



APPLICATIONS

- ▲ Very high performance surveillance systems where high resolution or long transmission distances are required
- ▲ Industrial process monitoring
- ▲ Medical image transmission
- ▲ Multiple video trunks



FEATURES AND BENEFITS

- ▲ Bandwidth of 10MHz
- ▲ Extends wideband video transmission to at least 5km on multimode and 50km on singlemode
- ▲ Higher quality video than with coax or twisted pair
- ▲ Immune to electrical interference
- ▲ Complete end-to-end isolation
- ▲ Safe transmission in hazardous environments
- ▲ More secure than coaxial cable

DESCRIPTION

The OSD461/OSD463 series fiber optic video system is designed to provide wideband CCTV quality video over at least 5km of any of the commonly available multimode optical fiber types or over at least 50km on singlemode fiber.

The system utilises frequency modulation techniques in order to provide excellent linearity and operation over a high optical loss budget. The standard system is based on a LED optical source and a PIN photodiode operating at a wavelength of 850nm but can be supplied to work at 1310nm for singlemode fiber systems. These units are designated the OSD461L and OSD463L.

Both the OSD461 and OSD463 can be supplied as a small self contained metal enclosure powered by 9 to 15V AC or DC or as a card which plugs into the OSD370 chassis.

Any commonly available multimode fiber can be used; singlemode is optional.

Other OSD products are available for remote control PTZ camera, alarms, video, audio, data and LAN'S.

Please contact OSD for application assistance.

ORDERING INFORMATION

OSD461	Fiber Optic Video Transmitter Card
OSD463	Fiber Optic Video Receiver Card
Option C	Module version
Option L	1310nm singlemode or multimode operation



SPECIFICATIONS

ELECTRICAL

Input/Output Impedance	75Ω
Input/Output Levels	1 Vpp nominal
Connector	BNC
Bandwidth	5Hz - 10MHz ±1dB
Weighted Signal to Noise Ratio	>60dB at -25dBm received optical power >50dB at -30dBm received optical power

OPTICAL

Transmitter wavelength	850 ±40nm (1300nm optional for L version)
Receiver wavelength range	800 to 900nm (1270 to 1580nm for OSD463L)
Transmitter coupled power	-15 to -11dBm into 62.5/125μm multimode fiber -15 to -12dBm into 9/125μm singlemode fiber (OSD461L version only)
Receiver sensitivity	<-30dBm for 50dB SNR
Receiver saturation	>-10dBm
Optical connectors	ST standard Others optional: consult OSD

PHYSICAL

Power Requirements	+9 to 18VDC or AC, 100mA max
Dimensions of module (mm)	104W x 104D x 25H
Weight of module	350g
Dimensions of card (mm)	25W x 208D x 100H
Weight of card	200g
Indicator	TX Signal Present (OSD461) RX Signal Present (OSD463)
Operating Temperature	-20 to +75°C
Relative Humidity	0 to 95% non-condensing
Chassis Current Consumption (CCC)	0.10 Amp