

## 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

<b>INSL1950;</b>	950-1950MHz
<b>INSL2150;</b>	950-2150MHz
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

### 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 8:	2-way, 3dB insertion loss
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 failure Amplifier current detection
Connection	D-Type, 15-way

### Options

- 1a) N-Type (f), 50Ω
- 4) Redundant diode & amplifiers
- 7) Redundant power supplies
- 8) Multiple outputs: 2-way
- 8a) Multiple outputs: 4-way
- 8b) Multiple outputs: 8-way
- 8c) Multiple outputs: 16-way
- 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)

