

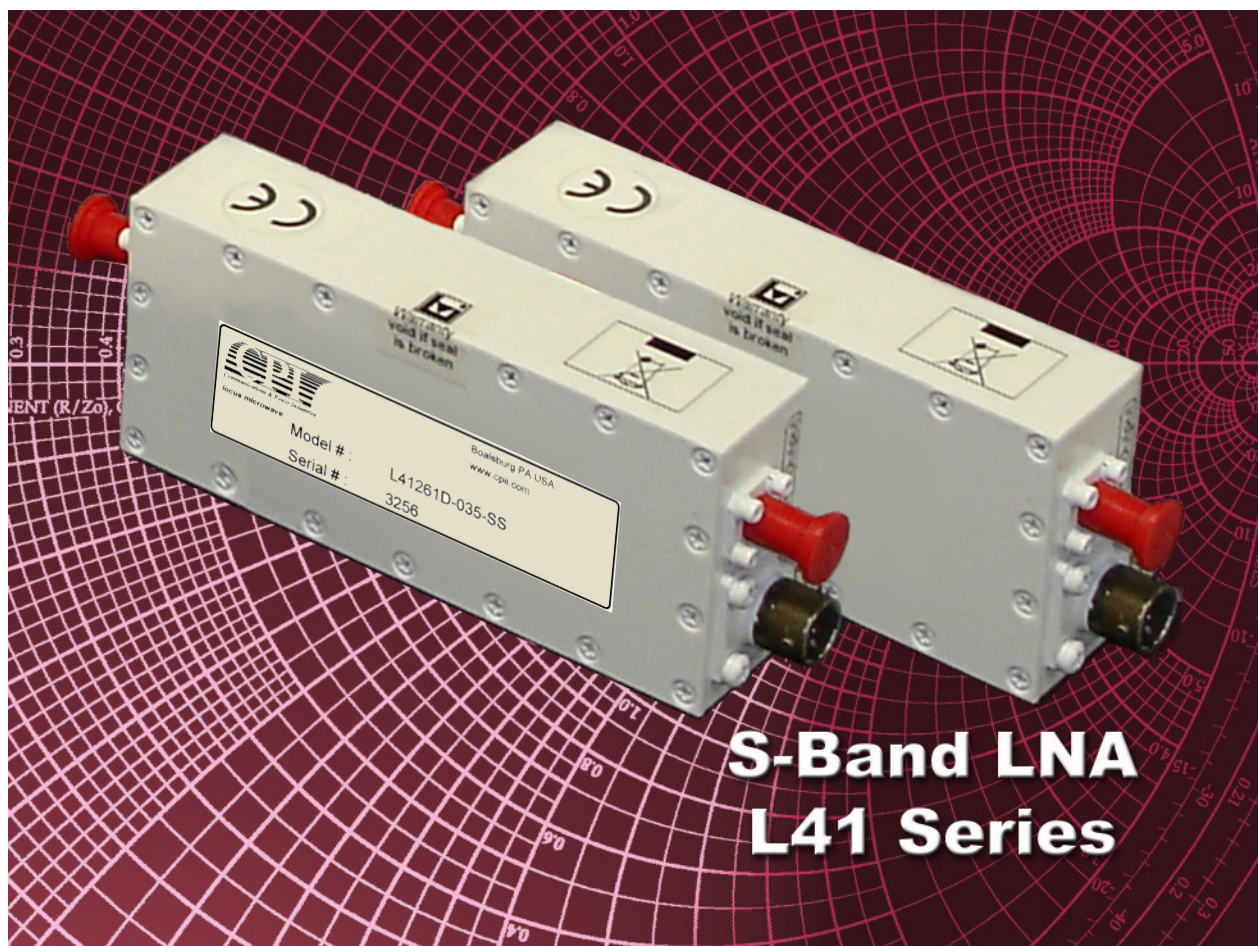
High Performance S-Band Low Noise Amplifiers

General Information

Intended for either indoor or outdoor environments, the CPI Locus Microwave L41 Series S-Band Low Noise Amplifier (LNA) provides a combination of superior performance, reliability and cost effectiveness.

