

DATASHEET

CODAN SATCOM



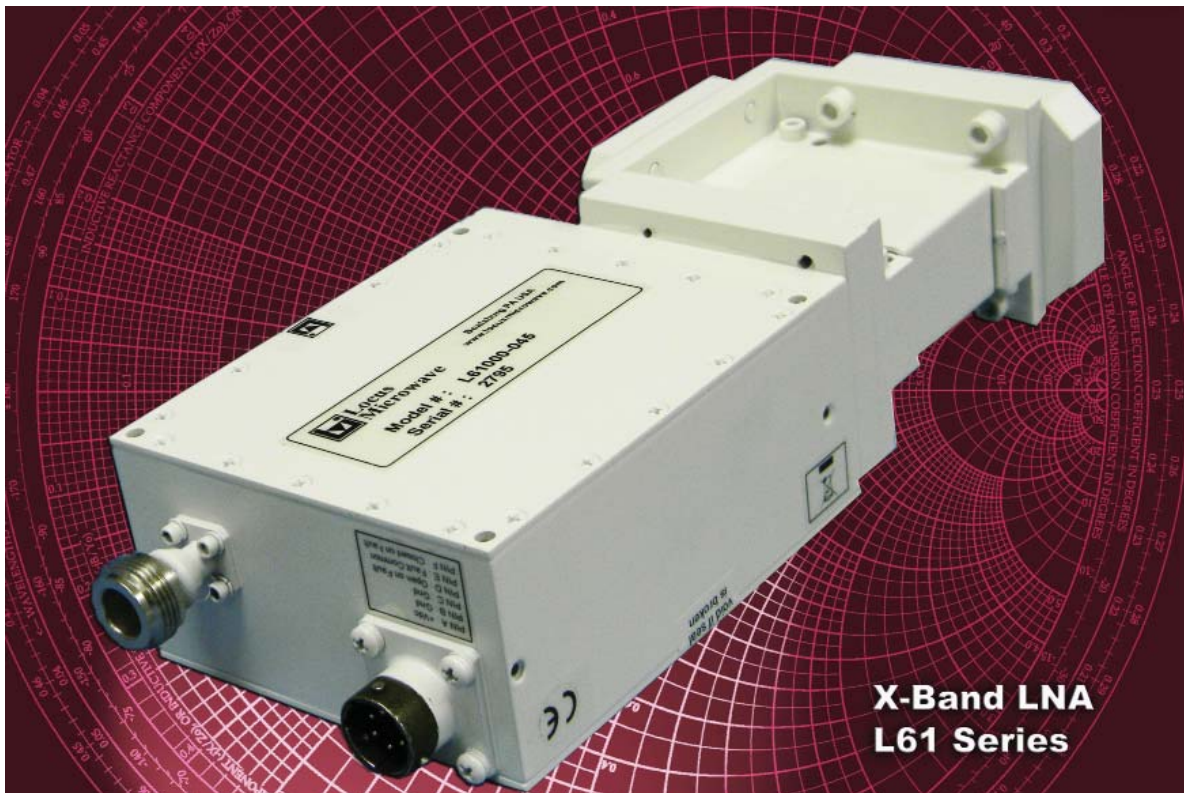
High Performance X-Band Low Noise Amplifiers

General Information

Intended for either indoor or outdoor environments, the Locus Microwave L61 X-Band Low Noise Amplifier (LNA) provides a combination of superior performance, reliability and cost effectiveness.

Features

- Outdoor packaging
- Integral Fault Alarm
- Interstage Tx Desense Filter



This item is subject to International Traffic in Arms Regulations (ITAR) and is classified as 22 CFR, Part 121, Category XI (a) (5) per United States Munitions List (USML). Compliance with the Department of State ITAR is required for export of this item.

