

Fully Designed
& Made in Italy



NEW RF Over FIBER LINKS

50 - 3000 MHz • For SATCOM - VHF / UHF - GPS - VSAT - SNG

RF over
FIBER
9 Modules
Indoor
Unit

Mod. ROF9-IU-X-X



RF over
FIBER
4 Modules
Indoor
Unit

Mod. ROF4-IU-X-X



**INNOVATIVE
PERFORMANCE**

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

VEMA
technology

1972 > 2025 >>

MORE THAN 53 YEARS OF TECHNOLOGY INNOVATION

These Products are very well shielded and specially designed to create fixed or temporary RF over Fiber Links in a reliable, simple and fast way.

This new range of links includes by 1 unit rack with up to 8+1 RF over fiber modules (ROF 9) and a modular equipment with 4 modules (ROF 4). They can be configured as TX, RX, or mixed as a Transceiver.

Due to exceptionally Wide Dynamic Range these modules can be used for many different applications, example: Wireless Camera and Microphone systems, Satcom applications, VHF & UHF signal transport, Mobile Sat Link, GPS & GNSS applications, Far Field antenna test, ESD testing, SNG News Gathering.

Upon request Rover can supply the modules with different Presets or Adjustable Link gain and different Optical and RF connectors. Our Sales and Technical staff are available to support and advise for whatever need.

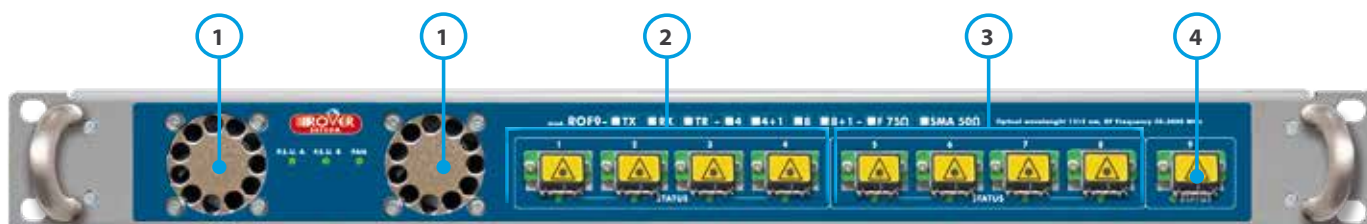
MAIN FEATURES

- Transport all formats: DVB-T2/S2/C-ATSC-DAB-FM-GPS-GNNS
- Protected LNA/LNB feed with resettable fuse
- Exceptional Wide Dynamic Range
- Analog Monitor Alarm Output for: TX laser current/Received Optical power
- Compatible with Other Links

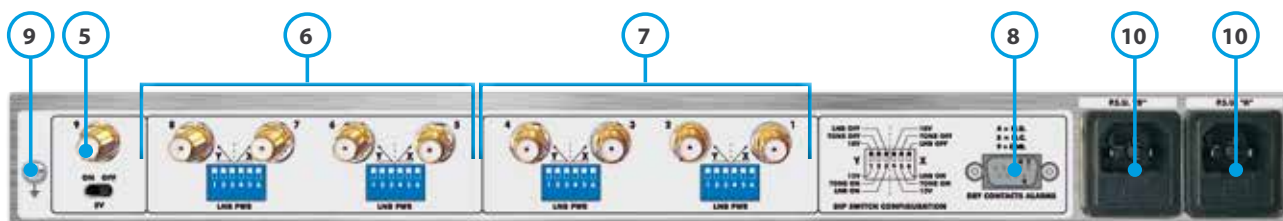
BENEFIT

- Presettable Link gain: from -10 to +20 dB
- RF IN power Measurement (TX)
- RF OUT power Measurement (RX)
- 5 Vdc to RF IN for GPS-GNNS Active Antenna
- Multiple TX or RX in a single unit
- Transceiver version available, TX & RX
- 1310 or 1550 nm version available
- 13/18 Vdc to RF IN for LNB powering & 22 KHz

ROF - 9 IU FRONT / REAR PANEL DESCRIPTION

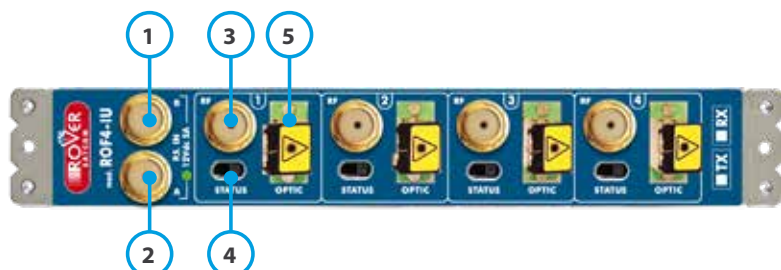


1. Built-In Fan
2. N. 4 Optical TX/RX Modules
3. N. 4 Optical TX/RX Modules
4. N. 1 Optical Module TX/RX for TER or GPS



5. RF IN/OUT for TER or GPS
6. N. 4 RF IN/OUT for L-BAND & LNB Pwr (only TX)
7. N. 4 RF IN/OUT for L-BAND & LNB Pwr (only TX)
8. Sub-D Dry 9 Contact Alarm and Remote Reset
9. Ground Screw
10. Mains and Fuse Receptacle