Features

- Outdoor packaging
- Integral Fault Alarm



11558 DS Rev C

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L41 Series Low Noise Amplifiers



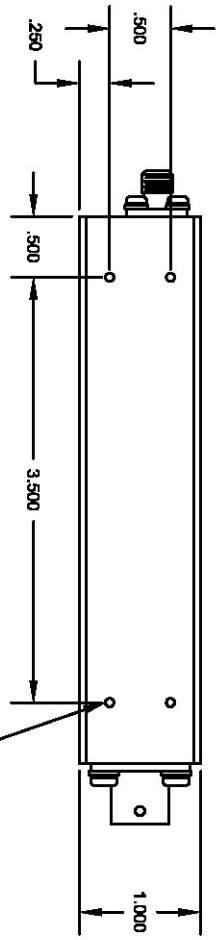
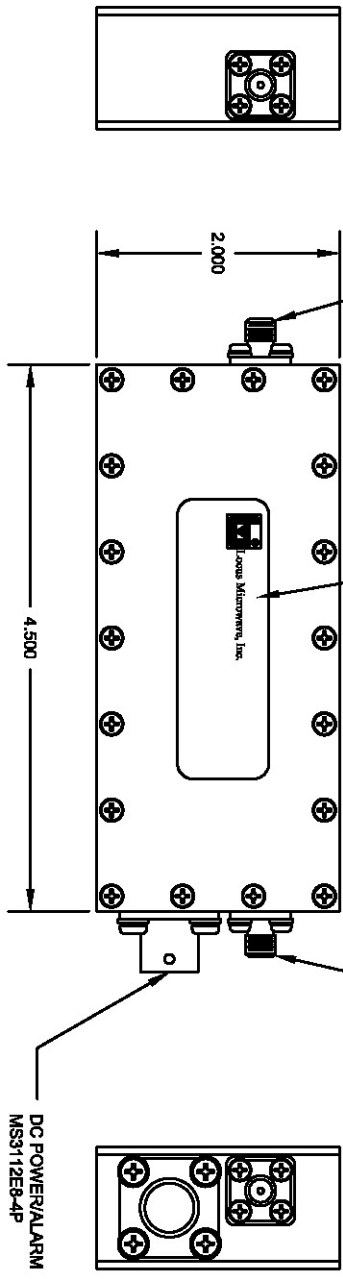
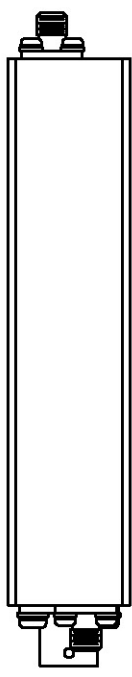
	Range			Units	Notes
Electrical Specifications					
Frequency	2.1-2.2	2.2-2.3	2.4-2.7	GHz	
Noise Temperature	30 or 35 max.	30 or 35 max.	35 or 40 max.	K	@+23°C
Gain	50 or 60 min.	50 or 60 min.	50 or 60 min.	dB	
Gain Flatness	+/-0.5 max.	+/-0.5 max.	+/-1.0 max.	dB	per full band
Gain Slope	+/-0.25 max.	+/-0.25 max.	+/-0.25 max.	dB	per 10 MHz
P _{1dB}	+10, 12 or 18 min.	+10, 12 or 18 min.	+10, 12 or 18 min.	dBm	
VSWR					
Input	1.3 typ., 1.5 max.	1.3 typ., 1.5 max.	1.5 typ., 2.0 max.	:1	
Output	1.3 typ., 1.5 max.	1.3 typ., 1.5 max.	1.5 typ., 2.0 max.	:1	
Input Overdrive	0 max.	0 max.	0 max.	dBm	non-damaging
AM/PM Conversion	0.1 max.	0.1 max.	0.1 max.	°/dB	@-5 dBm output
Group Delay					
Linear	0.01 max.	0.01 max.	0.01 max.	ns/MHz	per 40 MHz
Parabolic	0.001 max.	0.001 max.	0.001 max.	ns/MHz ²	per 40 MHz
Ripple	0.1 max.	0.1 max.	0.5 max.	ns p-p	per full band
Power Requirement					110/220 VAC available
Input Voltage	+12 to +24	+12 to +24	+12 to +24	VDC	
Current	220 nom.	220 nom.	220 nom.	mA	current sensing
Fault Alarm	contact closure	contact closure	contact closure	Form 'A'	
Mechanical Specifications					
Outline	LMI Dwg #11491			inches	
Weight	0.65			lbs.	
Finish	paint			white	other options available
Connectors					
RF Input	N or SMA			Female	
RF Output	N or SMA			Female	
Power/Alarm	4 pin			MS-type	mate included
Environmental					
Operating Temperature	-40 to +60			°C	consult factory for VAC option
Humidity	100			%	with condensation

