

FO

OPTICAL FIBRE VIDEO AND DATA TRANSMISSION

REVISION 1202

MAIN FEATURES

Optical fibre video and data transmission/reception (bidirectional)

Compatible with all NTSC and PAL video formats

Supports RS232, RS422, RS485 data formats (2 or 4 wires)

10bit digital video encoding

Single Mode or Multi Mode optical fibre

Transmission distance up to 69km (43 miles) with Single Mode optical fibre

Stand alone or rack

Wide range power supply with international plug kit included

DESCRIPTION

The complete optical fibre video transmission/reception system (Multi Mode or Single Mode) consists of two transmitter/receiver pairs, according to the type of fibre used.

The transmitter (FOTXMM01, FOTXSM01) converts the composite video signal and the telemetry data coming from a video camera or a pan and tilt system and sends them, through the optical fibre, to the receiver (FORXMM01, FORXSM01), which converts the digital video (10bit) into an analog signal.

Bidirectional data transmission (in various formats, such as RS232, RS422, RS485, 2 or 4 wires).

The Single Mode receiver/transmitter pair (FOTXSM01/ FORXSM01) allows covering distances of up to 69km (43 miles).

The Plug and Play installation does not require optical or electrical configurations.

Immediate status diagnostics, thanks to the LED indicators (power, data IN/OUT, video sync presence, optical carrier detection).

Wide range power supply with international plug kit (EU, UK, USA, AUS).

Two installation options: stand-alone or on a 14-slot rack (FORACK01) with power supply and EU, UK, USA plugs.



FORX-FOTX



FORX-FOTX



FORACK

INTEGRATED
POSITIONING UNITSEXPLOSION-PROOF
SYSTEMSSTAINLESS STEEL
SYSTEMSCAMERA
HOUSINGSDOME
ENCLOSURESVANDAL RESISTANT
HOUSINGSIR
ILLUMINATORSP&T MOTORS
AND TELEMETRYCAMERA
BRACKETSDIGITAL
VIDEO SYSTEMSCONTROL
KEYBOARDSVIDEO SWITCHING
AND DISTRIBUTION

INTEGRATED POSITIONING UNITS
EXPLOSION-PROOF SYSTEMS
STAINLESS STEEL SYSTEMS
CAMERA HOUSINGS
DOVE ENCLOSURES
VANDAL RESISTANT HOUSINGS
IR ILLUMINATORS
P&T MOTORS AND TELEMETRY
CAMERA BRACKETS
DIGITAL VIDEO SYSTEMS
CONTROL KEYBOARDS
VIDEO SWITCHING AND DISTRIBUTION

TECHNICAL DATA

GENERAL

1 optical channel
 1 analog video channel
 All the lines (power, video, data IN/OUT) are protected by voltage transients
 Automatic resettable fuses on all power lines (stand alone and rack)
 Hot-Swap modules
 Multi Mode transmitter: FOTXMM01
 Single Mode transmitter: FOTXSM01
 Multi Mode receiver: FORXMM01
 Single Mode receiver: FORXSM01
 FOTXMM01-FOTXSM01, FORXMM01-FORXSM01 supplied with power cords and plugs for the EU, UK, USA, AUS markets (Vin: 90-264Vac, 0.4A, 50/60Hz, Vout: 12Vdc), power supply connector and data line connector

MECHANICAL

FOTXMM01 - FORXMM01, FOTXSM01 - FORXSM01
 • Dimensions (WxHxL): 135x28x155mm
 1 rack slot
 Optical connector: ST (Standard)
 Video connector: BNC with gold-plated center pin

ELECTRICAL

FOTXMM01 - FORXMM01, FOTXSM01 - FORXSM01:
 Supply voltage:
 • Stand alone: 8-15Vdc
 • Rack mount: 9Vdc
 • Power dissipation: 2W

ELECTRICAL VIDEO/DATA

VIDEO:

FOTXMM01 - FOTXSM01:
 • Video input: 1.0Vpp, 75 Ohm
 • Max distance between camera and transmitter: 100m
 FORXMM01 - FORXSM01:
 • Video output: 1.0Vpp, 75 Ohm

