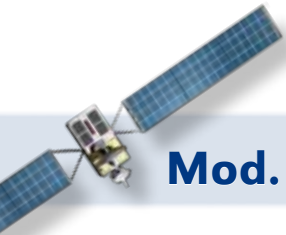




50 YEARS IN TECHNOLOGY INNOVATION

# MODULAR OUTDOOR RF Over FIBER LINK

EXTENDED BAND = 45 – 3000 MHz



RF Over FIBER

Mod. **ROF1-OTX-S**



RF Over FIBER

Mod. **ROF1-ORX-S**



Weatherproof connectors



Rubber O ring

- 45-3000 MHz for HTS & Ku/Ka-Band
- RF & Optic Weatherproof connectors
- IP67 enclosure, Direct Antenna mounting
- Transport all format, RF, SATCOM, GPS, TV, DAB, FM
- MGC adjust or AGC modes
- RF monitor Port for peaking or distribution

- 2 Redundant PSU connectors
- Built-in LNB PSU, 13/18 V/22 KHz
- LNB current monitor Led at RX (opt.)
- RF laser drive monitor Led at RX (opt.)
- 5 years Warranty, reliable Support & Training

**INNOVATIVE PERFORMANCE**

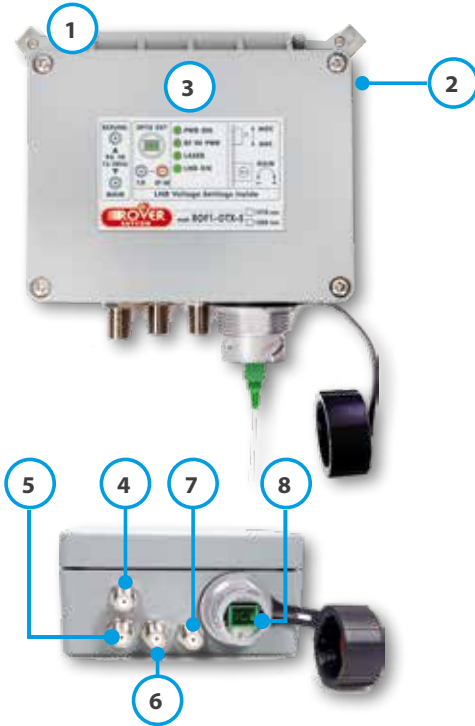
for: SYSTEM INTEGRATOR,  
TELEPORT BROADCASTER,  
CABLE NETWORK, GOVERNMENT  
& MILITARY COMMUNICATIONS



- Professional RF over FIBER Link (50 - 3000 MHz)
- Aluminium Outdoor case with wall mount Supports included
- RF Level Test Point @-20 dB for level Monitoring
- TX equipped with Coax DFB single mode Laser 1310 nm to 1.550 nm (opt.)
- RX equipped with Optical Photodiode PIN from 960 nm to 1.650 nm
- 2 Redundant 12V dc PSU Input to guaranty the Quality of Service

