



High Performance C, X & Ku Band LNA Systems

General Information

Locus Microwave Inc. designed the Redundant LNA systems to minimize system outages using waveguide switches to provide a spare amplifier in the event of a failure.

Various systems are available utilizing high performance C, X, or Ku band LNAs in 1:1 or 1:2 configurations. The plates are compact and easy to install.

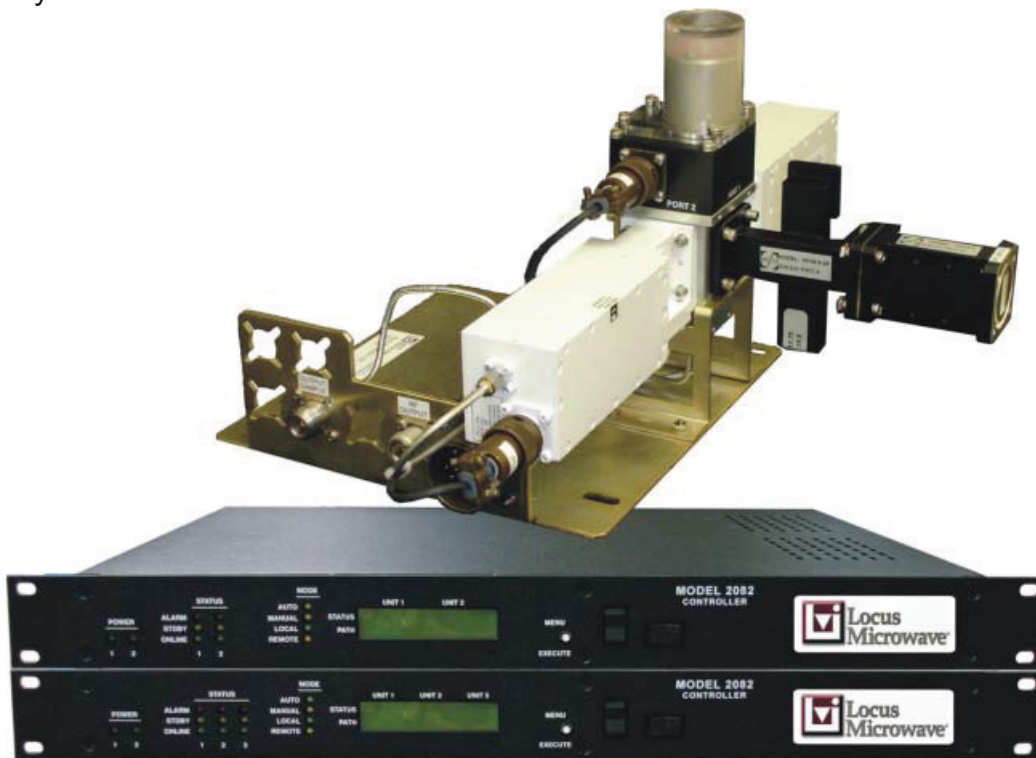
The controllers have serial and parallel control interfaces and can be operated manually or automatically.

Features

- Outdoor packaged LNA Plates
- 1:1 and 1:2 Configurations
- C, X, and Ku Bands
- Field proven, high performance LNA

Options

- Tx Filters
- Off line I/O
- Input waveguide coupler(s)
- Output coax coupler(s)
- L or S Band (coax I/O)
- Custom Configurations



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Redundant Low Noise Amplifier Systems