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11560 DS Rev -

L61 Series Low Noise Amplifier

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	Range	Units	Notes
Electrical Specifications			
Frequency	7.25 - 7.75	GHz	
Noise Temperature	40, 45, 50 or 55 max.	K	@+23°C
Gain	50 or 60 min.	dB	
Gain Flatness (incl. Tx Reject Filter)	+/-1.0 max.	dB	per full band
Gain Slope	+/-0.2 max.	dB	per 40 MHz
P _{1dB}	+15 or 20 min.	dBm	
VSWR			
Input	1.20 typ., 1.25 max.	:1	
Output	1.25 typ., 1.50 max.	:1	
Overdrive	0 max.	dBm	non-damaging
Desense level (7.9-8.4 GHz)	-25 min.	dBm	Interstage Transmit Reject Filter incl.
AM/PM Conversion	0.05 max.	°/dB	@-5 dBm output
Group Delay			
Linear	0.03 max.	ns/MHz	per 40 MHz
Parabolic	0.003 max.	ns/MHz ²	per 40 MHz
Ripple	0.3 max.	ns p-p	per 40 MHz
Power Requirement			
Input Voltage	+12 to +24	VDC	110/220 VAC available
Current	330 nom.	mA	
Fault Alarm	contact closure	Form 'C'	current sensing
Mechanical Specifications			
Outline	LMI Dwg #10131	inches	
Weight	1.9 nom.	lbs.	
Finish	paint	white	
Connectors			
RF Input	UG-138/U or CPR112G	Flange	WR112 waveguide
RF Output	N or SMA	Female	
Power	6 pin	MS-type	mate included
Pressure Test	5	psi	
Environmental			
Operating Temperature	-40 to +70	°C	
Humidity	100	%	with condensation

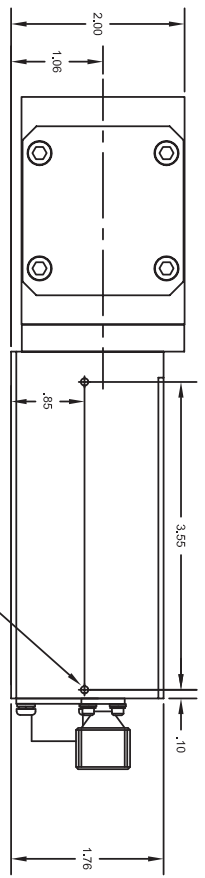
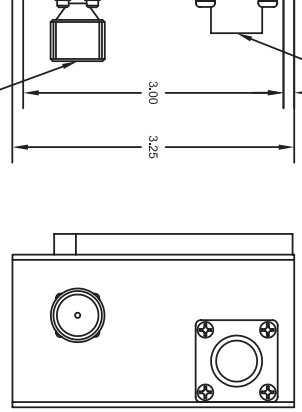
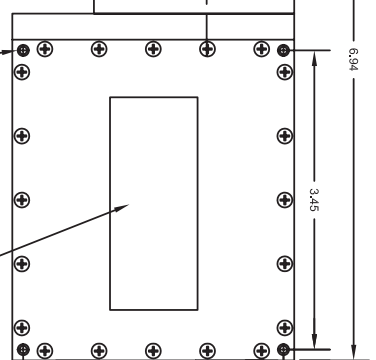
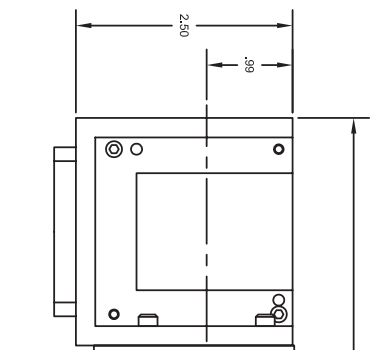
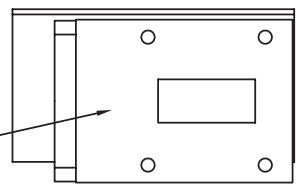
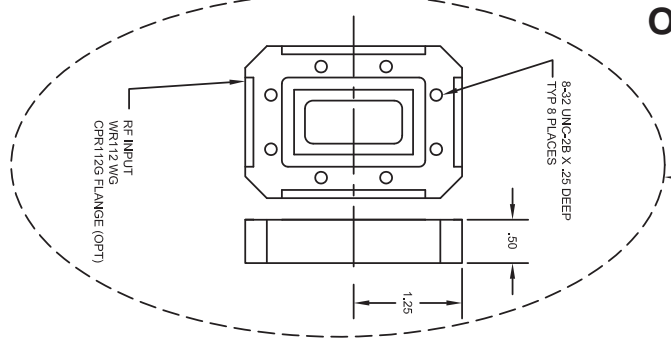
Specifications are subject to change at the discretion of Locus Microwave, Inc.

