

OFT-111 VIDEO OVER FIBER SINGLE MODE CONVERTER



DESCRIPTION AND CONNECTIONS:

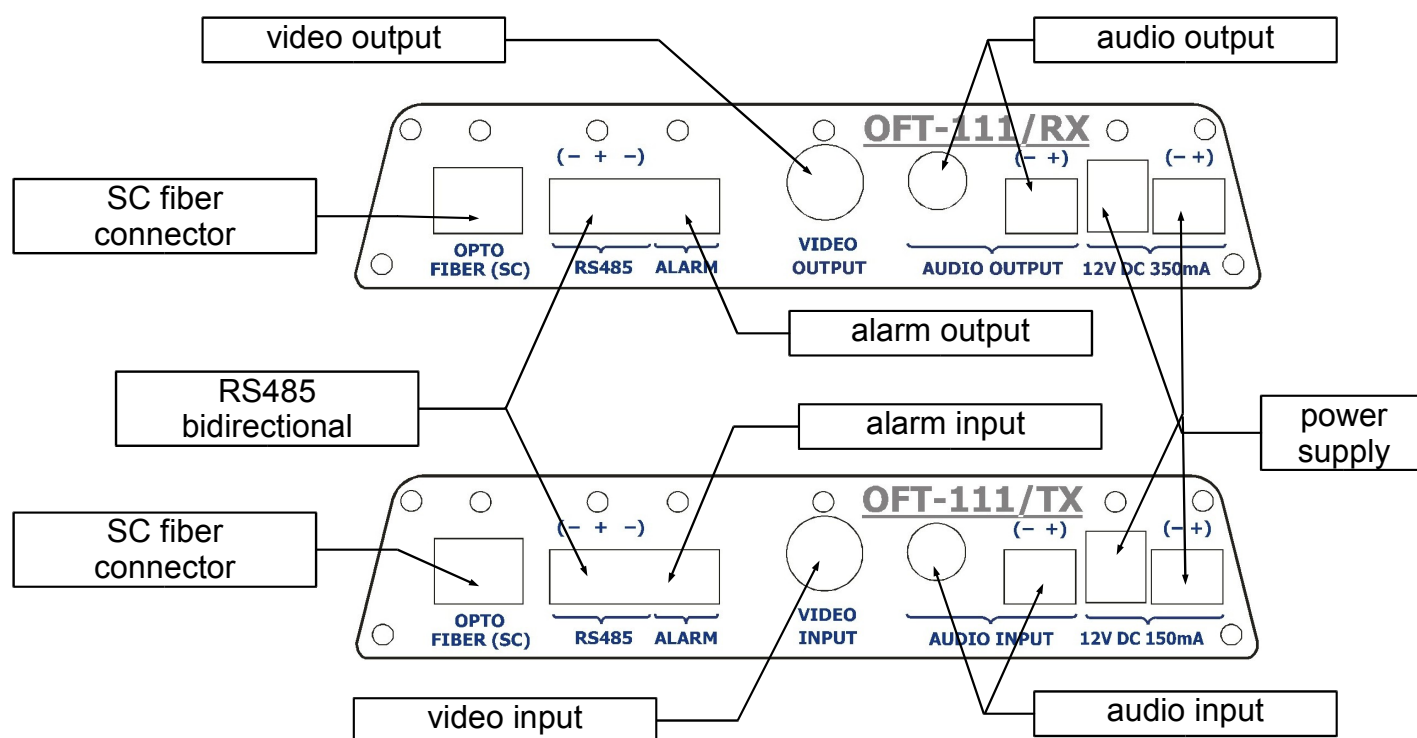
The OFT-111 device is built from two separate modules: the transmitter and the receiver. They enable the transmission of 1 analogue video signal, 1 audio signal, 1 telemetric data channel (RS485) and they have built-in 1 channel alarm module. The transmission is over one single mode fiber. The RS485 data transmission is bidirectional at half duplex mode. The transmission direction is set automatically and depends on that, where the RS485 signal will be connected to (receiver or transmitter).

To connection between two device modules is using the one single mode fiber. It is possible to connect up to eight transmitters OFT - 111/TX to the OFT - 8111/RX receiver, which has built eight fiber inputs.

The power supply inputs and audio inputs/outputs has double different type connectors. Above the fiber, video and power connectors there are LED indicators, which will light on (constant light) if the signal is connected. When the RS485 signal is connected the LED indicator is 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 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.

The OFT-111 series devices support any CCTV cameras. They are designed for continuous work indoors.



SPECIFICATIONS:

Transmitter / Receiver	OFT - 111/TX	OFT - 111/RX
Number of video channels	1 PAL/SECAM/NTSC	
Video connectors	BNC	
Video input voltage / impedance	1Vpp / 75Ω *	
Video bandwidth	6,5MHz (-3dB)	
Video resolution	8 bit **	
Number of audio channels	1	
Audio connectors	RCA (CINCH) / terminals	
Audio input voltage	1.5V Vpp	
Audio in / out impedance	39kΩ / 32Ω	
Audio bandwidth	30Hz – 14kHz (-3dB)	
Audio resolution	10 bit	
Telemetric data format	bidirectional RS485 (half duplex)	
RS485 maximum bitrate	1000kbit/s	
RS-channel jitter	80 ns	
Alarm module output load	0,5 A	
Optical transmitter / receiver	Fabry-Perrot LASER / PIN photodiode	
Encoding	8B/10B	
Optical wavelength	1310 ± 50nm -> /1550 ± 70nm <-	
Connection bitrate	155 Mbit/s	
Maximum transmission distance	20km	
Number of fibers	1	
Recommended fiber	Standard single mode 9/125 um (G652)	
Optical connector	SC Physical Contact	
Average optical output power	-10dBm	
Power supply	12V DC	
Power input connector type	2.1/5.5mm power socket / terminals	
Power consumptions	< 1,7W	<3W
Casing	ZnAl (shielded)	
Dimensions	43x167x88 mm	
Weight	0.78kg	
Operatio temperature	from 0°C to +50°C	
Relative humidity	from 0% to 95%	

- - The exceeding of this value causes video signal limitations. It may cause the distortions of the image (flickering, etc.).

** - This resolution is for 1Vpp signal value. At low levels the image will be with more noise visible.