ROF - 4 IU FRONT / REAR PANEL DESCRIPTION



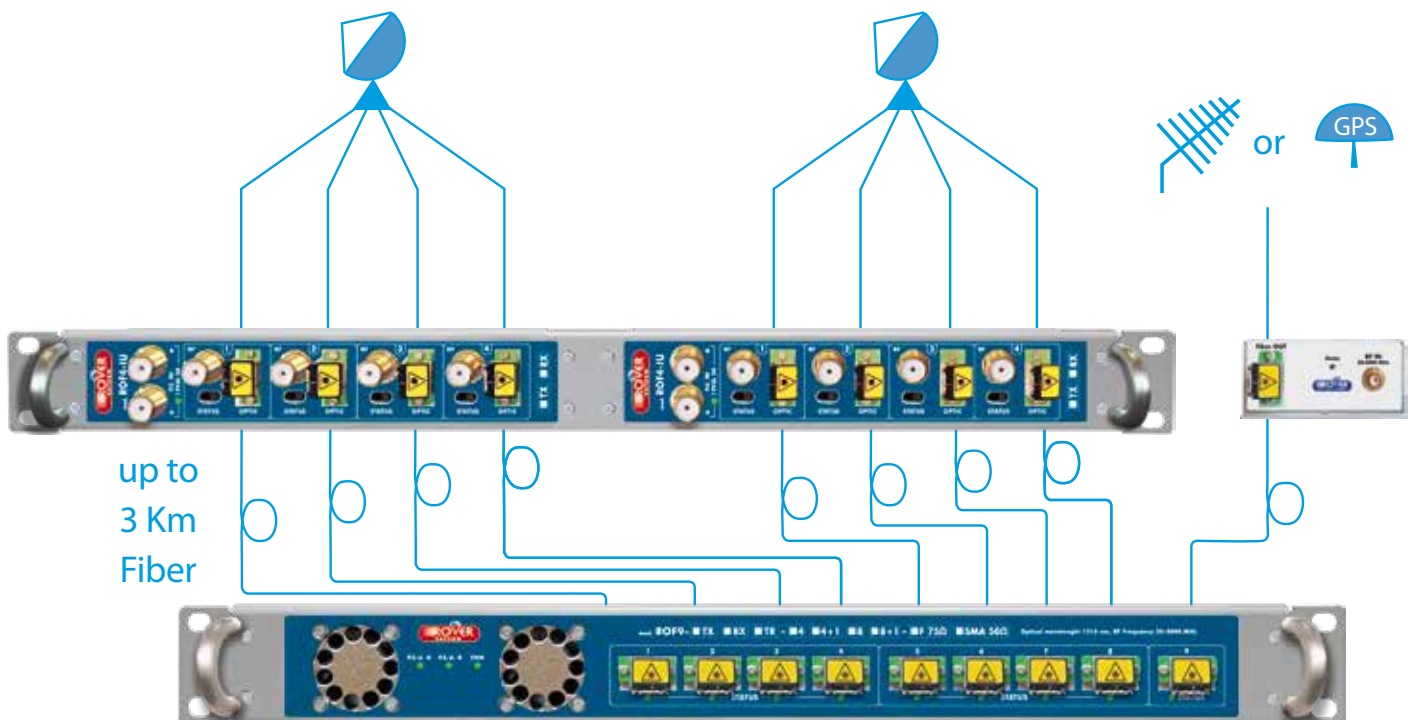
1. PSU "B" 12 VDC
2. PSU "A" 12 VDC
3. RF IN/OUT for L-BAND
4. 13 V 500 mA LNB Pwring
5. Optical TX/RX Module
6. LNB Power Switch (only for TX)

OPTICAL LINK SPECIFICATIONS

FREQUENCY RANGE	50-1000 MHz	50-3000 MHz
Flatness any 36 MHz	0,25 dB	
Flatness in band	± 1 dB	$\pm 1,5$ dB
Noise Figure	14 dB	16 dB
Noise Figure at 5 dB Optical Loss	19 dB	20 dB
Input P1 dB	2 dBm	0 dBm
Input IP 3	14 dBm	12 dBm
Link Gain (on request)	0 or 10 or 20 dB	
Link Gain stability over temp. -20/+60° C	$\pm 1,5$ dB	
RF Impedance IN-OUT	50 or 75 Ω	
Return Loss IN-OUT 50 Ω	18 dB	16 dB
Return Loss IN-OUT 75 Ω	16 dB	14 dB
RF IN-OUT Connector type	75 Ω / F	
SFDR	111 dB	
Optical Budget/Km Distance 1310/1550 nm	up to 30 / 45 Km	

Max RF IN power no damage	10 dBm Max 15
GPS-GNNS antenna feed	5 Vdc, Max 30 mA short circuit protected
Optical Connector	SC / APC
Optical Wavelength nm	1310 or CWDM
Optical CWDM Wavelength MUX/DEMUX	8 ch 1470 to 1610 or 16 ch.
TX Laser type	isolated DFB
TX Laser Optical power	4,5 dBm
LED Alarm	Green = OK • Red= Alarm
Operating Temperature	Typ. - 10° to +50° C
Umidity	95% non condensating
Cooling System	Convection
Power Supply ROF 4	Redundant 12 Vdc 5A
Power Supply ROF 9	Redundancy 220 Vac

APPLICATION EXAMPLES



ROF-4 ASSEMBLING EXAMPLES



DIN RAIL ASSEMBLING



MULTIPLE DIN RAIL ASSEMBLING



FLAT WALL ASSEMBLING



FLAG WALL ASSEMBLING

