

Fully Designed
& Made in Italy



MORE THAN 50 YEARS IN TECHNOLOGY INNOVATION

COMPACT OEM MODULES for RF Over Fiber Link

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

Mod. **OEM1TX-W1310-SMA-SC-0-x-x**

Mod. **OEM1RX-SMA-SC-0-x-x**



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 and Low Noise 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 equipment with Optical MUX / DEMUX you can send up to 8 Signals in 1 Fiber.

Upon request Rover can supply the OEM modules with different Link Gain and different Optical and RF connectors.

Our Sales and Technical staff is available to support and advise for whatever need.

MAIN FEATURES

- Transport all formats:
DVB-T2/S2/C-ATSC-DAB-FM-GPS-GNNS
- Very low noise & Exceptionally Wide Dynamic Range
- Analog Alarm Out for:
TX Laser current/Received Optical power
- Compatible with Other Optical Link Suppliers
- Very low Consumption
- 5 Years Warranty, reliable technical support

OPTIONAL

- 2 Links gain available : 0 dB or 10 dB gain
- Protected LNA/LNB feed transit with resettable fuse
- Laser power Measurement (TX)
- RF IN power Measurement (TX)
- RF OUT power Measurement (RX)
- 5 Vdc Out, 30 mA for GPS-GNNS Active Antenna
- CWDM, Optical Mux/Demux for up to 2, 4, 8 channels in 1 Fiber

**INNOVATIVE
PERFORMANCE**

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

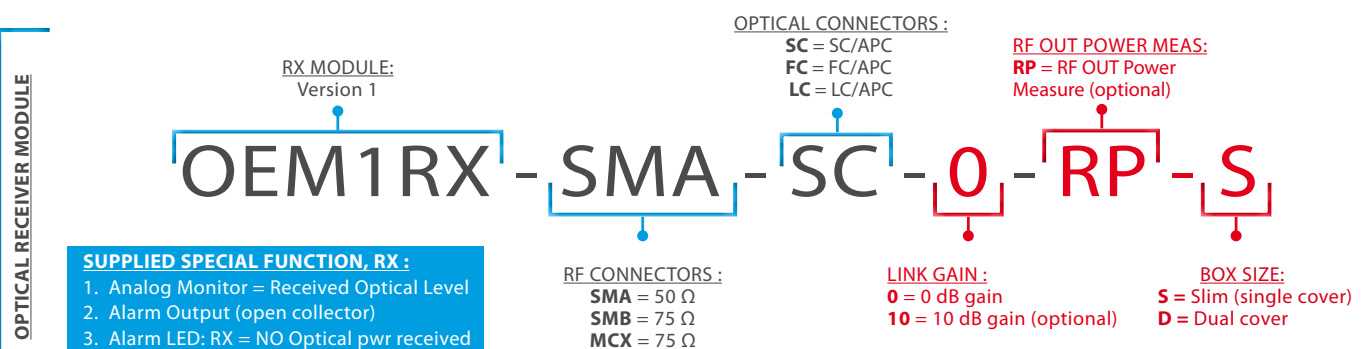
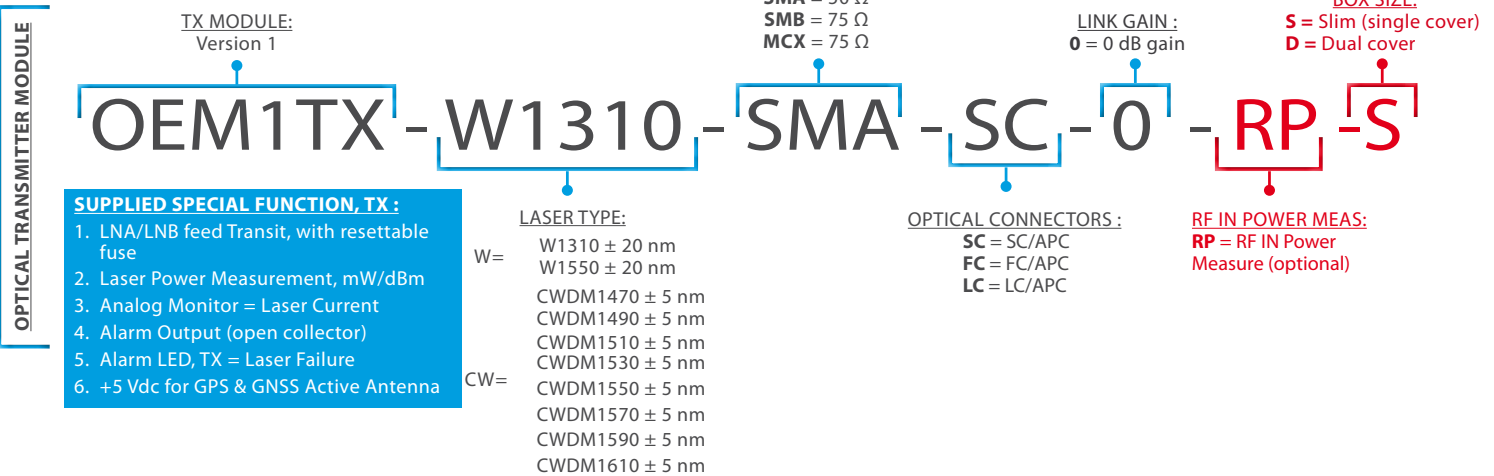