DATA:

• Data format: RS-232, RS-422, RS-485 (2 or 4 wires)

OPTICAL

Data rate: DC-115kbps
 Number of fibres: 1
 Wavelength: 1310/1550nm, (MM and SM fibres)
 Optical emitter: Laser diode

COMMUNICATIONS

FOTXMM01 - FORXMM01 pair with 62.5/125µm Multi Mode optical fibre
 Optical Power Budget: 16dB
 • Max. distance: 3km (2mi)
 FOTXSM01 - FOTXSM01 pair with 9/125µm Single Mode optical fibre
 Optical Power Budget: 23dB
 • Max. distance: 69km (43mi)

ENVIRONMENT

Indoor
 FOTXMM01 - FORXSM01, FOTXSM01 - FORXMM01:
 • Operating temperature: -40°C / +75°C
 • Relative humidity: 0% / 95% (without condensation)
This requires the installation of a fibre with a minimal loss of the 30dB connector. The use of Super Polish connectors is highly recommended.

TECHNICAL DATA FOR RACK

GENERAL

Supplied with power cable with plug for EU, UK, USA markets

MECHANICAL

• Dimensions (WxHxL): 190x175x482mm
 • 14 slots available

ELECTRICAL

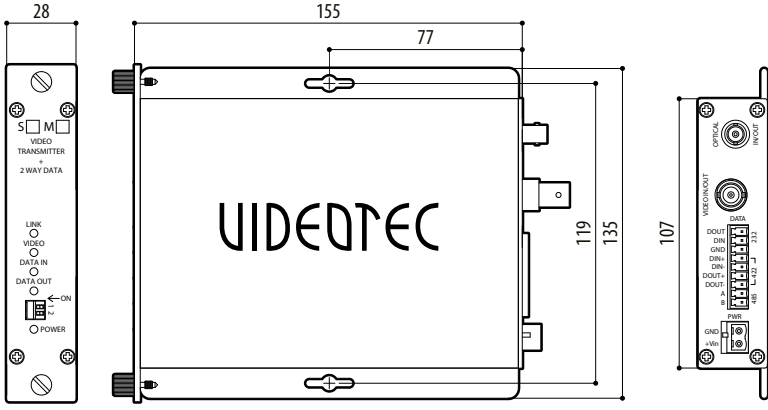
• Vin: 90-264Vac, 70W Max.
 • Vout: 9Vdc

