

INS Series

L-Band, Noise Source Units, Rack Mounted.







The 19 inch, 1U rack mounted **INS series** of Noise Source units from Peak Communications are designed to provide amplified broadband white Gaussian Noise, primarily for satellite receiver robustness testing.

The **INS series** units are mains powered and are constructed of high grade components to give the ultimate broadband noise and flat spectral response performance.

These units are offered with a range of optional enhancements and Peak are happy to customise the units to meet specific needs (please contact the Peak team directly to discuss any non-standard requirements).

Peak Features

-  Manually Variable Attenuator options for local control of output level
-  Flat output power versus frequency
-  Optional monitoring, dual PSU's, redundant amplifiers etc
-  Customising available



INS series – Typical Specification

Output

INSL1950;	950-1950MHz
Connector	SMA (f), 50Ω
Option 1a;	N-Type (f), 50Ω
Return loss	15dB

RF Performance

Output power density	-101dBm/Hz nom
<i>Note; for higher level options please contact the factory</i>	
Gain flatness	±1.5dB across full band

Redundant Source (Option 4)

Provides internal 1+1 redundancy for the noise source diode and amplifier

Control	Auto selection & manual switch-over via rear panel
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Variable L-Band Attenuation (Option 10)

Attenuation range	30dB
Control	Local, continuously variable from front panel

Note; can degrade gain flatness performance

Fan out (Option 8)

Provides multiple outputs

Number of ways (up to 16-way in 1RU)

Option 8a;	4-way, 6dB insertion loss
Option 8b;	8-way, 9dB insertion loss
Option 8c;	16-way (only available with SMA's), 12dB insertion loss

Note; theoretical insertion loss figures quoted as a guide

Mechanical

Width	19", standard rack mount
Height	1U (1.75")
Depth	200 to 400mm (option dependent), plus connectors
Construction	Aluminium chassis
Weight	Approx. 2kgs (4.5lbs)

Environmental

Operating temp	0°C to +50°C
EMC	EN55022 part B & EN50082-1
Safety	EN60950

Power supply

Voltage	90-264VAC
Frequency	47-63Hz
Power	30 Watts max.
Option 7;	Redundant PSU; provides a 1+1 redundant power supply configuration with separate prime power inputs

Control System Interface

Discrete 'alarms interface'	PSU fail Amplifier current detection
Connection	D-Type, 15-way

Options

- 1a) N-Type (f), 50Ω
 - 4) Redundant diode & amplifiers
 - 7) Redundant power supplies
 - 8a) Multiple outputs
 - 10) Manual Variable Attenuator, 30dB at L-Band
- Note; the addition of options can modify the typical specification, for details please consult the factory*

Rear Panel View (version with 8-way fan out option shown)

