

Fully Designed  
& Made in Italy



## COMPACT OEM MODULES for RF Over Fiber Link

50 - 1000 MHz & 50 - 3000 MHz • For Wireless Cameras & Microphones

Mod. **OEM-OTX1-F-G10-SA-SC-1310**

Mod. **OEM-ORX1-F-G10-SB-SC**



OPTICAL  
TRANSMITTER  
Module



OPTICAL  
RECEIVER  
Module

These compact OEM modules are very well shielded and specially designed for **Wireless Cameras and Microphones in the Broadcast world**.

Due to exceptionally Wide Dynamic Range these modules can be used in Wireless Camera systems using COFDM modulation and diversity reception.

The modules can be also easily integrated in your broadcast equipments with long or short fiber cable length.

Upon request Rover can supply the OEM modules with different 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
- Very low Consumption
- Exceptionally Wide Dynamic Range
- Analog Monitor Out for: TX laser current/Received Optical power
- Compatible with Other Links
- 5 Years Warranty, reliable support

### OPTIONAL

- Protected LNA/LNB feed with resettable fuse
- Presetable 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
- CWDM, Up to 4, 8 or 16 channels in 1 Fibre

**INNOVATIVE  
PERFORMANCE**

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



1972 > 2023 >>

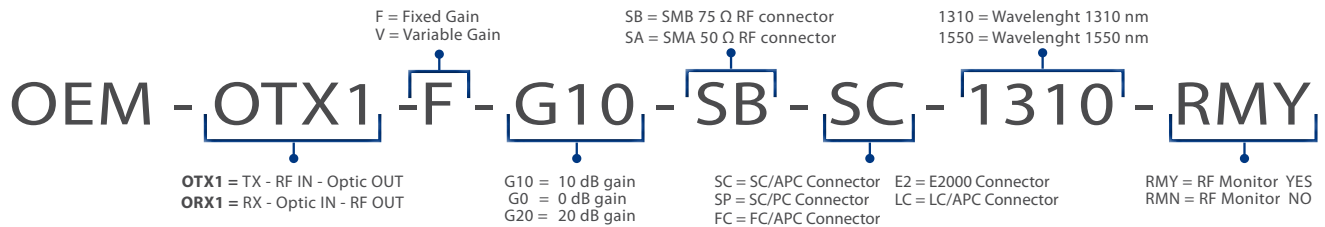
51 YEARS OF TECHNOLOGY INNOVATION

# OPTICAL LINK SPECIFICATIONS

FREQUENCY RANGE	50-1000 MHz	50-3000 MHz
Flatness any 36 MHz	0,25 dB	
Flatness in band	± 1 dB	± 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	± 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	SMA 50 Ω or SMB 75 Ω	
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	
Protected BiasTee to RF input via standard Molex PIN	Optional 500 or 700 mA, 28 Vdc, with Resettable fuse	
GPS-GNNS antenna feed via Molex PIN	5 Vdc, Max 30 mA short circuit protected	

Measur. of the RF pwr at the RX OUT	optional via MOLEX PIN
Measur. of the RF pwr at the TX IN	optional via MOLEX PIN
Module power Supply	12 Vdc ± 4 V
PSU Current TX/RX	TX 110 mA/RX 90 mA
Optical Connector on request	SC or FC or LC or E2000
Optical Wavelength nm	optional 1330 or 1550
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
Open drain collector Alarm	Open = Alarm • CURRENT = OK
LED Alarm	Green = OK • Red= Alarm
Operating Temperature	Typ. - 10° to +50° C
Umidity	95% non condensating
Cooling System	Convection
Power Supply & Alarms Molex Connector	Molex 906351141 - 14 PINS Male
Module dimensions	77 x 40 x 18,4 mm
Module weight	TX: 65 gr • RX 58 gr

## MODULE MODEL CONFIGURATION



## PIN OUT MOLEX CONNECTOR

MOLEX	PIN N.	Color	Function description
1	1	-	free
2	2	-	optional do not connect
3	3	-	+ 5 Vdc 30 mA Max
4	4	-	optional do not connect
5	5	-	Alarm Output (open drain)
6	6	-	Tx: Optical PWR
7	7	-	Module Pwr Supply = 12 Vdc ± 4 V

8	-	Supply Vdc grounding
9	-	free
10	-	free
11	-	Supply Vdc grounding
12	-	optional Tx = RF pwr IN    optional Rx = RF pwr OUT
13	-	Tx: LNA LNB Feed *    Rx: Not Used
14	-	Analogue Monitor Output
		Tx: Laser current    Rx: RLL (Received Light Level)

\* LNB feed Voltage to RF-IN, ± 28 Vdc, protected with 500 or 700 mA Resettable Fuse.

## MECHANICAL DIMENSIONS - All quotes are in mm

