Low Noise Amplifiers

2000-1929-R
18 GHz to 42 GHz, 28 dB Gain, 4 dB Noise Figure, V Connectors

2000-1930-R
18 GHz to 42 GHz, 28 dB Gain, 4 dB Noise Figure, K Connectors
Low Noise Amplifiers

Introduction
These Anritsu branded low noise amplifiers are a convenient and lightweight solution for field testing of 5G mmWave signals. The low noise amplifiers provide exceptional small signal gain and low noise figure across the frequency range of 18 GHz to 42 GHz. The amplifiers have a built-in regulator and USB Type-C port and can be powered via a battery pack or a laptop. The LNAs are also water resistant.

The amplifiers feature a specially designed bracket for secure mounting to the Anritsu MS2760A Ultra Portable Spectrum Analyzer. The port connectors are either K (2.92 mm) or V (2.4 mm), matching the port configuration of the MS2760A, depending on model.

Features
- Specially designed for the MS2760A
- Improved field testing of 5G mmWave signals in 28 GHz and 37 GHz to 39 GHz bands
- Small signal gain of 28 dB
- Nominal noise figure of 4 dB
- USB Type-C powered for convenience
- V Connectors™ are compatible with 2.4 mm connectors
- K Connectors™ are compatible with 2.92 mm, 3.5 mm, and SMA connectors

Dimensions

Typical specifications are not tested and are not warranted. They are generally representative of characteristic performance.
Warranty: 1 year
Technical Data

Available Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Frequency Range</th>
<th>Connectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-1929-R</td>
<td>18 GHz to 42 GHz</td>
<td>Input: V(m) (2.4 mm(m)) Output: V(f) (2.4 mm(f))</td>
</tr>
<tr>
<td>2000-1930-R</td>
<td>18 GHz to 42 GHz</td>
<td>Input: K(m) (2.92 mm(m)) Output: K(f) (2.92 mm(f))</td>
</tr>
</tbody>
</table>

Specifications
(all specifications typical, except where noted)

- Gain: 28 dB
- Noise Figure: 4 dB
- P1dB: +15 dBm
- RF Input Power: -5 dBm, max
- Damage RF Input Power: 0 dBm, max
- Input Return Loss: 10 dB
- Output Return Loss: 10 dB
- DC Supply Voltage: USB Type-C, 5 VDC to 5.5 VDC
- DC Supply Current: 240 mA
- Specification Temperature: +25 °C
- Operating Temperature: -20 °C to +65 °C
- Size (LWH): 2.20 in x 1.80 in x 0.75 in (55.9 mm x 45.7 mm x 19.1 mm)
- Weight: 2.0 oz (56.7 g)

Typical Performance vs. Frequency
Bias: +5 VDC, 240 mA

Regulatory Compliance

- European Union: RoHS Directive 2011/65/EU

Accessories

2000-1933-R LNA battery pack accessory
Includes battery, USB Type-C cable, and two fastening straps

LNA Assembled with MS2760A Spectrum Master and Optional Battery Pack
Training at Anritsu

Anritsu has designed courses to help you stay up to date with technologies important to your job. For available training courses, visit: www.anritsu.com/training