

sat-nms IMC Low Loss 50/75Ohm - Impedance Converter Family

In any satellite ground station 50Ohm and 75Ohm systems are used in different sub-systems. Very often the system engineer and service operator has the problem to switch and convert between the different impedances. The **sat-nms** IMC19G Impedance Converter chassis is your ideal candidate to perform this application for you.

The base unit is a 19" rack-mount chassis with 1RU only. As no active devices are integrated in this chassis it does not need any power supply. The special design of the impedance converters incorporates a low loss and includes DC Bypass on the L-Band pass.



Front Panel View of **sat-nms** IMC19G



Rear Panel View of **sat-nms** IMC19G in Standard Configuration

Technical Specification

RF Specification

Frequency Range	950 to 2150MHz
Connectors on the 50Ohm Side	50Ω SMA female
Input Return Loss	> 20dB
Insertion Loss	1dB +/-0.5dB
Damage Input Level	+20dBm
Relative Gain Frequency Variation in Frequency Band	+/-1dB
Connectors on the 75Ohm Side	75Ω F-Type female
Output Return Loss	> 17dB
DC Bypass	Included
Standard Configuration	10 Impedance Converters 2 Modules with Qty. 5 50/75Ohm Impedance Converters
Extension Module	With 5 times 50/75Ohm Conversion Up to 2 Extension Modules per Unit

Electrical and Mechanical Specification, Environmental Conditions

Temperature Range	5° to 50° C
Humidity	Up to 90% non-condensing
Mechanical Size	436 x 46 x 340 mm, 19" 1RU
Weight	3.2kg

Applications

- In any kind of L-Band Sub-System of Satellite Ground Stations
- Interface between 50 and 75Ohm Systems

Key Features

- 19" 1 Rack Unit Compact Design
- Upgradeable in Steps of 5
- Up to 20 Impedance Converter in one Unit
- Low Loss (~1dB)
- DC Bypass included
- Passive Design, no Power Supply needed
- Bi-directional Usage possible

Contact Information

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sat-nms IMC50/75, sat-nms IMCLL and sat-nms IMCLL-5 50/75Ohm Impedance Converter Low Loss

If you need to change the signal impedance bi-directional in-line from 50 to 75Ω, the **sat-nms IC50/75** and **sat-nms IMCLL** is what you need. It is available in the following versions:

IC50/75: 6dB attenuation, mechanical length only 58mm, DC-Bypass as an option

IMCLL: 1dB attenuation, mechanical length 130mm, DC-Bypass included

Both versions are also available as array of 5 converters for front panel mounting.



Technical Specification sat-nms IMC 50 to 75Ohm Impedance Converter

Frequency Range	950 to 2150MHz
Input Connector J1	50Ω SMA female
Input Return Loss	> 20dB
Insertion Loss	6dB +/-0.5dB
Damage Input Level	+20dBm
Relative Gain Frequency Variation in Frequency Band	+/-1dB
Output Port Connector	75Ω F-Type female
Output Return Loss	> 17dB
Mechanical Overall Dimensions (LxØ)	58x16mm

Technical Specification sat-nms IMCLL 50 to 75Ohm Impedance Converter Low-Loss Version

Frequency Range	950 to 2150MHz
Input Connector J1	50Ω SMA female
Input Return Loss	> 20dB
Insertion Loss	1dB +/-0.5dB
Damage Input Level	+20dBm
Relative Gain Frequency Variation in Frequency Band	+/-1dB
Output Port Connector	75Ω F-Type female
Output Return Loss	> 17dB
Mechanical Overall Dimensions (LxØ)	130x16mm

sat-nms IMCLL-5: 1dB attenuation, mechanical length 130mm, DC-Bypass included



Technical Specification sat-nms IMCLL-5 50 to 75Ohm Impedance Converter Low-Loss Version

Frequency Range	950 to 2150MHz
Input Connector J1	50Ω SMA female
Input Return Loss	> 20dB
Insertion Loss	1dB +/-0.5dB
Damage Input Level	+20dBm
Relative Gain Frequency Variation in Frequency Band	+/-1dB
Output Port Connector	75Ω F-Type female
Output Return Loss	> 17dB
Mechanical Overall Dimensions (LxBxH)	130x79x22mm
Mountable with M2.5 Screws (press nuts mounted at 4 sides of the unit)	