



APPLICATIONS

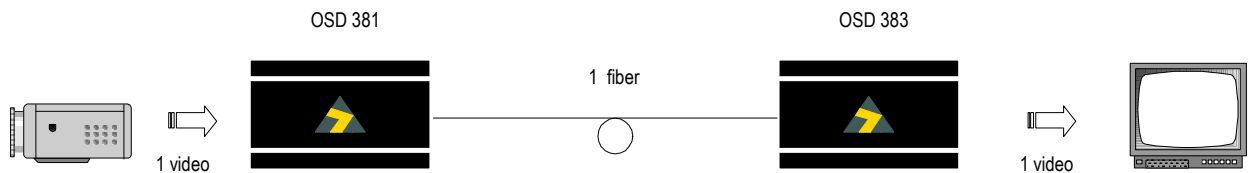
- ▲ Very high performance surveillance systems where high resolution or long transmission distances are required
- ▲ Industrial process monitoring
- ▲ Medical image transmission



FEATURES AND BENEFITS

- ◆ Bandwidth of 10MHz
- ◆ Extends wideband video transmission to over 5km of multimode fiber
- ◆ Higher quality video than with coax or twisted pair
- ◆ Immune to electrical interference
- ◆ Safe transmission in hazardous environments
- ◆ Adjustment-free receiver operation
- ◆ More secure than coaxial cable
- ◆ Small size, low cost, robust and reliable
- ◆ Compatible with most other OSD300 series video transmission products
- ◆ Complete end-to-end isolation

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

| | |
|----------|--------------------------------------|
| OSD381 | Fiber Optic Video Transmitter Module |
| OSD383 | Fiber Optic Video Receiver Module |
| Option L | 1310nm Singlemode operation |



SPECIFICATIONS

ELECTRICAL

| | |
|--------------------------------|---|
| Input/Output Impedance | 75Ω |
| Input/Output Level | 1Vpp nominal |
| Receiver AGC Technique | Sync tips |
| Video Connector | BNC female socket |
| Power Connector | 2-pin power socket |
| Bandwidth | 10Hz to 10MHz +1, -3dB |
| Weighted Signal to Noise Ratio | >50dB at -27dBm peak received optical power |

OPTICAL

| | |
|-------------------------------|---|
| Transmitter Wavelength | 850 ±40nm (1310nm for OSD381L) |
| Receiver Operating Wavelength | 800 to 900nm (OSD383), (1200 to 1600nm for OSD383L) |
| Transmitter Coupled Power | -13 to -11dBm into multimode fiber (OSD381) -16 to -13dBm peak into singlemode fiber (OSD381L) |
| Transmitter Power Adjustment | 5dB nominal, user selectable |
| Receiver Operating Wavelength | 800 to 900nm (OSD383), 1200 to 1600nm (OSD383L) |
| Receiver Sensitivity | <-27dBm peak for 50dB |
| Receiver Saturation | >-17dBm peak |
| Optical Link Budget | >17dB at 850nm (>5km of multimode fiber) >14dB at 1310nm (>30km of singlemode fiber) |
| Receiver Saturation | >-17dBm peak |
| Optical Connectors | ST standard |

PHYSICAL

| | OSD381 Video Transmitter | OSD383 Video Receiver |
|-----------------------|--|---|
| Power Requirements | +9 to 18VDC, or 6 to 15VAC, 100mA max | or +9 to 18VDC, or 6 to 15VAC, 100mA max |
| Enclosure | Strong metal case | Strong metal case |
| Case Dimensions (mm) | 94D x 54W x 27H | 94D x 54W x 27H |
| Weight | 250g | 250g |
| Indicators | Power On/Laser OK Video Input | Video Signal Present |
| Controls | TX output power level (toggle switch) | Output fine adjust |
| Operating Temperature | -40 to +75°C | -40 to +75°C |
| Relative Humidity | 0 to 95% non-condensing | 0 to 95% non-condensing |

OSD381PP Power Pack

| | |
|-----------------|---|
| Mains Input | 240VAC ±15%, moulded plug |
| DC Output lead. | +12VDC nominal, 400mA max One 2-pin power plug on flying |
| Dimensions (mm) | 52D x 26W x 92H |

Doc. ID: 10238106