ENVIRONMENT

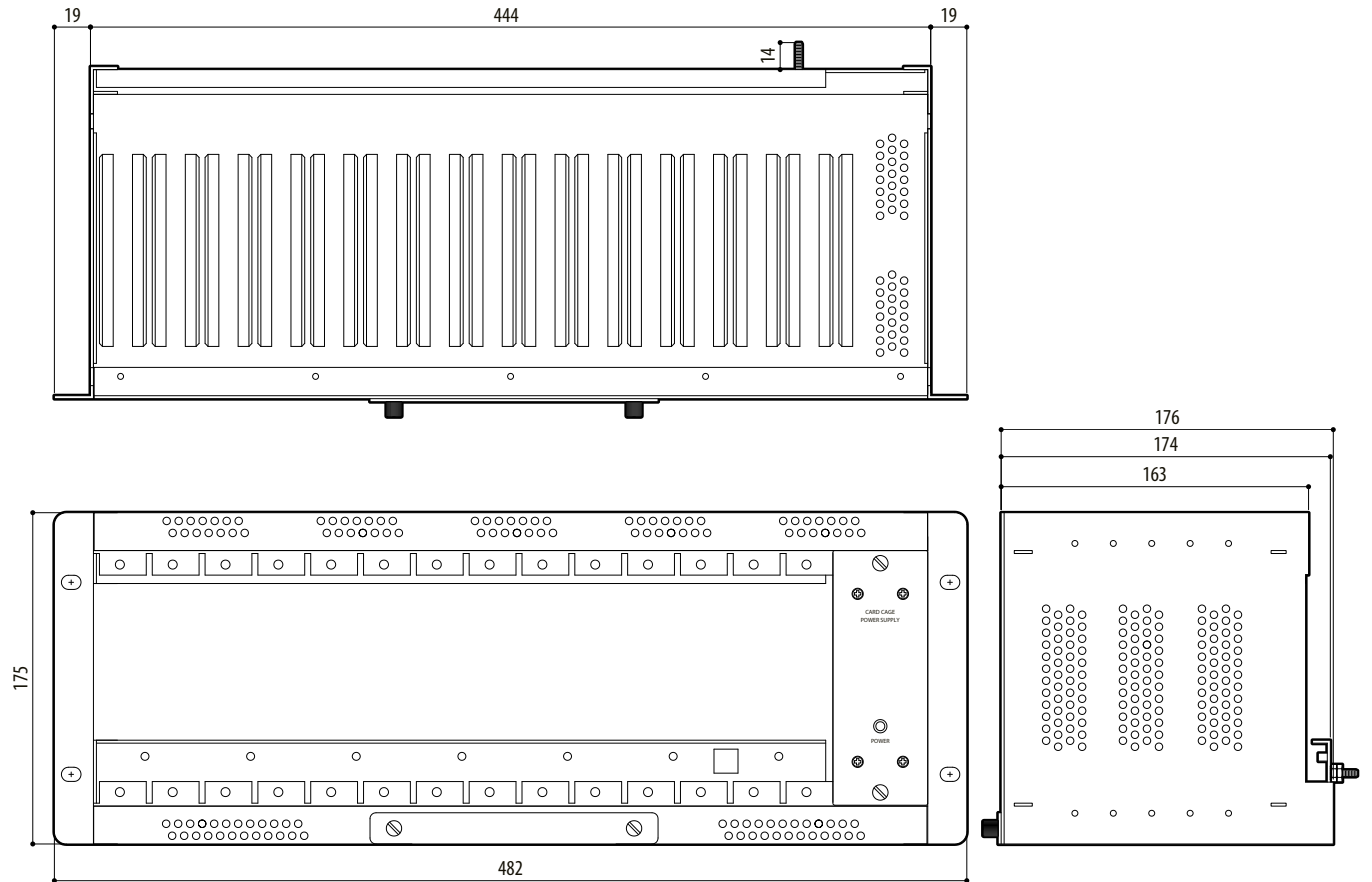
Indoor
 • Operating temperature: -40°C/+75°C
 • Heat supplied: 254KJ (240BTU)

FOTX-FORX - MAIN FEATURES

Code	Description	Required fibres	Fibre	Optical power balance	Max. distance	Max UTC (Up The Coax) distance
FOTXMM01	Multi Mode transmitter	1	Multi Mode 62.5/125µm	16dB	3km (2mi)	1km (0.6mi)
FORXMM01	Multi Mode receiver					
FOTXSM01	Single Mode transmitter		Single Mode 9/125µm	23dB	69km (43mi)	1km (0.6mi)
FORXSM01	Single Mode receiver					



FOTX-FORX



FORACK

INTEGRATED POSITIONING UNITS	EXPLOSION-PROOF SYSTEMS	STAINLESS STEEL SYSTEMS	CAMERA HOUSINGS	DOME ENCLOSURES	VANDAL RESISTANT HOUSINGS	IR ILLUMINATORS	P&T MOTORS AND TELEMETRY	CAMERA BRACKETS	DIGITAL VIDEO SYSTEMS	CONTROL KEYBOARDS	VIDEO SWITCHING AND DISTRIBUTION
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VIDEO SWITCHING AND DISTRIBUTION	CONTROL KEYBOARDS	DIGITAL VIDEO SYSTEMS	CAMERA BRACKETS	P&T MOTORS AND TELEMETRY	IR ILLUMINATORS	VANDAL RESISTANT HOUSINGS	DOIME ENCLOSURES	CAMERA HOUSINGS	STAINLESS STEEL SYSTEMS	EXPLOSION-PROOF SYSTEMS	INTEGRATED POSITIONING UNITS
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