USLN Series Low Noise Broadband Amplifiers

BROADBAND PERFORMANCE

1 MHz to 2.5 GHz or 50 MHz to 3 GHz

VERY LOW NOISE

0.5 to 3.7 dB, depending on model and frequency

WELL PROTECTED

Reverse polarity, nondestructive protection. RF input, RF output and supply voltage ESD protection

READY FOR THE TOUGHEST ENVIRONMENT

All models meet all specifications from -40 to 85 °C. Outdoor housing option is IP65 compliant



The USLN low noise broadband amplifier series by US Microwave Laboratories provide exceptional performance at a very competitive price. Covering bandwidths of more than 11 octaves, they provide outstanding flatness, sub-dB noise figure, non-destructive reverse polarity and comprehensive ESD and transient protection.

All models meet all specifications from -40°C through 85°C, and the outdoor option is IP65 compliant. Designed and manufactured in the U.S.A., they conform to the European RoHS requirements, and are ECCN EAR99.



RF & microwave components and equipment

All our products are designed and manufactured in the U.S.A.



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Specifications subject to change without notice

Electrical specifications (valid -40 °C to 85 °C)

		SLN 503 freq. respo			SLN 5030 ery low noi			SLN 012 freq. opera		UNIT
	Min	Тур	Max	Min	Тур	Max	Min	Тур	Max	
Frequency range	50		3000	50		3000	1		2500	MHz
Gain	30	31.5	33	22	30	43	30	31.5	33	dB
Input & output impedance		50			50			50		ohm
Input VSWR			2:1			4:1			2:1	
Output VSWR			2:1			2:1			2:1	
P1dB	15	20	21	15	20	21	19	20	20.5	dBm
Noise figure	1.5	2.2	3.5	0.5	1.1	1.9	0.9	1.9	3.7	dB
Operating supply voltage	8		12	8		12	8		12	V dc
Absolute maximum										
supply voltage			15			15			15	V dc
Current consumption		135			160			135		mA
ESD & transient protection	Yes, RF input, RF output and dc									
Reverse polarity protection	Yes, non destructive									
Maximum input/										
reverse output power			17			17			17	dBm

Mechanical and environmental specifications

	Indoor version	Outdoor version	UNIT			
Operating temperature	-40 to 85					
DC supply connector	Feedthrough capacitor, solder post	Military style, 3 pin circular connector				
Dimensions						
(excluding connectors)	W: 1.5 (38.1), H: 0.95 (24.1), D: 3.5 (88.9)	W: 3.0 (76.2), H: 1.3 (33.0), D: 3.75 (95.3)	inch (mm)			
Weight	0.353 (160)	0.904 (410)	lb (g)			
IP rating	IP60	IP65	.57			

USLN #### X ## X X USLN series . Frequency range -5030: 0.05 to 3 GHz 0125: 0.001 to 2.5 GHz Features . **F:** flat frequency response N: very low noise (USLN 5030 only) Connectors (input/output) -1: SMA female (indoor option only) 2: SMA male (indoor option only)

3: N female (outdoor option only)

Environmental I: indoor (IP60)

O: outdoor (IP65)

Enclosure finish -

Part number

A: polished aluminum, clear chemical conversion coating,

non-chrome or trivalent chrome based (indoor option only)

G: military green powder coating

W: bright white powder coating



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