

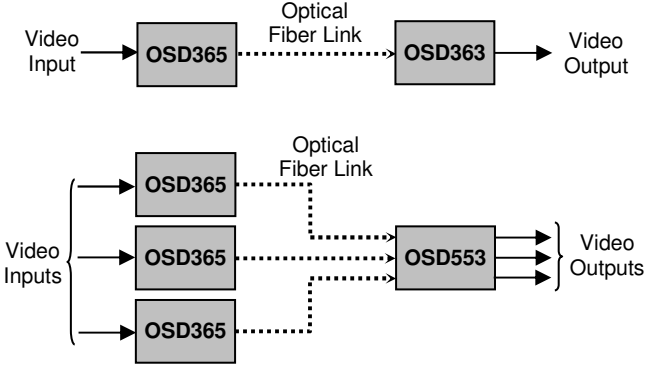
OPERATOR MANUAL
OSD365A
Analog Single Channel Micro
Video Transmitter

The OSD365A fiber optic video transmitter is designed to provide wideband CCTV quality video over up to 3km of any of the commonly available multimode optical fiber types. It is optionally available to operate over singlemode fiber (OSD365AL). Its major feature compared to other AM transmitters is its small size, just 25mm x 40mm elliptical diameter x 38mm long. It also fits directly onto the BNC connector of the camera. It operates with any of OSD's 300 series AM video receivers such as the OSD353, OSD383 and OSD553.

Specifications and Features

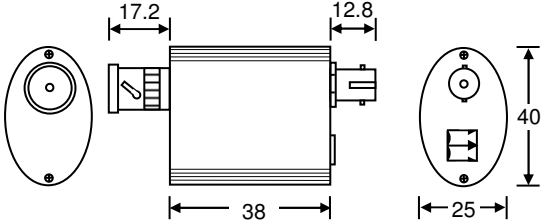
- ▲ Short distance surveillance links
- ▲ Space constrained camera sites
- ▲ Industrial process monitoring
- ▲ Bandwidth of 10MHz
- ▲ Extends wideband video transmission to over 3km
- ▲ Eliminates length dependant adjustments often required with coax or Cat 5 based systems
- ▲ Immune to electrical noise
- ▲ Fits directly onto the camera.
- ▲ More secure than copper cables
- ▲ Small size, low cost, robust and reliable
- ▲ Safe transmission in hazardous environments

Typical Configurations



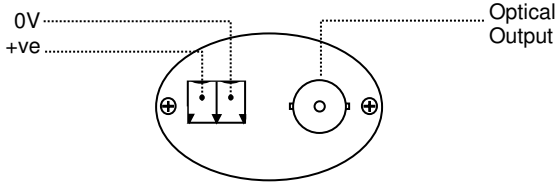
Mounting Details

The OSD365A can be mounted directly on the back of a camera to the female BNC connector. Below is an outer case drawing showing the dimensions.



Power Connection

The OSD365A requires external DC or AC power. The acceptable DC voltage range is +8 to +18V_{DC}, and the allowed AC voltage range is 8 to 15V_{AC}, with maximum current draw of 70mA. Power should be connected to the 3.5mm 2-way terminal block located at the side of the case. Take care to connect DC power with the correct polarity as shown below. A 3.5mm 2-way terminal plug is supplied with the OSD365A

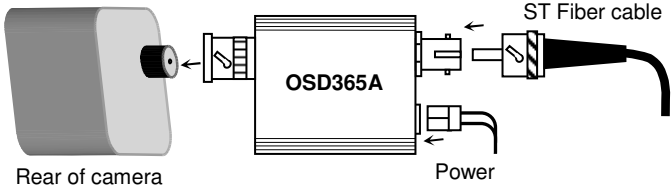


Signal Connection

Video input signal should be connected to the male BNC connector on the OSD365A directly from the camera.

The optical fiber cable must be terminated with the appropriate ST type optical connector. Before connection, inspect the ends of the connectors to ensure that no dust or dirt is present as it could contaminate the modern connector and result in poor performance.

If it is necessary to clean the cable connectors use isopropyl alcohol and lint free tissue to remove contamination.



