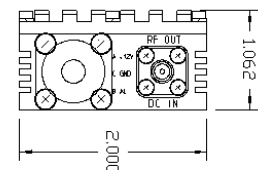
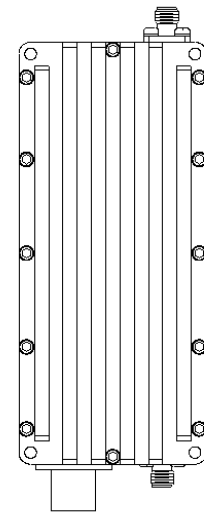
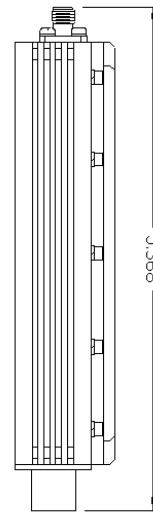
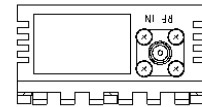




ALNA-S® series



Features

- S-Band frequency from 2.025 to 2.400 GHz (see table on the next page)
- GaAs/HEMT Technology
- Over 200,000 Hours MTBF
- Built-in Regulator 11-24 VDC operation
- Built-in Interstage Transmit Reject Filter
- Built-in Alarm Circuit
- Single or redundant operation
- Power supply via RF connector or Power Connector
- Extreme operating temperature
- Weatherproof housing
- Three year warranty

Overview

The Advantech Wireless Low Noise Amplifier (LNA) ALNA-S® is a low noise, highly dynamic range amplifier suitable for use in satellite earth station receiver applications where ultra low noise and high reliability are critical. Advantech also provides LNA's in C, X Ku and Ka bands.

The S-band LNA is available with Noise Temperature ranging from 50° K to 70° K. With weatherproof packaging, the LNA can meet the demands of the installations in severe environmental conditions.

The 1:1 and 1:2 redundant system configurations can be provided. They require special Redundancy Kit.

The Advantech Wireless LNA provides an industry leading MTBF of over 200,000 hours.

Options

- Input Isolator

Accessories

- External Transmit Reject Filter

S-Band LNA 45° to 70° K

Technical Specifications			
Electrical Characteristics			
Frequency range	Band 1	2025 - 2120 MHz	Model # ALNA-S1
	Band 2	2100 - 2250 MHz	Model # ALNA-S2
	Band 3	2200 - 2400 MHz	Model # ALNA-S3
	Band 4	2200 - 2300 MHz	Model # ALNA-S4
Noise Temperature @ 23° C	45°K to 70°K		
Gain	50 dB min		
Gain flatness	±0.5 dB .over full band		
Gain slope	±0.25 dB per 10 MHz		
Gain variation	2 dB p.p. max over operating temperature range or 0.04 dB/°C		
Gain stability	0.25dB / 24 hours@ constant ambient temperature		
Output power (P1dB)	+10 dBm min		
Spurious	-65 dBc max		
Max input power	0 dBm (no damage)		
Input VSWR	1.25:1 max		
Output VSWR	1.30:1 max		
Operating voltage	15 VDC nominal (11 - 24 VDC option)		
Current consumption	120 - 150 mA		
Mechanical Characteristics			
Dimensions (L x W x H)	6" x 2.5" x 1" (150 x 63 x 25 mm)		
Weight	0.8 lb (350 g)		
Input connector	SMA Female (or TBD)		
Output connector	SMA Female (or TBD)		
Power connector	MS3112E8-3P (MS3116F8-4S option)		
Environmental Conditions			
Operating temperature	-40°C to +55°C -50°C to +60°C (Optional)		
Humidity	100%, condensing (2" rain/hour)		
Altitude	10,000' AMSL, de-rated 2°C/1,000' from AMSL		

To order, please select model number from the following list:

- ALNA-S1
- ALNA-S2
- ALNA-S3
- ALNA-S4

Then add suffix:

- 45 for 45°K
- 50 for 50°K
- 60 for 60°K
- 70 for 70°K

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An ISO 9001 : 2008 Company



Ref.: PB-ALNA-S-45-70-13150