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52 YEARS OF TECHNOLOGY INNOVATION

DESCRIPTION	50-1000 MHz	50-3000 MHz
Flatness any 36 MHz	0,25 dB	
Flatness in band	± 1 dB	± 1,5 dB
Link Gain (on request)	0 or 10 dB	
Link Gain stability over temp. -10 / +60° C, see related curve	± 2,5 dB Max	
Noise Figure with 1 m Fiber	typ 10 dB - 12 Max	
Noise Figure with 5 dB Optical Loss	17 dB	
Input P1 Link with 0 dB gain	+2 dBm	
Input P1 Link with 10 dB gain	with 1 m fiber = -6 dBm with 10 Km fiber = +4 dBm	
Input IP 3 Link with 0 dB gain	+12 dBm	
Input IP 3 Link with 10 dB gain	with 1 m fiber = +4 dBm with 10 Km fiber = +14 dBm	
RF Impedance IN-OUT on request	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, SMB or MCX 75 Ω	
SFDR	117 dB	
Optical Budget/Km Distance , 1310/1550 nm with 10 dB gain	up to 10 / 20 Km Fiber	
Max RF IN power no damage	10 dBm typ. Max 15	
LNA Protected BiasTee transit to RF input via standard Molex PIN	Optional 500 or 700 mA, 28 Vdc, with Resettable fuse	
GPS-GNSS antenna feed at PIN 3	Out 5 Vdc, Max 30 mA short circuit protected	

DESCRIPTION	50-1000 MHz	50-3000 MHz
Meas. of the RF pwr at the RX OUT	optional via MOLEX PIN 12	
Meas. of the RF pwr at the TX IN	optional via MOLEX PIN 12	
Meas. of the Laser Power Out	Via Molex PIN 6	
LNB/BUC Bias-T (Transit with Fuse)	via MOLEX PIN 13	
Module Power Supply Voltage	12 Vdc ± 4 V	
Module Power Consumption	TX: 1,9 W - RX 0 dB: 1,4 W - RX 10 dB gain: 1,9 W	
Optical Connector on request	SC or FC or LC	
Optical Wavelength nm	optional 1310 or 1550 or CWDM	
Optical CWDM Wavelength MUX/DEMUX	2, 4, 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, available also at PIN 5	Green = OK Red= Alarm	
Operating Temperature	Typ. - 10° to +60° C	
Umidity	95% non condensing	
Cooling System	Convection	
Power Supply & Alarms Connector	SPARKTRONIK / MOLEX 14 PINs MALE connector	
Slim type Module dimension	77 x 41 x 13,9 mm	
Dual cover Module dimension	77 x 41 x 18,4 mm	
Module Weight Slim / Dual cover	S = 48 gr / D =58 gr	



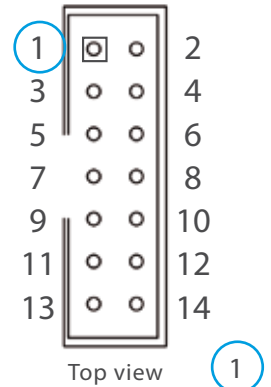
PIN OUT CONNECTOR & WIRE COLOR CODE

PIN N.	Wires Color	Function description	
1	-	not used	
2	BLUE	do not connect	
3	PURPLE	DC OUT + 5 Vdc 30 mA Max for GPS Antenna	
4	GREY	do not connect	
5	WHITE	Alarm Output (open collector)	
6	YELLOW	TX Laser Optical Power Measure	RX not used
7	RED	Module Pwr Supply = 12 Vdc ± 4 V	
8	BLACK	Supply Vdc grounding	
9	PINK	To switch the module ON & OFF	
10	-	do not connect	
11	BLACK	Supply Vdc grounding	
12	BROWN	optional Tx = RF pwr IN Measure	optional Rx = RF pwr OUT Measure
13 *	ORANGE	optional Tx: LNA/LNB Feed (Transit)	optional Rx: BUC feed (Transit)
14	GREEN	Analog Monitor Output	
		Tx = Laser current	Rx = Received Optical Light Level

