 1310/1550nm for single-mode fiber
- Transmission distance: 20-120Km
- Fiber Optic Interface Type: FC/SC
- Data Rate: 150 Mb/s(GRANCOM proprietary)
- Typical output power  
single mode 1310/1550nm:  $\geq -8\text{dBm}$   
multi-mode 850nm:  $\geq -18\text{dBm}$   
multi-mode 1310nm:  $\geq -25\text{dBm}$
- Receiver Sensitivity:  $\leq -34\text{dBm}$

### Fast Ethernet Interface

- Number of Ports: 4
- Interface Type : 10/100 Mbps, auto-negotiation, full/halfduplex, flowcontrol, MDI/MDX crossover
- Compliance: IEEE 802.3, 802.3u and 802.1p&q
- Max Frame Size: 1916
- LAN Table: 2KMAC
- Connector: RJ-45
- Electrical Cable Type: Cat.5

### Voice(FXS/FXO) Interface

- Number of Ports: up to 96
- Impedance:  $200\Omega + 680\Omega // 0.1\mu\text{F}$
- Frequency character: 300-3400Hz(-0.6~+3dB)
- Weighted noise:  $\leq -65\text{dBmop}$
- Interface loop resistance:  $\leq 1800\Omega$
- Compliance : ITU G.711 A-Law

### Environmental Limits

- Operating Temperature: 0 to 50°C
- Storage Temperature: -40 to 85°C
- Ambient Relative Humidity: 5 to 95% (non-condensing)

### Power Requirements

- Input Voltage:  
AC: 100-240VAC( $\pm 10\%$ ), 50/60Hz  
DC: -48VDC(36-72VDC)
- Power Consumption: <100 watts

### Physical Characteristics

- Housing: Metal
- Weight: 3.0kg
- Dimensions: 430 x 200 x 110mm (Standard 2.5U and 19-inch rackmount size)

## Ordering Information

Type	Function Description
OP-4FE*64VO-AD	Fast Ethernt and 64 Voice over Fiber Optical Multiplexer with Console; 100~240VAC and 36~72VDC
OP-4FE*96VO-AD	Fast Ethernt and 96 Voice over Fiber Optical Multiplexer with Console; 100~240VAC and 36~72VDC