

# OFT – 8111/RX VIDEO OVER FIBER SINGLE MODE CONVERTER



## DESCRIPTION AND CONNECTIONS:

The OFT-8111/RX device is 8-channels receiver for OFT-111/TX transmitters. It includes eight OFT-111/RX transmitters inside one RACK type case. The device allows to receive up to eight analogue video channels, eight audio channels, one telemetry data channel (RS485) and eight alarm data channels. The RS-485 data transmission is bi-directional at half duplex mode. The direction is set automatically depending on the RS-485 signal connection (on receiver or transmitter side). The connection between modules is made using one from eight single fibers. Each fiber is used to transmission of the one video channel, one audio channel, RS-485 channel and a signal from alarm module.

Above the fiber, video, alarm and power connectors there are LED indicators. The constant light means the signals presence. During RS-485 transmission the LED is blinking.

Each terminal of the receiver „ALARM OUTPUTS” connector 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 alarm output to the ground. On the „+” terminal there is a 11,4V voltage. So, this output can be used to control the relay on. The current consumption of each output can be maximal 0.5A, but the summary value of the current consumption has to be less than 2A. You have to select also the right power supply adaptor, because the device current consumption is about 1A. The ground of the device is connected to the „-” terminal.

The OFT-8111/RX device supports any CCTV cameras. It is designed for continuous work indoors.

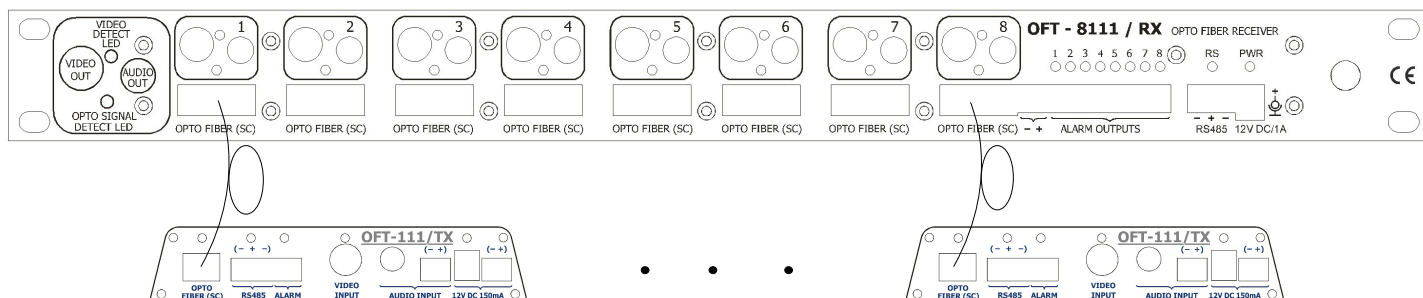


Fig. 1 Schematic diagram of the OFT-8111/RX receiver connections to the OFT-111/TX transmitters.

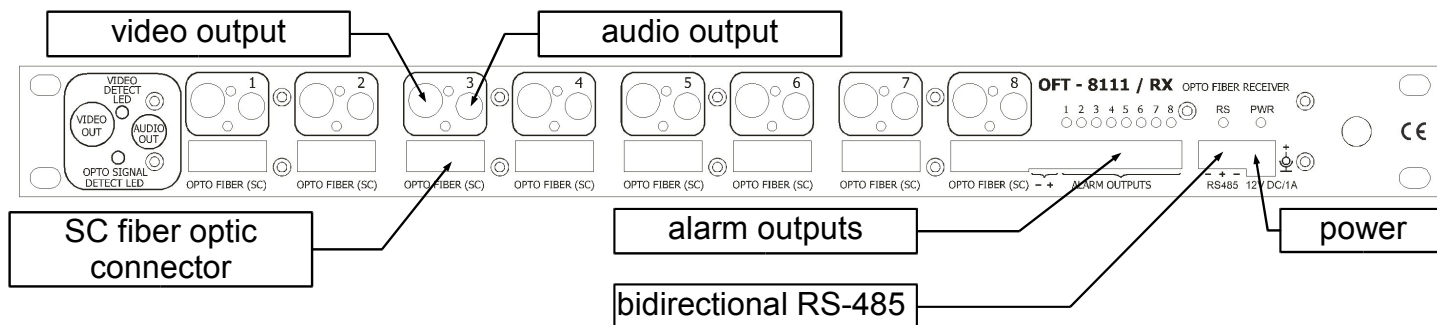


Fig. 2 Front panel of the OFT-8111/RX receiver description.

## **SPECIFICATIONS:**

<b>Receiver</b>	<b>OFT - 8111/RX</b>
<b>Number of video channels</b>	<b>8 x 1 PAL/SECAM/NTSC</b>
<b>Video connectors</b>	<b>BNC socket</b>
<b>Video input voltage / impedance</b>	<b>1Vpp / 75Ω</b>
<b>Video bandwidth</b>	<b>6,5MHz (-3dB)</b>
<b>Video resolution</b>	<b>8 bit *</b>
<b>Number of audio channels</b>	<b>8 x 1</b>
<b>Audio connectors</b>	<b>RCA (CINCH) socket</b>
<b>Audio input voltage</b>	<b>1.5Vpp</b>
<b>Audio output impedance</b>	<b>32Ω</b>
<b>Audio bandwidth</b>	<b>30Hz – 14kHz (-3dB)</b>
<b>Audio resolution</b>	<b>10 bit</b>
<b>Telemetry data format</b>	<b>Bidirectional RS485 (half duplex)</b>
<b>RS-485 maximum bitrate</b>	<b>1000kbit/s</b>
<b>RS-channel jitter</b>	<b>80 ns</b>
<b>Load capacity of the alarm module output</b>	<b>0,5 A</b>
<b>Optical transmitter / receiver</b>	<b>Laser Fabry-Perrot / photodiode PIN</b>
<b>Encoding</b>	<b>8B/10B</b>
<b>Optical wavelength</b>	<b>1310 ± 50nm -&gt; /1550 ± 70nm &lt;-</b>
<b>Connection bitrate</b>	<b>8 x 155 Mbit/s</b>
<b>Maximum transmission distance</b>	<b>20km</b>
<b>Number of fibers</b>	<b>1 - 8</b>
<b>Recommended fiber</b>	<b>Standard single mode 9/125 um (G652)</b>
<b>Optical connectors</b>	<b>SC Physical Contact</b>
<b>Power supply</b>	<b>12V DC</b>
<b>Power supply input connector</b>	<b>2.1/5.5mm socket</b>
<b>Power / current consumption</b>	<b>&lt;11W / &lt;0.9A</b>
<b>Casing</b>	<b>1RU (19")</b>
<b>Dimensions</b>	<b>44x480x130 mm</b>
<b>Weight</b>	<b>1.3kg</b>
<b>Operation temperature</b>	<b>0°C - 50°C</b>
<b>Relative humidity</b>	<b>0% - 95%</b>

\* - At 1Vpp signal. At lower levels effective resolution gets worse and quantization noise can be relatively higher.