Products and Options

Item	Description
OSD365A	STANDARD FIBER OPTIC CCTV MICRO TRANSMITTER MODULE
OSD365AL	SINGLEMODE VERSION OF OSD365A
OSD365APP	MAINS INPUT PLUG PACK TO SUIT OSD365A PRODUCTS

Technical Specifications

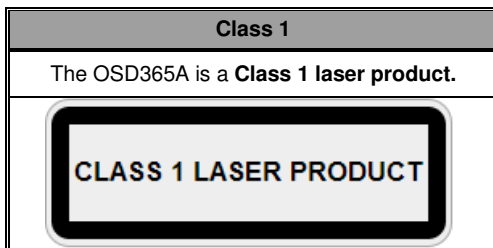
Specification	Performance
Input Impedance	75Ω
Input Level	1V _{p-p} nominal
Video Connector	BNC Plug
Power Connector	3.5mm 2-way terminal block
Bandwidth	5Hz to 10MHz +1/-3dB
Weighted Signal to Noise Ratio	>70dB for the OSD365. SNR depends on the receiver and optical loss.
Transmitter Wavelength	850 ± 40nm (1310 ± 40nm for optional OSD365AL)
Transmitter Coupled Power	>-16dBm peak into 62.5/125um multimode fiber >-13dBm peak power into singlemode fiber (OSD365AL only)
Optical Connectors	ST
Power Requirements	+8V _{DC} to +18V _{DC} 8V _{AC} to 15V _{AC} at 70mA max
Enclosure	Anodised elliptical metal case
Dimensions (mm)	25 x 40 x 38L (excluding connectors)
Weight of Module	35g
Operating Temperature	-40 to 75°C
Relative Humidity	0 to 95% non-condensing

▲ ELECTROMAGNETIC COMPATIBILITY

WARNING: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

▲ OPTICAL OUTPUT OPERATION

WARNING: Laser Safety: Class 1 Laser Product per IEC/EN 60825-1:20011 standard.



Precautions

- ▲ All service personnel should be provided training as to the hazards of direct viewing of laser radiation and of the precautionary measures during servicing of equipment
- ▲ Areas where laser products are installed should be restricted in access to trained service personnel only and appropriate warning signs posted in the work area.
- ▲ All laser apertures should be covered by protective covers when not connected to optical fibers. Never leave outputs uncovered.
- ▲ Laser equipment should be positioned above or below eye level where possible. Apertures should be positioned away from personnel.
- ▲ Protective eyewear should be worn in the vicinity of laser equipment

Maintenance

This equipment has been fully tested prior to dispatch and is ready for immediate operation. However it is advisable to check for external transportation damage before operation. If damage is evident, return the unit with the packaging to your supplier immediately.

Visually check for the following:

- ▲ Check that the correct power source is connected to the power socket.
- ▲ Check that the video signal is connected to the modem correctly and that the distant modem has been terminated correctly to any external equipment.
- ▲ Inspect the optical connector for any contamination and clean using isopropyl alcohol and a lint free tissue if any contamination is detected.
- ▲ Check that any external terminations are connected if the system configuration requires them.

Warranty/Repairs

Thank you for purchasing equipment designed, manufactured and serviced by Optical Systems Design (OSD). OSD warrants that at the time of shipment, its products are free from defects in material and workmanship and conforms to specifications.

For warranty period and repair service please call your local OSD distributor.

Optical Systems Design reserves the right to repair or replace faulty modules/units. Should your unit be faulty, please obtain a "Return Material Authorisation" (RMA) form and number before returning goods.

Goods must be returned in adequate packing material to Optical Systems Design, Warriewood or its nominated authorised representative, for all repairs.

This warranty does not apply to defects caused by unauthorized modifications, misuse, abuse or transport damage to the equipment. All modifications to OSD's standard product will need written authorization and will be charged at normal repair rates. All modifications are to be carried out by OSD Technicians. Warranty is void if unauthorized removal and/or tampering with serial number and/or repair labels is evident.



OPTICAL SYSTEMS DESIGN PTY LTD

7/1 Vuko Place, Warriewood 2102.
PO Box 891, Mona Vale,
NSW, Australia 1660.
Phone: +61 2 9913 8540
Fax: +61 2 9913 8735