sat-nms LRXD14 - L-Band Distributor

The ***sat-nms*** LRXD14 L-Band Distributor is designed for satellite ground terminals where a 19" rack-mount unit is not possible to realize due to space or budget limitations, for example, in satellite news gathering terminals. This unit provides:

- An active 0dB L-Band distributor with 4 L-Band output ports. The signal distribution is realized with cascaded Wilkinson dividers that guarantee good frequency response and isolation between the different output ports.
- 14/18V and 22kHz tone switching initiated by contact closure interface allowing to control the LNB's Polarisation and frequency range.
- An external supplied 10MHz reference is mulitplexed on the L-Band interface to the LNC if aplied to J2 10MHz input.
- The unit is powered by external 24V DC available in all satellite ground terminals.
- The four output ports can be defined at time of order as 50Ohm SMA or 75Ohm F type, in any combination.

Technical Specification

RF Specification	
Frequency Range	950 to 2150MHz
Input Connector J1 (to LNC)	SMA female 50Ohm (opt. BNC, F)
Input Return Loss	> 17dB
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	-40dBc
Output Connector J4 … J7	F female 75Ohm or SMA 50Ohm
→ *Please specify requested combination at time of order*	
Output Return Loss	75Ohm > 15dB, 50Ohm > 20dB
Isolation between Outputs	> 25dB
Input Connector J2 (10MHz)	SMA female 50Ohm (opt. BNC)

Contact Information

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LNC Interfaces	
LNC Supply Voltage, switchable / Maximum Current per LNC	0, 14, 18V / 350mA
L-Band Input, 10Mhz Output and LNC Supply Voltage	Multiplexed on J1

M&C and Power Supply Interface	
Remote Interface J3	DSUB 15 Pin
Control and Supply Inputs	
DC Power Supply Input	8(+) -15(-) Power Supply 1, 7(+) -14(-) Optional Power Supply 2
DC Power LNC on/off	6-13 closed for ON
LNC Control 14/18V	5-12 closed for 14V
LNC Control 22kHz on/off	4-11 closed for 22kHz on
Monitoring Outputs	
Power Supply OK, LED Driver (DC Power Supply Input available)	1-(11..15) 10mA for OK (1 = Anode LED)
Power Supply 1 or 2 defect, LED Driver	3-10 10mA for OK (3 = Anode LED)
LNC switched on, LED Driver (OK LNC = on)	2-9 10mA for ON (2 = Anode LED)
Power Supply 1 or 2 defect, Open Collector	10-(11..15 [GND]), closed for OK
LNC switched on, Open Collector	9-(11..15 [GND]), closed for ON

Electrical and Mechanical Specification, Environmental Conditions	
Supply Voltage	22 - 26 V DC
Current Consumption excluding LNB	110 mA @ 24VDC
Power Consumption excluding LNB	2.64 W
Temperature Range	-20° to 55° C
Humidity	Up to 90% non-condensing
Mechanical Size (with Connectors)	190 x 120 x 30 mm
Weight	380 g

sat-nms LRXD14 Front and Rear Panel Interfaces