OPTICAL SYSTEMS DESIGN

SINGLE & MULTIPLE CHANNEL AUDIO LINKS

OSD732 TELEPHONE MULTIPLEXER

APPLICATIONS

- ▲ Line/PABX–Telephone Links
- Telephone-Telephone Intercom Links
- ITS Emergency Telephone System
- PABX Extension for Remote Location
- Secure networks





FEATURES AND BENEFITS

- Interfaces with any touchtone or decadic dialling telephone and PABX systems.
- Available with 1 or 4 telephone interfaces.
- Duplex communication on one or two optical fibers.
- A-Tick compliant

Operates with both singlemode and multimode fibers over up to 50km

- Available in both standalone module or rack-mount card.
- Fully digital transmission.

DESCRIPTION

The OSD732 is a high performance fully digital fiber optic interface for links between a PABX and any touchtone telephone. It is designed for applications such as PABX/Line extension between buildings or to a remote location (e.g. from a central control room to a security guard post) where only one or a few telephones are required. A typical application example could be the emergency telephone systems of highways or other ITS (Intelligent Transportation System) applications. The OSD732 can also be used to connect any two touchtone telephones to form a dedicated intercom system. The OSD732 is available with common optical fibers operating at wavelengths of 850nm, 1300nm or 1550nm. Both multimode or singlemode versions are available to suit different application requirements. The longest transmission distance supported by the OSD732 is 5km on multimode fiber or 50km over singlemode fiber. For longer distances or special transmission requirements, please consult OSD. The unit can be supplied with 1 or 4 telephone interfaces. The OSD732 is available in two types of package: a standalone module or a card which can be installed into a standard OSD370 19" rack-mount chassis.

ORDERING INFORMATION

OSD732T
OSD732R
Option C
Option L
Option W
Option 4A

850nm multimode telephone modem Card, telephone end 850nm multimode telephone modem Card, PABX/line end Module version 1300nm operation on singlemode or multimode Single fiber operation Four telephone lines



SYSTEM PERFORMANCE

Audio Bandwidth	150Hz to 6kHz
SNR	> 70dB
Input/Output Impedance	600Ω Balanced
Optical Signal Wavelength	850nm (OSD732)or 1310nm (OSD732L)
Coupled Transmit Power	-13 to -10dBm into 62.5/125 multimode fiber (OSD732) -13 to -10dBm into 9/125 singlemode fiber (OSD732L)
Receiver Sensitivity for 1 x 10 ⁻⁹ BER	< -40dBm
Receiver Saturation	>-10dBm
Optical Link Budget and Transmission Distance	>27dB (>8km multimode, >70km singlemode)
Ring Voltage	70 VAC on –24 VDC bias

PHYSICAL

Telephone Connector	RJ11
Optical Connectors	ST standard, others are optional
Operating Temperature Range	-20 to +75℃
Relative Humidity	0 to 95% non-condensing
Power Requirements	+9V to 24V DC @ 6VA
Indicators	Rx Optical Signal OK Laser OK
Dimensions of Module (mm)	104W x 157D x 53H
Dimensions of Module (mm) Weight of Module (kg)	104W x 157D x 53H 0.4
Weight of Module (kg)	0.4