06/11

Outline Drawing

REVISION HISTORY				1
ZONE	REV	CHANGE NO	DESCRIPTION	DATE
---	-	---	INITIAL RELEASE	JPD 05/08/05
---	A	588	CHGD WIG ISOLATOR, REDRAWN	JPD 09/05/27
---	B	908	ADD VIEWS, CHG WIG CALLOUT	SES 11/02/24
---	C	944	ADD WIG CALLOUTS	MES 11/04/11

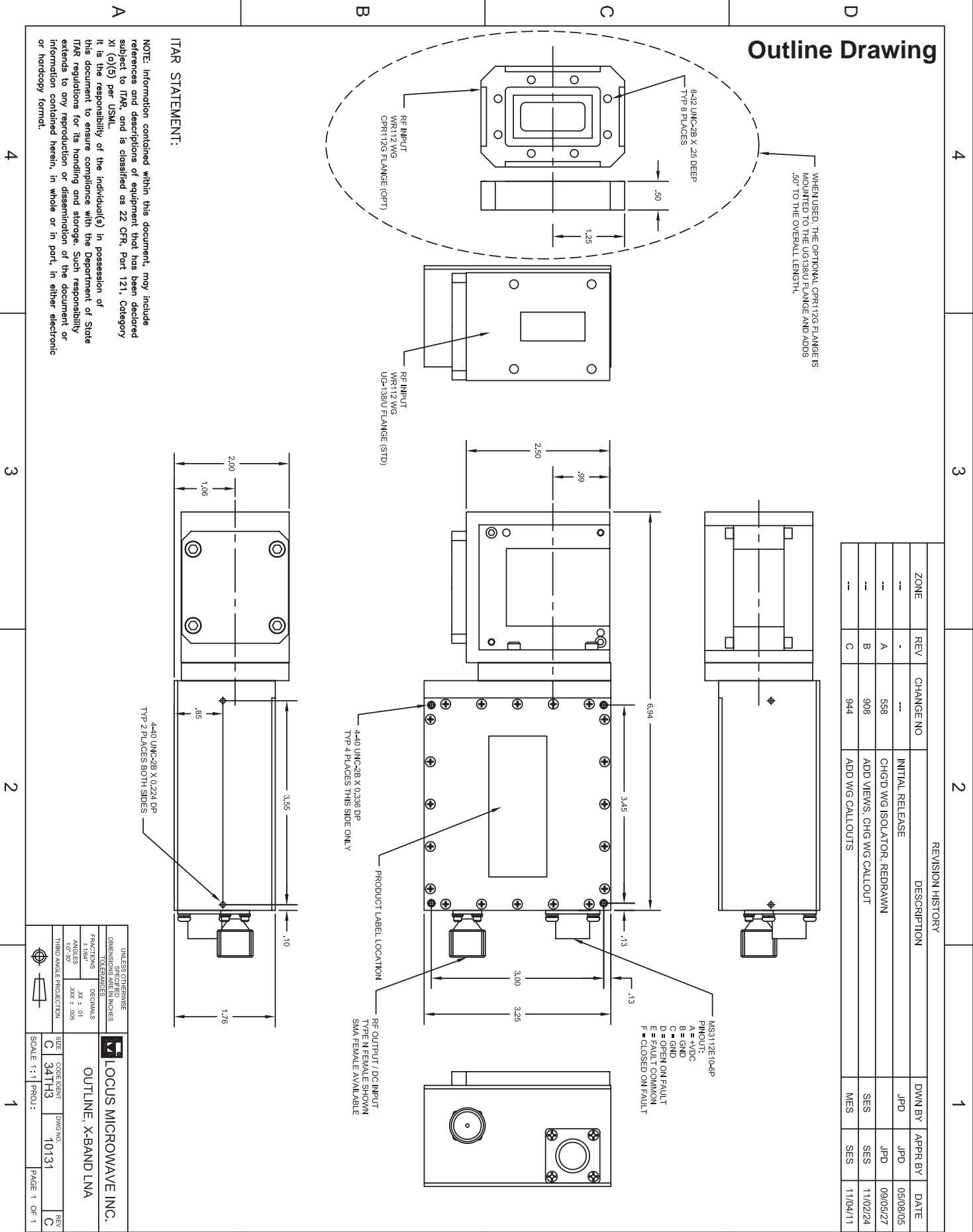
WHEN USED, THE OPTIONAL CPR1126 FLANGE IS MOUNTED TO THE UG138U FLANGE AND ADDS .50" TO THE OVERALL LENGTH.



