

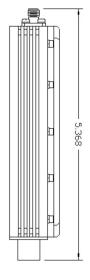
S-Band LNA 45° to 70° K

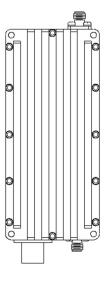
ALNA-S series

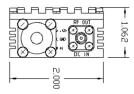


Features

- 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^{TM} 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

Accesories

• 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°	45°K to 70°K	45°K to 70°K			
Gain	50 dB min	** *= 11111			
Gain flatness	±0.5 dB .ove	±0.5 dB .over full band			
Gain slope	±0.25 dB pe	±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				
Input VSWR	1.25:1 max				
Output VSWR	1.30:1 max				
Operating voltage	11-15V DC (11-24V DC 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

Ref.: PB-ALNA-S-45-70-22182

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