

Code: OFT-111/TX

OPTICAL FIBER TRANSMITTER **OFT-111/TX** 1x VIDEO + 1x AUDIO + RS-485 + ALARM

The OFT-111 device is built from two separate modules: the transmitter and the receiver. They enable the transmission of 1 analog video signal, 1 audio signal, 1 telemetric data channel (RS-485) and have built-in 1-channel alarm module.

The transmission is over one single mode fiber. Optical signal is transmitted and received in the II i III transmission window of 1310/1550 nm.

The RS-485 data transmission is bidirectional at half duplex mode. The transmission direction is set automatically and depends on that, where the RS-485 signal will be connected to (receiver or transmitter). To connection between two device modules is using the one single mode fiber.

The power supply inputs and audio inputs/outputs has double different type connectors enable to connect with different sockets. Above the fiber, video and power connectors there are LED indicators, which will light on (constant light) if the signal is connected. RS-485 signal is indicating by LED blinking.

The left pin of the receiver "ALARM" socket is connected to the control transistor drain and the source to the ground. The short-circuit of the transmitter alarm input pins causes the short-circuit of the left pin to the ground. On the right pin there is a 10V voltage.

So, this output can be used to control the relay on. The ground of the device is only connected to the (-) output of the audio terminal. Device supports any CCTV cameras. The device is designed to continuous work in closed spaces.



Device type:	Transmitter
Optical connector type:	SC
Number of fibers:	1 pcs
Recommended fiber:	Single-mode 9/125 μm (G652)
Transmission range:	20 km
Number of video channels:	1x PAL/SECAM/NTSC
Video connectors type:	BNC
Video resolution:	8 bit
Video bandwidth:	6.5 MHz (-3dB)
Video input voltage / impedance:	1 Vpp / 75 Ω
Audio input:	1 pcs
Audio connectors type:	RCA (CINCH) / Cable terminals
Audio input voltage:	1.5 Vpp
Audio input/output impedance:	239 k Ω / 32 Ω
Audio bandwidth:	30 Hz ... 14 kHz (-3dB)
Audio resolution:	10 bit
RS-485 signal:	Bi-directional RS-485 (half duplex)
RS-485 transmission direction:	OFT-111/RX ... OFT-111/TX

RS-485 maximal bitrate:	1000 kbps
RS-485 channel Jitter:	80 ns
Optical transmitter / receiver:	Fabry-Perot LASER / PIN photodiode
Optical wavelength:	1310 ± 50 nm / 1550 ± 70 nm
Encoding:	8 B / 10 B
Bitrate:	155 Mbps
Average optical output power:	-10 dBm
Main features:	<ul style="list-style-type: none">• Wavelength-Division Multiplexing technology WDM (Tx 1550nm / Rx 1310nm)• Alarm signaling
Power supply:	12 V DC / 150 mA 2.1/5.5mm socket / cable terminals
Power consumption:	< 1.7 W
Housing:	ZnAl - shielded
Operation temp:	0 °C ... 50 °C
LED diodes:	LEDs indicating device operation state
Permissible relative humidity:	0 % ... 95 %
Weight:	0.800 kg
Dimensions:	167 x 88 x 43 mm
Guarantee:	2 years