* Max 28 Vdc, 750 mA Fuse

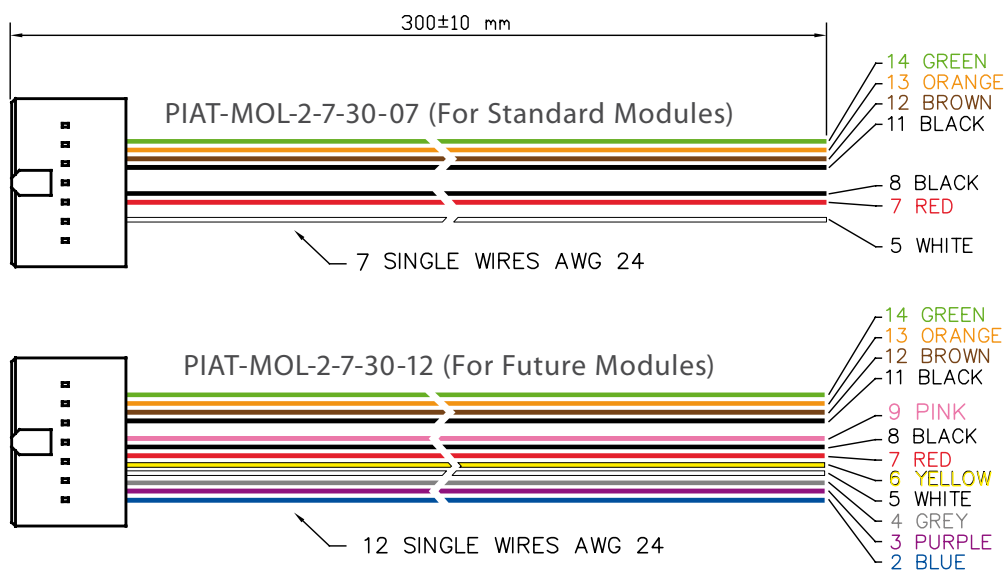
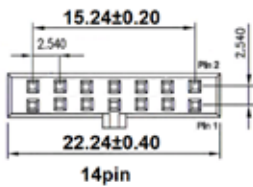
SPARKTRONIC / MOLEX Male Connector

(Rover can supply several Female connectors for PCB mount or wired, see related Price List)



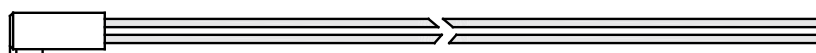
POWER & CONTROL MULTICOLOR CABLE

Female Connector :
SPARKTRONIC / MOLEX

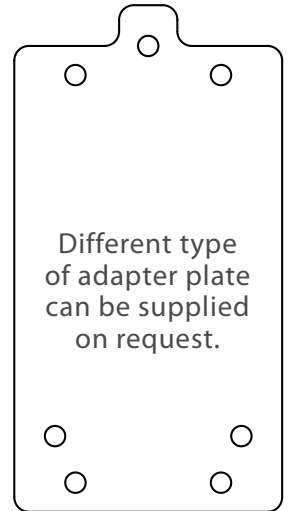
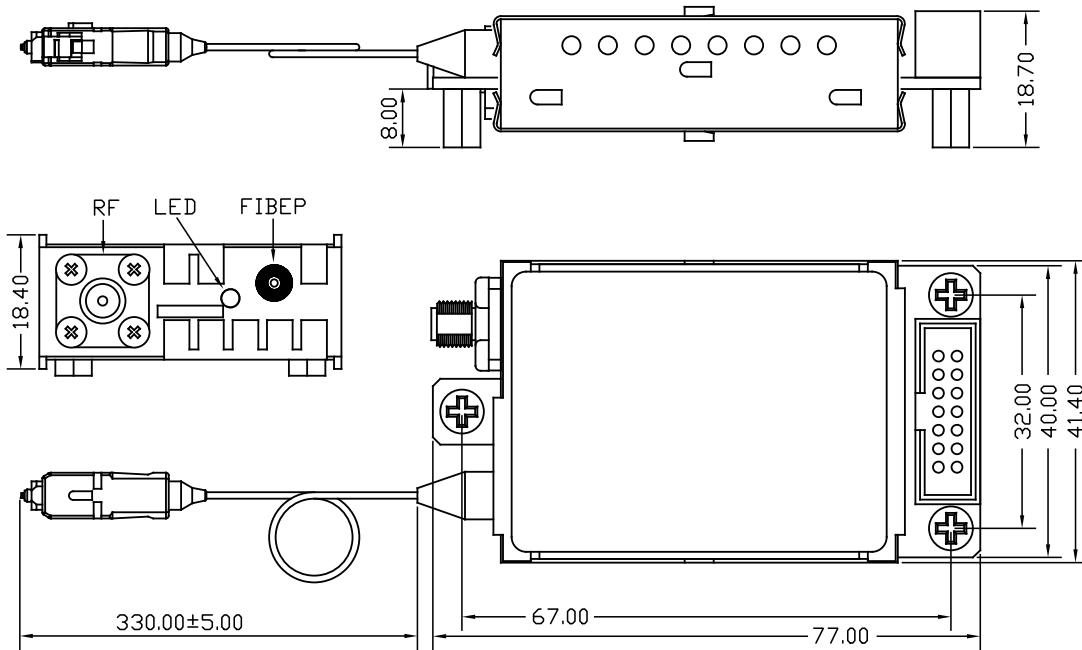