ITAR STATEMENT:

NOTE: Information contained within this document, may include references and descriptions of equipment that has been developed subject to ITAR, and is classified as 22 CFR, Part 121, Category XI (a)(5) per USML. It is the responsibility of the individual(s) in possession of this document to ensure compliance with the Department of State ITAR regulations for its handling and storage. Such responsibility extends to any reproduction or dissemination of the document or information contained herein, in whole or in part, in either electronic or hardcopy format.

UNLESS OTHERWISE SPECIFIED INCHES		LOCUS MICROWAVE INC.	
FRACTIONS	DECIMALS	OUTLINE, X-BAND LNA	
1/16"	.xxx + .01	SIZE	CONDENSED DWG NO
ANGLES	.xxx ± .005	C	34TH3
TWO ANGLE PROJECTION		SCALE	1:1
		PROJ:	PROU:
			10131
			REV C
			PAGE 1 OF 1



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Model Number Configuration

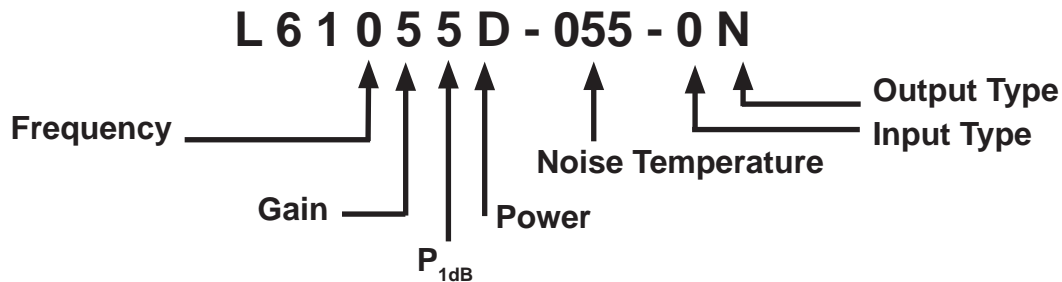
1 2 3 4 5 6 7

L 6 1 x x x x - x x x - x x

1 Frequency 0 = 7.25-7.75 GHz	2 Gain 5 = 50 dB 6 = 60 dB	3 P 1dB 3 = 15 dBm 5 = 20 dBm	4 Power D = 12-24 VDC A = 110/220 VAC	5 Noise Temperature 040 K 045 K 050 K 055 K	6 Input Type 0 = UG-138/U Flange 1 = CPR112G Flange *1	7 Output Type S = SMA (Female) N = N (Female) *2	A Accessories 0 = None 1 = 6 Pin Mate 2 = 6 Pin Pigtail DC ONLY 3 = 6 Pin Pigtail AC ONLY	B Finish 0 = White 1 = Dark Green 2 = Desert Tan 3 = Beige 4 = Sand 5 = Forest Green 6 = Metalast	Federal Standard 37925 34094 33446 37722 33303 34083
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*1 NOTE: CPR112G Flange includes Gasket
 *2 NOTE: LNAs ordered as components of a Redundancy system require an N (F) output connector.

Example: 7.25-7.75 GHz, 50 dB Gain, +20 dBm P_{1dB}, DC Power, 55K Noise



Note: Selections shaded in gray will require Engineering review.

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