

sat-nms LFTRX Fibre Optical Receiver/Transmitter

Based on the *sat-nms* LFTX Optical Transmitter and *sat-nms* LFRX Optical Receiver for analog multi-carrier RF transportation on fibre optical media, SatService delivers also a transceiver module. This unit has a very compact mechanical footprint for easy integration into existing or new system solutions. It also allows a communication equipment manufacturer seamless integration of optical interfaces into its RF equipment or sub-system.



Technical Specification

RF Specification

Frequency Range	50 to 2150MHz
RF Input Connectors (Transmitter)	SMA female 50Ohm
Input Return Loss	> 18dB
RF Output Connector (Receiver)	SMA female 50Ohm
Output Return Loss	> 18dB
Optical Connectors	FC/APC 8°
Operating Wavelength	1310nm
Optical Output Power	2.2mW
Input Noise Figure	< 30dB@1500MHz
Gain	4dB +/-2dB@1500MHz
Flatness	+/-1.5dB@ 950-2150MHz +/-0.5dB@ 50-200MHz +/-0.25dB@ any 40MHz
Gain Stability	+/-0.25dB/24h
Input Signal max. (Total Level)	+10 dBm
Intermodulation at -5dBm Input Level per Carrier	<-45dBc@1500MHz

MNC Interface Specification

Summary Fault and Monitoring Interface	D-SUB 9 pin Connector
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Electrical and Mechanical Specification, Environmental Conditions

Supply Voltage	9 to 24V, 260mA@12V
Temperature Range Storage	-40 to +75°C
Temperature Range Operational	-25 to +55°C
Humidity	Up to 90% non-condensing

Key Features

- Small Package Outline
- Low-noise DFB Lasers
- Wide Dynamic Range
- Monitoring and Alarm Functions

Applications

- Standalone compact optical transceiver Module
- Embedded into other Equipment

Contact Information

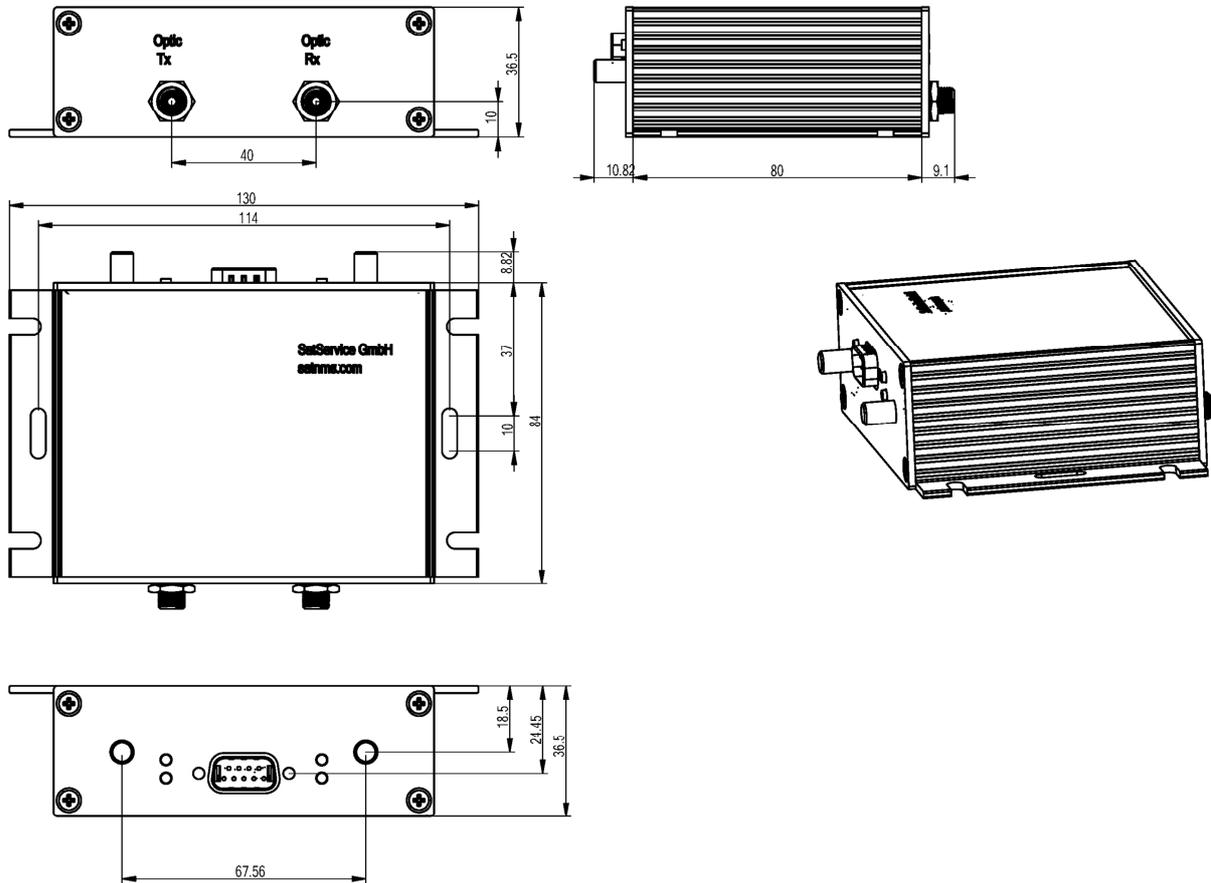
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Mechanical Drawing



Interface Connector

sat-nms LFTRX Module			
Pin	Description	Pin	Description
1	NC	2	NC
3	NC	4	+9..24V / 260mA@12V
5	GND	6	TX Current Monitor (10mA = 100mV)
7	TX Alarm Open Collector (max. 24VDC)	8	RX Optical Monitor (100uW = 100mV)
9	RX Alarm Open Collector (max. 24VDC)		