Seal all connectors using appropriate weatherproofing materials. Failure to seal connectors could result in down time and repair expenses that are not covered under warranty.

Specifications are subject to change at the discretion of CPI Locus Microwave, Inc.

Outline Drawing

REVISION HISTORY				
ZONE	REV	CHANGE NO	DESCRIPTION	DATE
-	-	-	INITIAL RELEASE	11/02/25



UNLESS OTHERWISE SPECIFIED		LOCUS MICROWAVE	
DIMENSIONS ARE IN INCHES		TOLERANCES	
FINISH	LOCUS	DATE	REV
3.1UM	208 4 21	11/02/25	B
ANGLES	208 4 21		341713
SPRINT	208 4 21		11491
THIRD ANGLE PROJECTION			
SCALE 1:1	PROJ:		
LOCUS MICROWAVE INC.		OUTLINE, S-BAND LNA	
PAGE 1 OF 1			

4 3 2 1

A B C D

L41 Series Low Noise Amplifiers



Model Number Configuration

1 2 3 4 5 6 7

L 4 1 x x x x - x x x - x x

1 Frequency	2 Gain	3 P _{1dB}	4 Power	5 Noise Temp
0 = 2.2-2.3 GHz	5 = 50 dB	1 = 10 dBm	D = 12-24 VDC *2	030 K
1 = 2.1-2.2 GHz	6 = 60 dB	2 = 12 dBm	A = 110/220 VAC *4	035 K
2 = 2.4-2.7 GHz *1		4 = 18 dBm		040 K

6 Input Type	7 Output Type	A Accessories	B Finish	Federal Standard
S = SMA (F)	S = SMA (F) *2	0 = None	0 = White	37925
N = N (F)	N = N (F) *3	1 = 4 Pin Mate DC Only	1 = Dark Green	34094
		2 = 4 Pin Pigtail DC Only	2 = Desert Tan	33446
		3 = 6 Pin Mate AC Only	3 = Beige	37722
		4 = 6 Pin Pigtail AC Only	4 = Sand	33303
			5 = Forest Green	34083
			6 = Metalast	

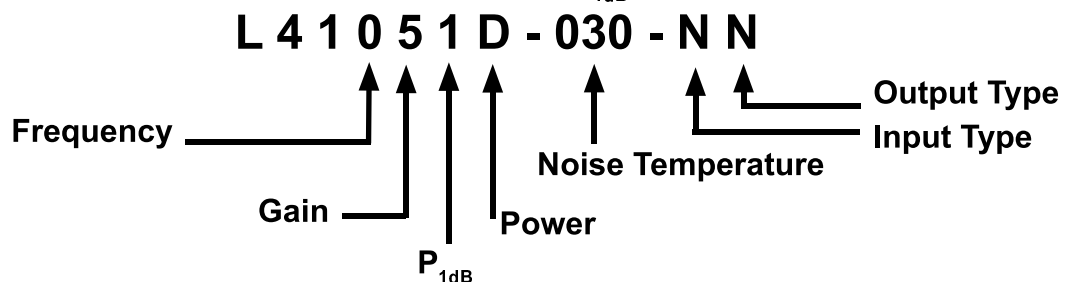
*1 NOTE: 35K Noise Temp Minimum

*2 NOTE: LNAs ordered as components of a Redundancy system require DC power and an SMA (F) output connector.

*3 NOTE: SMA (M) to N (F) adapter supplied.

Selections shaded in gray will require Engineering review.

Example: 2.2-2.3 GHz, 50 dB Gain, +10 dBm P_{1dB}, DC Power, 30K Noise



Please confirm configurations against product specifications, and with factory, prior to order.