

## LINDSAY SUBSCRIBER AMPLIFIERS 1.22GHz Extreme Bandwidth Series

LRSA1510    LSA151  
 LRSA0803    LSA84

### PRODUCT OVERVIEW

Lindsay Broadband extreme bandwidth subscriber amplifiers are two-way 1.22GHz devices supporting DOCSIS 3.1 frequencies with available upstream and downstream splits of 42/54, 65/85 and 85/102MHz.

Customers with long drops and excessive splitter losses benefit from advanced Gallium Arsenide (GaAs) technology delivering improved distortion and noise performances. Specifically designed for both indoor and outdoor applications with a 15PSI water-tight seal, protective coating and 6kV surge withstand capabilities for enhanced system reliability.



- Optional power insertion on output port  
 Part # 15-100



### FEATURES

- 1.22GHz Gallium Arsenide Technology
- 3 dB Noise Figure
- Two-Way Active Models
- 6 kV Surge Withstand
- One and Four Port Options
- Power LED Indicator
- Surge and Current protected Power Supply
- Compact Environmentally Hardened design
- 15 PSI Water –Tight Seal
- Local and Remote Powering
- Diplex Filters 42/54, 64/85 and 85/102 MHz
- 360 degree F Pin Seizure
- 8dB equalized options

## SPECIFICATIONS

Parameter	LRSA1510		LSA151		LRSA0803		LSA84		Unit	Note
	Typical	Worst	Typical	Worst	Typical	Worst	Typical	Worst		
<b>Forward Path 102-1220 MHz</b>										
Gain (all ports)	15	13	15	13	8	6	8	6	dB	
Flatness	±0.5	±1.0	±0.5	±1.0	±0.5	±1.0	±0.5	±1.0		
Out-Out Isolation					25	24	25	24		
CTB	-75	-70	-75	-70	-75	-70	-75	-70	dBc	1
CSO	-65	-62	-65	-62	-65	-62	-65	-62		
Noise Figure	3	4	3	4	3	4	3	4	dB	
Group Delay		20		20		20		20	ns	1 MHz span
<b>Return Path 5-85 MHz</b>										
Gain	10	9	-1	-2	3	2	-7	-6	dB	
Flatness		±0.75		±0.75		±0.75		±0.75		
Out-Out Isolation					25	24	25	24		
2 <sup>nd</sup> Order Intermodulation	-70	-65	-70	-65	-70	-65	-70	-65	dBc	2
3 <sup>rd</sup> Order Intermodulation	-60	-57	-60	-57	-60	-57	-60	-57		
Noise Figure		8				15			dB	
Group Delay		20		20		20		20	ns	1 MHz span
<b>General Specifications 5-85, 102-1220 MHz</b>										
Impedance	75								Ohm	
Return loss	20	16	20	16	20	16	20	16	dB	all ports
Hum Modulation		-70		-70		-70		-70	dBc	
Power Supply Noise	-50/-80/-100								dBm	3
RFI	-100								dBc	
Surge Withstand Capability	6kV 3kA, 8/20us Combo Wave IEEE 587 (C62.41-1991) Category B3 Standard									Fwd Input & Power Pack
	6kV 200A, 0.5-100KHz, Ring Wave IEEE 587 (C62.41-1991) Category A3 Standard									Fwd Outputs
Operating Temperature	-40 to +60									
DC Power Consumption		280		150		280		150	mA	12-15Vdc
Port Diode Protection	yes									
Waterproof	Withstand 15 psi for 1 minute									All F Ports

**Note:**

- 1) 10dBmV/ch flat input level (75 NTSC) + digital at 6dB setback (550-1220MHz)
- 2) as per SCTE115, 13&19MHz channels at 58dBmV/ch output, w/c of DSO at 6/32MHz and DTO at 7/25MHz
- 3) max for (DC-500kHz) / (500kHz-1.5MHz) / (1.5MHz-1GHz). Measure at RF OUT while using power insterter to power the amplifier.

\*All specifications are subject to change without prior notice

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