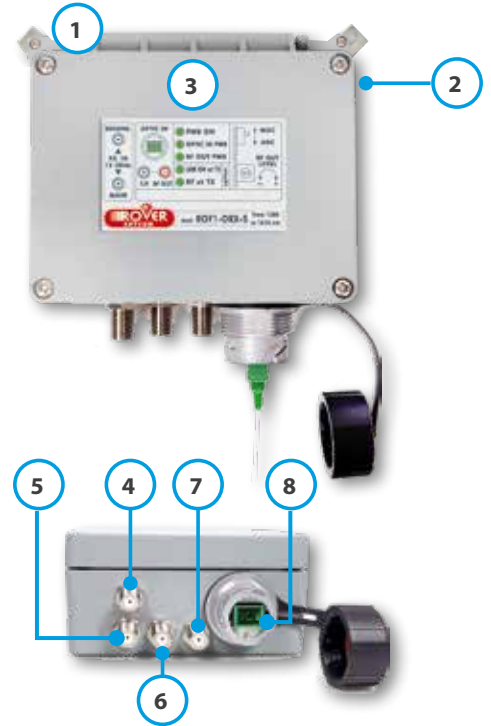
## PHYSICAL & CONNECTIONS

mod. **ROF-1-OTX-S**



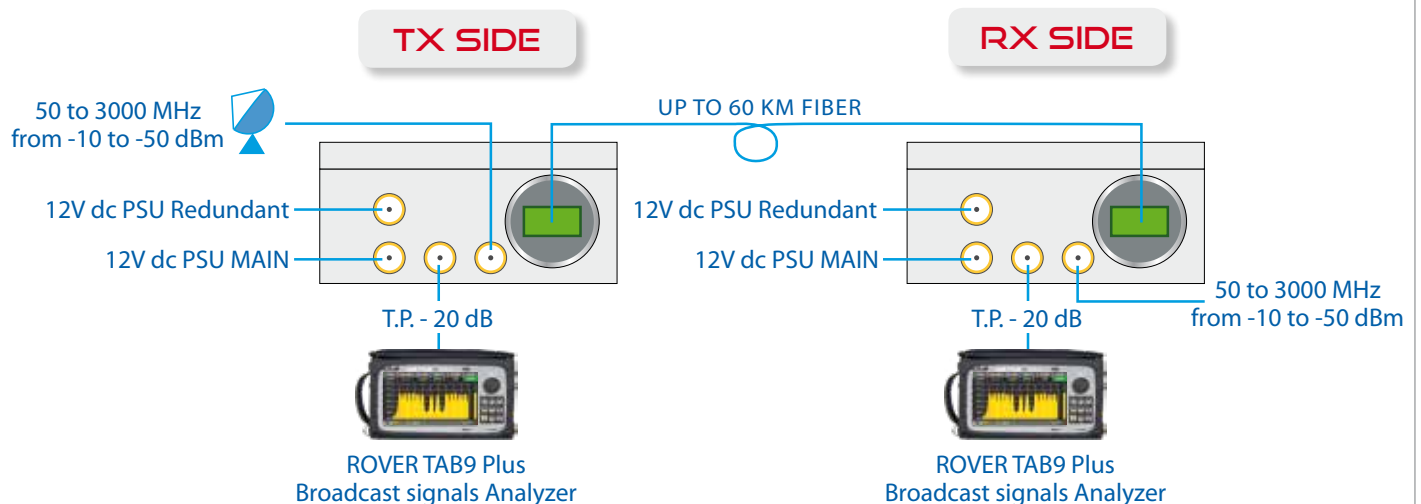
1. Cover Hinges
2. Wall fixing bracket
3. Aluminium Outdoor IP65 case
4. PSU 1 Input 12 V dc
5. PSU 2 Redundancy 12 V dc
6. Level test point - 20 dB
7. RF Input 50 - 3000 MHz
8. LASER Output 1310 nm/1550 nm

mod. **ROF-1-ORX-S**



1. Cover Hinges
2. Wall fixing bracket
3. Aluminium Outdoor IP65 case
4. PSU 1 Input 12 V dc
5. PSU 2 Redundancy 12 V dc
6. Level test point - 20 dB
7. RF Output 50 - 3000 MHz
8. OPTICAL Input 960 / 1.650 nm Photodiode

## EXAMPLE of ROF1 RF OVER FIBER LINK APPLICATION



## mod. ROF-1-OTX-S



## mod. ROF-1-ORX-S



### RF TX PARAMETERS

- RF Input frequency range: ..... 45-3000 MHz
- Flatness: ..... +/- 1.5 dB
- 36 MHz Flatness: ..... +/- 0.3 dB
- RL: ..... > 14 dB (75 ohm)
- Noise Figure: ..... < 10dB @ max gain
- IMD: ..... 50 dBc@ 2 tones -13 dBm
- OP1: ..... + 5 dBm (RMS)
- RF Input power Range: ..... - 50 to -10dBm (RMS)
- RF Damage Input Level: ..... + 15 dBm (RMS)
- RF adjustable Gain: ..... 30 dB (AGC/MGC) with internal settings
- LNB powering with external adapter: ... 0, 13V, 18V, 22 KHz, 600 mA.
- Test Point output level: ..... @ -20 dB of RF input

