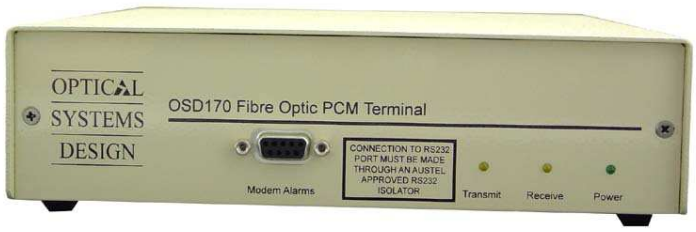
OSD170 G.703 PCM TRANSCEIVER

APPLICATIONS

- PABX - PABX links
- G.703 backbone networks
- Mine communications
- Secure networks



FEATURES AND BENEFITS

- Interfaces with any balanced ternary line code in the range 300kbps to 5Mbps such as G.703 systems operating at 1.544Mbps and 2.048Mbps.
- Available with operating wavelength of either 850nm or 1310nm.
- Operates with both singlemode and multimode fibers over up to 100km.
- Compatible with CCITT Rec. G.703.
- May use 120V, 240V AC or 48V DC power sources.
- User adjustable optical power level.
- Austel approved

DESCRIPTION

The OSD170 is a low cost, high performance PCM terminal designed primarily for in-house links such as PABX interconnects, 2.048Mbps data switch links and the like. It operates essentially as an analog link optimized for the transmission of balanced ternary signals with peak amplitudes of 2.37V.

Operation is available at either 850nm or 1300nm. Sufficient power can be coupled into standard 10/125mm singlemode fiber to span distances up to 100km at 2.048Mbps when operating at 1310nm.

If longer distances are encountered operation can be at 1550nm - consult OSD for details.

The OSD170 is available in a self contained case which takes up half a modem tray in a standard 19" rack.

ORDERING INFORMATION

OSD170S	850nm multimode G.703 Transceiver
OSD170L	1310nm multimode or singlemode G.703 Transceiver
OSD170LD	1310nm low power laser transmitter G.703 Transceiver
OSD170HLD	1310nm high power laser transmitter G.703 Transceiver
Option/48V	48VDC power, not 120/240VAC mains power
Option W	Single fiber operation

SPECIFICATIONS

PERFORMANCE

Data Rate	300 kbps to 5Mbps balanced ternary line code
Receiver Bandwidth	5MHz
Electrical Input	G.703 or similar line codes to 2.048Mbps at 75Ω unbalanced. Minimum level 6dB below nominal.
Electrical Output	Replica of input with +2.37V peak (nominal) level bandlimited to 5MHz at 75Ω.
Indicators	Electrical input signal present Optical input signal present Power
Alarm Contacts	Isolated changeover relay contacts for electrical input signal present and optical input signal present available on 9 pin D connector.
Optical Signal Wavelength	850 or 1310nm nominal

Coupled Transmit Power

Version	Wavelength	Coupled transmit power	Fiber type
OSD170S	850nm	-16 to -14dBm	62.5/125
OSD170L	1310nm	-23 to -17dBm	10/125
		-16 to -9dBm	62.5/125
OSD170LD	1310nm	-7 to -3dBm	10/125
OSD170HLD	1310nm	0 to +4dBm	10/125

Optical Power Control	5dB nominal, user selectable
Receiver Sensitivity for 1 x 10^{-9} BER	<-34dBm
Receiver Saturation	>-15dBm

PHYSICAL

Signal Connector	BNC
Alarm Connector	9 pin female D connector
Control	Transmit power
Optical Connectors	ST standard, but others are available
Operating Range	0 to +50℃
Relative Humidity	0 to 95% non-condensing
Power Requirements	Standard: 120/240V AC ±10% 47-63Hz @ 10VA **OR** -48V option: 20VDC to 72VDC. Current draw 200mA @ 48VDC
Weight	1.5kg
Dimensions (mm)	Freestanding, 215W x 210D x 56H 19" rack mounting adaptor is available

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