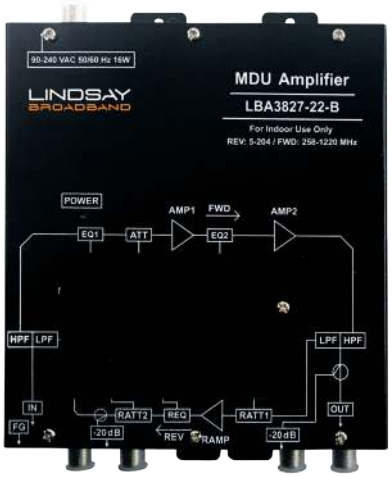
1.2 GHz MDU Amplifier

LBA-3827 SERIES

This Lindsay Broadband exclusive multiple dwelling unit (MDU) amplifier delivers reliable performance supporting DOCSIS® 3.1 frequencies to 1.2 GHz. The unique design offers configurations for 42, 85 and 204 MHz upstream bandwidth requirements. The LBA-3827 amplifier is suited for applications for advanced HFC network installations in apartment buildings, hotels, schools, hospitals, and similar facilities having high RF amplification requirements.

This high-gain amplifier can be mounted directly to a wall. It runs cool with its increased heat dissipation properties and low power consumption, thereby reducing operating costs. The two-way amplifier uses the latest 1.2 GHz GaAs FET push-pull technology, providing superior distortion performance and low noise. Technician-friendly controls feature variable attenuators and EQs facilitating greater flexibility when adjusting the amplifier. The mains-powered automatic switching mode power supply accepts input voltages from 90-240 V at frequencies of 50 or 60 Hz without adjustment.

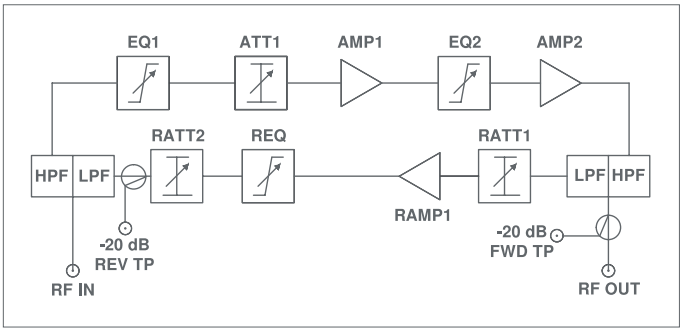


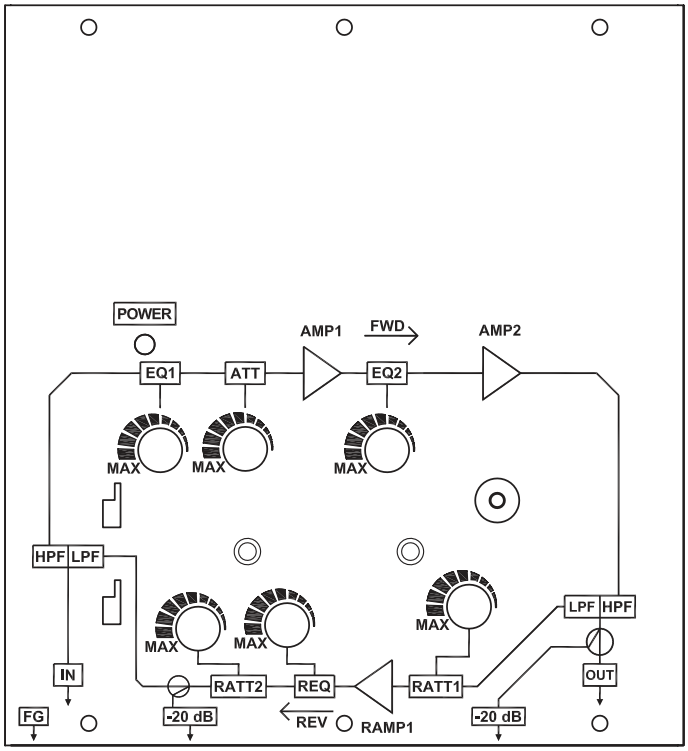
LBA-3827
(front view)

FEATURES

- Wall mount aluminum enclosure
- Heat dissipation finned design
- IP64 rating for indoor applications
- Operating Temperature: -40°C to +60°C (-40°F to +140°F)
- Forward gain 38 dB; reverse gain 27 dB
- Variable-type attenuators & EQs
- -20 dB external test points
- Surge protected to 6 kV on all ports
- 90-240 VAC mains-powered
- Available Diplex Filter Options: 42/54, 85/102 & 204/258 MHz
- Also available in 12-15 VDC powering option

FUNCTIONAL SCHEMATIC





LBA-3827
(front view with door off)

SPECIFICATIONS

Parameter		Specification	
		Forward	Reverse
Bandwidth		54/102/258-1220 MHz	5-42/85/204 MHz
Average Full Gain		38 dB	27 dB
Flatness		± 1 dB	± 0.75 dB
Return Loss		-14 dB	-14 dB
Test Points	FwdOUT/RevOUT	-20 ± 1 dB	-20 ± 1 dB
Input EQ Control Range (1)		0-18 dB	
Interstage EQ Control Range (1)		0-18 dB	
Output EQ Control Range (1)			0-18 dB
Input Attenuator Control Range (1)		0-20 dB	0-20 dB
Output Attenuator Control Range (1)			0-20 dB
Reference Output Level		48 dBmV	46 dBmV
Forward Distortions: 33/48 dBmV (15 dB tilt 54/1220 MHz) output level, 79 NTSC channels, digital at -6 dB from 550 MHz - 1.2 GHz			
CTB		-66 dBc	
CSO		-66 dBc	
Reverse Distortions: 46 dBmV flat output, 2 CH (13 & 19 MHz) according to ANSI SCTE 1152011			
DTO	on 7 & 25 MHz		-75 dBc
DSO	on 6 & 32 MHz		-60 dBc
Noise Figure	with Full Gain	8 dB	8 dB
Group Delay	3.58 MHz Span	≤ 35 ns	
	1 MHz Span		≤ 35 ns
Hum Modulation		-65 dBc	-75 dBc
Surge Withstand	In/Out	IEEE C62.41-Cat B3, Combination Wave, 6 kV, 3 kA	
Power, Environmental & Physical			
Powering		12-15 VDC / 90-240 VAC, 50/60 Hz	
Power Consumption		16 W	
Operating Temperature		-40°C to +60°C (-40°F to +140°F)	
Dimensions (H x W x D)		8.3"H x 6.1"W x 2.4"D (21.0H x 15.5W x 6.0D cm)	
Weight		3.8 lb (1.6 kg)	

NOTES:

Typical for T = +20°C (+68°F); ZIN = ZOUT = 75 ohms

(1) Continuously adjustable with hard stop at ends of rotation

ORDERING INFORMATION

		Bandpass Split		Power Socket Type
LBA-3827	-	xx	-	x
		45 = 5-42 MHz / 54-1220 MHz		B = Brazil
		81 = 5-85 MHz / 102-1220 MHz		C = Europe
		22 = 5-204 MHz / 258-1220 MHz		D = 15 VDC (transformer)

LINDSAY BROADBAND

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