### OPTICAL TRANSMITTER

- Power output: ..... 4.5 dBm
- Wavelength: ..... 1310nm /1550 nm
- Connectors: ..... water protected SC/APC
- LASER: ..... DFB, Class 1M
- MAX Transmission distance 60Km @ 1310nm or 90Km @ 1550 nm

### OTHERS

- Casing: ..... ODU IP 67
- Visible Status LEDs for: ..... PSU, RF power input, Laser and LNB
- Redundant external power supply
- Operating temperature: ..... - 40°C to 55°C
- Weight: ..... 400g
- Size: ..... 115 X 100 (133 including connectors) X H57 mm

### RF RX PARAMETERS

- RF Output frequency range: .....45-3000 MHz
- Flatness: ..... +/- 1.5 dB
- 36 MHz Flatness: ..... +/- 0.3 dB
- RL: ..... > 14 dB (75 ohm)
- Noise Figure: ..... < 10dB @ max gain
- IMD: .....50 dBc@ 2 tones -13 dBm
- OP1: .....+ 5 dBm (RMS)
- RF Output Power Range: .....- 50 to -10dBm (RMS)
- RF adjustable Gain: .....30 dB (AGC/MGC) with internal settings
- Test Point output level: .....@ -20 dB of RF output

### OPTICAL RECEIVER

- GAIN : .....automatic or manual
- Input power sensitivity range: .....- 20 to +4 dBm
- Wavelength: .....960 to 1650 nm
- Connectors: .....water protected SC/APC
- Input power measurement: .....- 30 to +5 dBm
- Photodiode: .....PIN
- Optical damage Input PWR.....+12 dBm

### OTHERS

- Casing: .....ODU IP 67
- Visible Status LEDs for: .....PSU, Optic pwr and RF output pwr
- Redundant external power supply
- Operating temperature: .....- 40°C to 55°C
- Weight: .....400g
- Size: .....115 X 100 (133 including connectors) X 57 mm

### OPTIONS

- LNB current monitor Led via fiber
- RF over drive Monitor Led via fiber



- Outdoor power supply IP 67 enclosure
- Wall fixing bracket
- 80 ~ 264 VAC Input / 12 V Output
- Led indicator for Power ON
- EMI Class B
- Short circuit protection
- Overload protection
- Over voltage / temperature protection



## ORDERING MODEL / CODE EXAMPLE

MODEL/CODE	DESCRIPTION
<b>ROF1-OTX-1310-S</b>	Outdoor RF over FIBER Transmitter, Wavelength 1310 nm, with Double redundant PSU Input, - 20 dB Level Test Point, Monitoring LED, IP65 waterproof aluminium housing with hinges.
<b>ROF1-OTX-1550-S</b>	Outdoor RF over FIBER Transmitter, Wavelength 1550 nm, with Double redundant PSU Input, - 20 dB Level Test Point, Monitoring LED, IP65 waterproof aluminium housing with hinges.
<b>ROF1-ORX-S</b>	Outdoor RF over FIBER Receiver, Wavelength 1100 - 1650 nm, with Double redundant PSU Input, - 20 dB Level Test Point, Monitoring LED, IP65 waterproof aluminium housing with hinges.



ROVER Laboratories and offices



ROVER Goods entrance & production

V.2,1 25-11-21



Product  
made in Italy by  
Rover Broadcast.com

CERTIFICATES N°  
1263 ISO 9001  
1264 ISO 14001  
1265 ISO 45001



Specifications and features are subject to change without notice.

RO.VE.R. Laboratories S.p.A.  
Via Parini, 2 - 25019 Sirmione (BS) Italy  
info@roverinstruments.com • www.roverbroadcast.com