

## sat-nms L-Band Components

### sat-nms LC10-50 and sat-nms LC-10-75 L-Band Coupler

The application for this 10dB coupler is to connect a beacon receiver or another measurement unit at its 10dB coupling arm within a main L-Band link between LNC and a fiber optical link or other receive equipment. For easy mechanical mounting, there are M2.5 screw threads attached to the case at two sides.

This unit is available in two versions:

**sat-nms LC10-50:** 50Ω SMA female connectors at all in- and output ports

**sat-nms LC10-75:** 50Ω SMA female connectors at in- and output port, 75Ω F-type female connector at the coupler output



#### Technical Specification 10dB Coupler

Frequency Range	950 to 2150MHz
Input Connector J1	SMA female 50Ω (opt. 75Ω F-Type)
Input Return Loss	> 20dB (>17dB@ 75Ω F-Type)
Coupling Factor	-10dB +/-1.5dB
Damage Input Level	+20dBm
Mainline Insertion Loss	1dB +/- 0.5dB
Relative Gain Frequency Variation in Frequency Band	+/-1dB
Mainline Output Connector	SMA female 50Ω (opt. 75Ω F-Type)
Mainline Output Return Loss	> 20dB (>17dB@ 75Ω F-Type)
10dB Output Port Connector	50Ω SMA female or 75Ω F-Type female
10dB Output Return Loss	50Ω > 25dB, 75Ω > 17dB
10dB Output Directivity	>25dB
Mechanical Overall Dimensions (LxHxD)	110x30x38mm

### sat-nms LD12-50 and sat-nms LD12-75 1:2 L-Band Splitter

The compact design of the L-Band 1:2 divider is dedicated to applications where an L-Band signal has to be doubled in-line. For easy mechanical mounting, there are M2.5 screw threads attached to the case at two sides.

This unit is available in two versions:

**sat-nms LD12-50:** 50Ω SMA female connectors at all in- and output ports

**sat-nms LD12-75:** 50Ω SMA female connectors at input port, 75Ω F-Type female connector at output ports



#### Technical Specification 1:2 Splitter

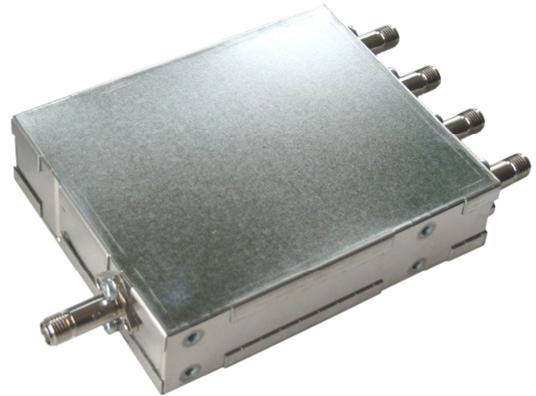
Frequency Range	950 to 2150MHz
Input Connector J1	SMA female 50Ω (opt. 75Ω F-Type)
Input Return Loss	> 20dB
Insertion Loss	3.8dB +/-0.5dB
Damage Input Level	+20dBm
Relative Gain Frequency Variation in Frequency Band	+/-1dB
Output Connectors	50Ω SMA female or 75Ω F-Type female
Output Return Loss	50Ω > 20dB, 75Ω > 17dB
Output Port to Port Isolation	>25dB
Mechanical Overall Dimensions (LxHxD)	110x30x38mm

## **sat-nms LD14-50 and sat-nms LD14-75 1:4 L-Band Splitter**

The **sat-nms** LD14 is the enhanced version of our **sat-nms** LD12. For easy mechanical mounting, there are M2.5 screw threads attached to the case at two sides. This unit is available in two versions:

**sat-nms LD14-50:** 50Ω SMA female connectors at all in- and output ports

**sat-nms LD14-75:** 50Ω SMA female connectors at input port, 75Ω F-type female connector at output ports



### **Technical Specification 1:4 Splitter**

Frequency Range	950 to 2150MHz
Input Connector J1	SMA female 50Ω (opt. 75Ω F-Type)
Input Return Loss	> 20dB
Insertion Loss	12dB +/-0.5dB (included 6dB PAD)
Damage Input Level	+20dBm
Relative Gain Frequency Variation in Frequency Band	+/-1dB
Output Connectors	50Ω SMA female or 75Ω F-Type female
Output Return Loss	50Ω > 25dB, 75Ω > 17dB
Output Port to Port Isolation	>35dB
Mechanical Overall Dimensions (LxHxD)	110x30x38mm

## **sat-nms ATN-xx-50 L-Band Attenuator with DC- and 10MHz Bypass**

The attenuator with DC- and 10MHz bypass is bi-directional and for in-line mounting. The robust and compact design is ideal for easy mechanical installation and reliable operation.

Applications are attenuation of L-Band signal for a Block-Up-Converter (BUC) WITHOUT attenuation of 10MHz reference or attenuation of a receive signal with the capability to supply a voltage to LNC or BDC.

The attenuator is available in several versions according to the attenuation value:

**sat-nms ATN-xx-50:** xx =attenuation value

For example 10dB: **sat-nms** ATN-10-50



### **Technical Specification Attenuator with DC- and 10MHz Bypass**

Frequency Range	950 to 2150MHz
Input and Output Connector	50Ω SMA female
Return Loss	> 20dB
Attenuation	1dB, 2dB, 3dB, 6dB, 10dB, 20dB +/-0.5dB
Damage Input Level	+20dBm
Relative Gain Frequency Variation in Frequency Band	+/-1dB
Insertion Loss 10MHz	0dB +/-0.25dB
DC-Current max.	800mA@15V
Mechanical Overall Dimensions (LxØ)	71x16mm

### **Contact Information**

SatService Gesellschaft für Kommunikationssysteme mbH  
 Hardstrasse 9, D-78256 Steisslingen, Germany  
 Phone +49 7738 99791 10  
 Fax +49 7738 99791 99  
[www.satnms.com](http://www.satnms.com)

E-Mail: [sales@sat-service-gmbh.de](mailto:sales@sat-service-gmbh.de)  
[www.sat-service-gmbh.de](http://www.sat-service-gmbh.de)