14-PIN FEMALE CONNECTOR DUAL ROW

- | | |
|--|--|
| A. SPARKTRONIC MODEL CODE: 254N4-014HB | A. SPARKTRONIC CRIMP TERMINAL CODE: 254E1 or 254MF |
| B. MOLEX MODEL CODE: 90142-0014 | B. MOLEX CRIMP TERMINAL CODE: 90119-2109 |

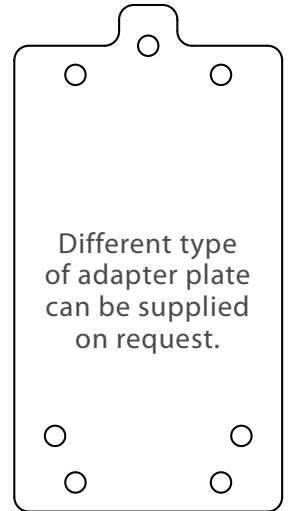
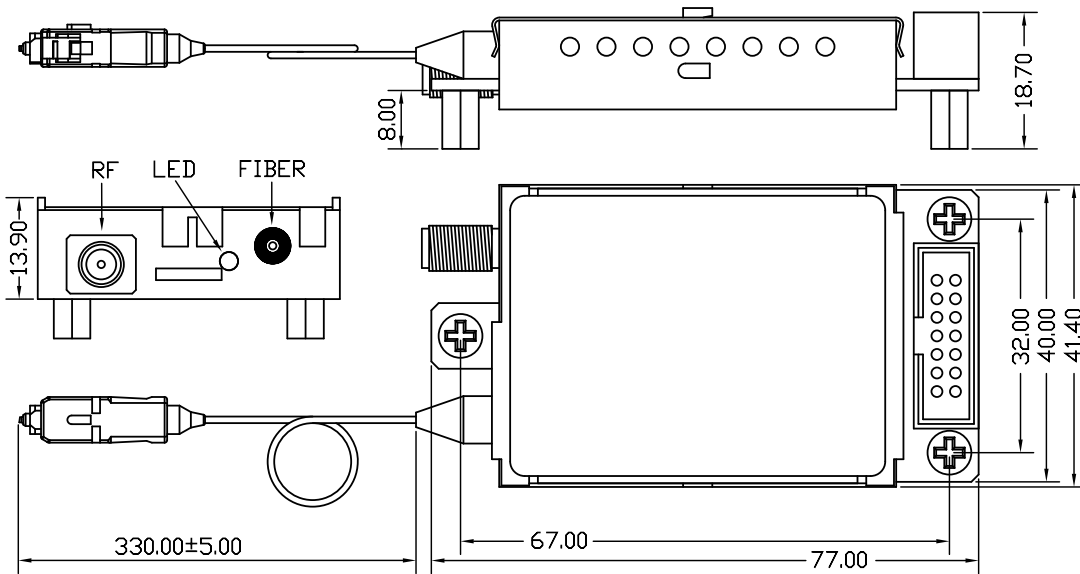


MECHANICAL DIMENSIONS Dual Cover version - All quotes are in mm



Different type of adapter plate can be supplied on request.

MECHANICAL DIMENSIONS Slim version - All quotes are in mm



Different type of adapter plate can be supplied on request.

V2,1 17-1-24

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



Product
made in Italy by
RoverLaboratories.com



*Specifications and features
are subject to change without notice.*

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