

QLA-10-20000-53-25

10MHz~20GHz, 53dB, 2.5dB

Features:

- * Broadband
- * Low Noise

Applications:

- * Wireless
- * Receiver
- * Laboratory Test
- * Radar



Description

This product series features ultra-wideband low-noise amplifiers (LNAs) operating from 10MHz to 20GHz. The lineup includes:

- LNA modules powered by 5-8V DC, where increasing supply voltage enhances gain and output power;
- LNA systems with integrated switching-mode power supplies (SMPS) accepting 85-265V AC input, recommended for most applications;
- LNA systems employing linear-regulated power supplies for 220V AC operation, delivering optimal performance where extreme power purity is critical.

Electrical

Frequency:	10MHz~20GHz
Gain:	53dB typ.
Gain Flatness:	±3dB typ.
Output Power (P1dB):	12dBm typ. @+5V 16dBm typ. @+8V
Output Power (Psat):	13dBm typ. @+5V 17dBm typ. @+8V
Noise Figure:	2.5dB typ.
Spurious:	-60dBc typ.
VSWR:	2 typ.
Reverse Isolation:	-50dB typ.
Voltage:	+5V~+8V DC (Outline A) +85~+265V AC (Outline B) +220V AC (Outline C)
Current:	150mA typ. @+5V (Outline A) 260mA typ. @+8V (Outline A)
Impedance:	50Ω

Absolute Maximum Ratings*1

RF Input Power:	-25dBm
Voltage:	+9V (Outline A)

[1] Permanent damage may occur if any of these limits are exceeded.

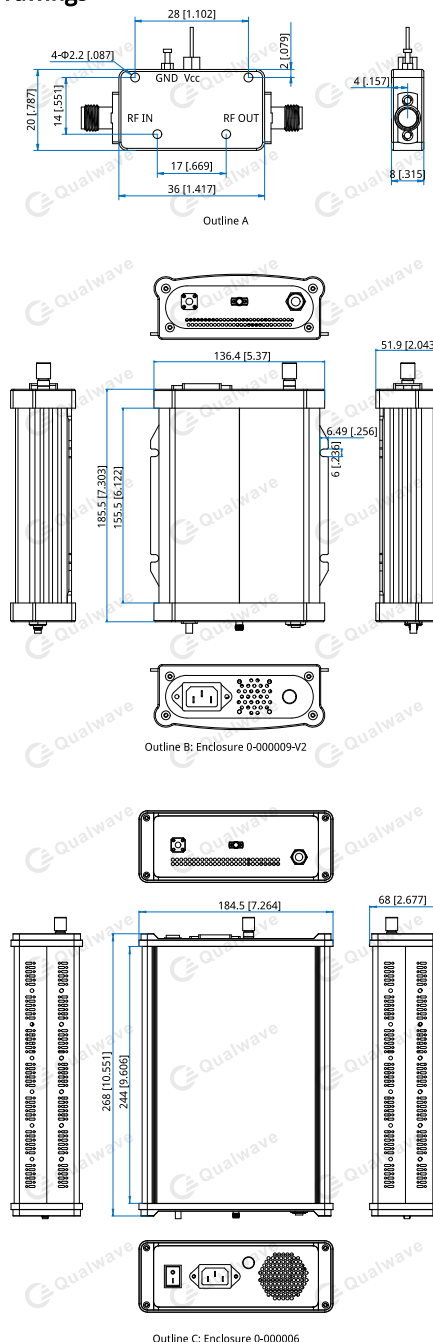
Mechanical

RF Connectors:	SMA Female (Removable)
----------------	------------------------

Environmental

Operating Temperature:	-45~+85°C
Non-operating Temperature:	-55~+125°C

Outline Drawings



Unit: mm [in] Tolerance: ±0.2mm [±0.008in]

How To Order

[QLA-10-20000-53-25](#) - Outline A

[QLAS-10-20000-53-25](#) - Outline B, AC-powered unit integrates a switching-mode power supply.

[QLAS-10-20000-53-25-1](#) - Outline C, AC-powered unit integrates a linear-regulated power supply.

Customization is available upon request.

Typical Performance Curves