Parameter	System Performance *1			Units	Option
C-Band System					
	1:1	1:2			
		Pol 1	Pol 2		
System Noise Temperature Contribution (above specified LNA)	2	2	4	K	None
	3	3	5	K	40 dB Input Coupler
	4	4	6	K	Std. Tx Filter (3.6-4.2 GHz)
	10	10	12	K	Ext. Tx. Filter (3.4-4.2 GHz)
	5	5	7	K	Std. Tx Filter & Coupler
	11	11	13	K	Ext. Tx Filter & Coupler
System VSWR					
Input					
On-line Input(s) *2	1.25	1.25	1.25	:1	
Off-line and Coupled Inputs	1.50	1.50	1.50	:1	
Output					
Main Output(s)	1.25	1.25	1.25	:1	
Options with isolator	1.25	1.25	1.25	:1	
Options without isolator	1.50	1.50	1.50	:1	
X-Band System					
System Noise Temperature Contribution (above specified LNA)	3	--	--	K	None
	5	--	--	K	40 dB Input Coupler
	19	--	--	K	Tx Filter
	21	--	--	K	Tx Filter & Coupler
System VSWR					
Input					
On-line Input(s) *2	1.25	--	--	:1	
Off-line and Coupled Inputs	1.50	--	--	:1	
Output					
Main Output(s)	1.25	--	--	:1	
Options with isolator	1.25	--	--	:1	
Options without isolator	1.50	--	--	:1	
Ku-Band System					
System Noise Temperature Contribution (above specified LNA)	5	5	14	K	None
	7	7	16	K	40 dB Input Coupler
	15	15	24	K	Tx Filter
	17	17	26	K	Tx Filter & Coupler
System VSWR					
Input					
On-line Input(s) *2	1.25	1.25	1.25	:1	
Off-line and Coupled Inputs	1.50	1.50	1.50	:1	
Output					
Main Output(s)	1.25	1.25	1.25	:1	
Options with isolator	1.25	1.25	1.25	:1	
Options without isolator	1.50	1.50	1.50	:1	

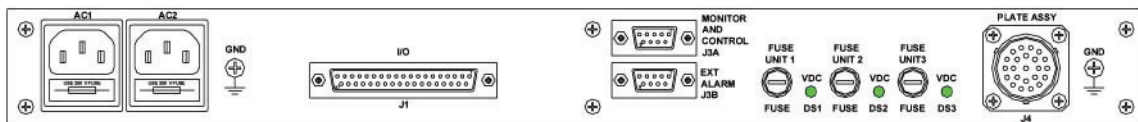
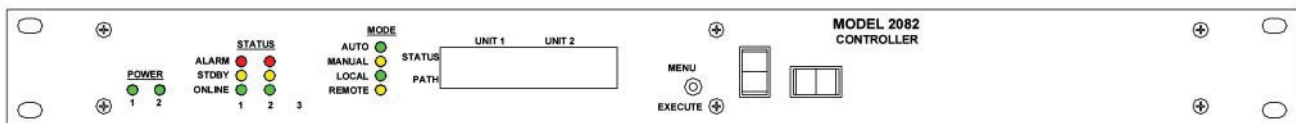
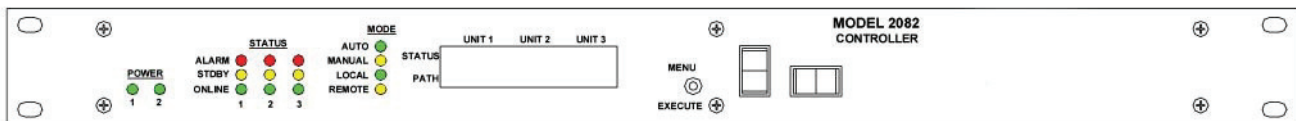
*1 Other specifications may apply.

*2 Options may effect input VSWR.

Specifications are subject to change.

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.

General Controller Specifications	
Parameter	Specification
Configuration Types	1:1 and 1:2
LNA Status Monitor	Current window. Alarm generated if current outside set window.
Window Width	+/-10% to +/-30% of nominal. Software selectable.
Switchover time	100ms typ., 150ms max. through standard length cable
Serial I/O	
Interface	RS-232C/RS-485 Selectable
Connector	9-Pin D, Female
Parallel I/O	
Status Outputs	Form 'C' dry contacts
Control Inputs	Contact closure to ground
Connector	37-Pin D, Female
External Alarm	
Input	Contact closure to ground
Connector	9-Pin D, Female
Controller Dimensions	19" (483 mm) W x 1.75" (44.4 mm) H x 16" (406.4 mm) D
AC Input	90-260 VAC, 47-63 Hz, 100 w max., Redundant Power Supplies
Operating Temperature Range	0°C to +50°C



Specifications are subject to change.