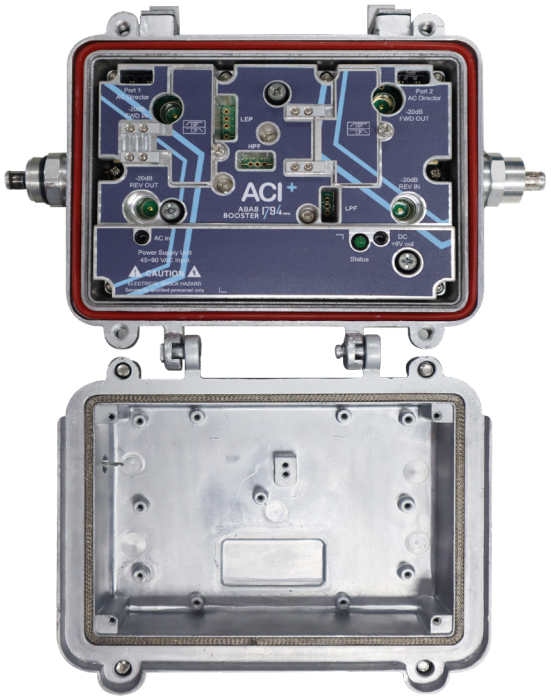
ACI INFINITY™ ABA8 Booster Amp Datasheet



INFINITY™ ABA8 Booster Amplifier 1.8GHz

The ACI Infinity™ ABA8 booster amplifier is specifically designed for use in 1.8G network applications. The booster amplifier provides extra forward and return gain where it is needed in the network. The Booster amplifier is offered to have the 85/105, 204/258, 396/482 or 684/834 splits and has a forward gain of 12 dB and a return gain of 6 dB.

Features

- 12 dB Forward and 6 dB return gain
- -20.0 dB directional coupler test points
- low power consumption at 7 Watts
- Increased reliability with higher surge protection
- The amplifier is housed in a fined aluminum die-cast housing for superior heat dissipation.
- Easy installation
- RoHS Compliant

Downstream

Preliminary

Frequency Range, MHz	105 - 1794 258 - 1794 492 - 1794 834 - 1794
Flatness, dB	± 0.5 @ F_{Minfwd} to 1218 MHz ± 0.75 @ F_{Minfwd} to 1794 MHz
Operational Gain, dB	12 +1.0/-0.0
Operational Slope, dB (Optional) 105-1794 258-1794 492-1794 834-1794	 9.0 ± 1.0 8.0 ± 1.0 7.0 ±1.0 5.0 ± 1.0
Noninal Input Level, dBmV/ch	10-29 @ 1794, Vitual Digital
Output Level, dBmV	21-40 @ 1794, Vitual Digital
Noise Figure, dB	10.0 @ F_{maxfwd} (Worst Case)
Test Points, dB	- 20 ± 0.75
CCN, dB	49 dB @ 111 to 1023 MHz, 256 QAM 49 dB @ 1029 - 1791 MHz, 256 QAM
Hum Modulation, dBc	>65 @ F_{minfwd} to 1794 MHz

Upstream

Frequency Range, MHz	10 - 85 10 - 204 10 - 396 10 - 684
Flatness, dB	± 0.6
Operational Gain, dB	2.0 ± 0.5 @ 85 Split 3.0 ± 0.5 @ 204 Split 4.5 ± 0.5 @ 396 Split 6.5 ± 0.5 @ 684 Split
Operational Slope, dB	1.0 ± 0.5 @ 85 Split 1.5 ± 1.0 @ 204 Split 3.0 ± 1.0 @ 396 Split 4.5 ± 0.5 @ 684 Split
Noise Figure, dB	12.0 (Worst Case)
Test Points, dB	- 20 ± 0.75
Hum Modulation, dBc	>65 @ 5 to 684 MHz

General

Operating Temperature Range	- 40°C to + 60°C (- 40°F to + 140°F)
Housing Dimensions, L x W x D	7.5 x 6.7 x 3.3 Inches, 191 X 169.5 x 84.05 (mm)
Weight	4.2 Lbs., 1.91 kg (Complete Unit)
Power Consumption	7 Watts

Powering

AC Input Voltage Range, VAC	45 - 90
AC Bypass Current	15 Amps

Rev C 08-28-2026 Printed in U.S.A.
ACI Communications, Inc. reserves the right to discontinue the manufacture or change specifications without prior notice on any parts illustrated in this data sheet. ACI and DSIM are registered trademarks and INFINITY and ACION are trademarks of ACI. Other trademarks are the property of their respective owners, and ACI is in no way affiliated with these companies.