

sat-nms LRXD L-Band Distributor 750hm

The **sat-nms** LRXD L-Band Distributor has two functions in professional satellite ground stations: it provides the redundant supply voltage for the Low Noise Converters (LNC) and distributes the receive signal to multiple outputs at which the satellite receivers are connected. Internal amplifiers compensate the loss of the distribution circuit. The signal distribution is realized with cascaded Wilkinson dividers which guarantee good frequency response and isolation between the different output ports.



Front panel view of LRXD28-75 with status LED's and test output



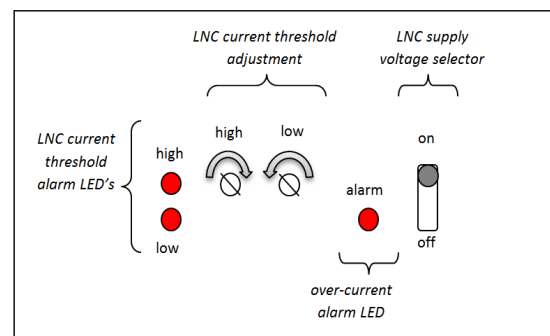
Rear panel view of LRXD28-75 with 2 SMA-type input connectors and 2x8 F-type output connectors

The unit includes two power supplies with two independent mains voltage input connectors. Internal redundancy switchover between the two power supplies improves the availability of the unit.

Model variants

Three versions are available. All are delivered in a one RU rack drawer.

model	connected to:	provides:
LRXD18-75	1 LNC	8 outputs
LRXD28-75	2 LNC's	8 outputs per LNC
LRXD116-75	1 LNC	16 outputs



LNC input connection status and configuration

Installation instructions

- Connect LNC on J1 (and J2)*
 - Connect receivers to J1.1 ... 1.8 (and 2.1 ... 2.8)* (or J1.1 ... 1.16)**
 - Switch LNC supply voltage on/off for LNC1 (and LNC2)* with dip-switch on front panel
 - Connect 2x mains voltage
- * for Model LRXD28 only
* for Model LRXD116 only

Key Features

- 19" 1 rack unit compact design
- One or two distributors in one unit
- Redundant power supplies
- DC free/protected outputs (no damage by IRD LNC supply voltage)
- Electronic over-current protection
- High and low current alarms
- Adjustable alarm threshold
- Relay contact outputs for all alarms
- Alarms can be used for redundancy switching
- Monitoring Output @ 0dB at the front panel
- LNC current monitoring

Applications

- In any type of satellite ground stations
- Cable head end stations
- LRXD28 as compact design for satellite news gathering transportable stations
- Connection of two LNC's e.g. for both polarizations, to 1 RU unit

Contact Information

SatService
Gesellschaft für Kommunikationssysteme
mbH

Hardstrasse 9,
D-78256 Steisslingen, Germany

phone +49 7738 97003
fax +49 7738 97005
e-mail info@satservicegmbh.de

Technical Specification

RF Specification

Frequency range	950 to 2150MHz
Input Connector J1, (J2)	SMA female 50Ohm
Input Return Loss	> 15dB
Input Noise Figure	<10dB
damage input level	+13dBm
Absolute gain from input to output for standard version	0dB +/-1dB
Relative gain frequency variation in frequency band	+/-1dB
Gain frequency characteristics in any 36MHz band	+/-0,3dB
Group delay in any 36MHz band	< 4ns
Intermodulation with two -13dBm input signals each (total input power -10dBm)	-40dBc
Output Connector J1.1 ... J1.8 / J2.1 ... J2.8* / J1.1 ... J1.16**	F female 75Ohm
Output Return Loss	> 16dB
Isolation between outputs	> 25dB
Monitoring output connector	SMA female 50Ohm
Monitoring Return Loss	> 18dB
Monitoring output coupling	Input level +/-1dB

LNC Remote Feed

LNC supply voltage, switchable / maximum current per LNC	15V / 600mA
--	-------------

Alarm Interface

Alarm Interface J3	DSUB 9 pin, Relay Contact
Power supply alarm	7-8 open on Alarm 8-9 closed on Alarm
LNC1 current threshold alarms output	1-6 open on Alarm
LNC2 current threshold alarms output	6-2 closed on Alarm 3-4 open on Alarm 4-5 closed on Alarm
Current high threshold adjustment range	150..600mA
Current low threshold adjustment range	50..500mA
Over-current (DC-switched off)	800mA

Electrical and Mechanical Specification, Environmental Conditions

Supply voltage	90 to 240V AC 50 to 60Hz
Connector for the two mains voltage AC inputs	IEC
Power consumption including LNC supply	2x20VA
Temperature range	5° to 50° C
Humidity	up to 90% non condensing
Mechanical size	436 x 46 x 370 mm, 19" 1RU
Weight	LRXD18: 4 kg LRXD28,116 : 5kg



Front panel view of LRXD116-75 with status LED's and test output



Rear panel view of LRXD116-75 with 1 SMA-type input connectors and 16 F-type output connectors

L In case of a failure do not open the L-Band Distributor, you will loose warranty. Call SatService GmbH for a RMA number.