

VBA-870 Bridger Amplifier

Description

The VBA-870 bi-directional bridger amplifier is a versatile platform for use in HFC distribution architectures. It has high gain with excellent distortion performance. The VBA-870 bridger amplifier provides 1 trunk level output port (33dB gain) and two bridger level output ports (41dB gain).



Specifications

Parameter	Unit	Specification
Forward		
RF Section Performance		
RF bandwidth	MHz	54-870
Return loss	-dB	≥16
Flatness	dB	+/-0.75
Gain trunk	dB	29(with AGC), 33 (without AGC)
Gain feeder	dB	37(with AGC), 41 (without AGC)
AGC	dB	Input range +/-3dB(single pilot)
Test point	dB	-20+/-1
Output port	inch	5/8
Noise figure	dB	<9
Slope control	dB	0 to 20(1dB step), plug-in EQs
Attenuator	dB	0 to 20(1dB step), plug-in PADs
Impedance	ohm	75
Distortion Performance (NTSC77 channels , 10dB slope and 44dBmV output level)		
CSO	-dBc	>69 for truck, >67 for feeder
CTB	-dBc	>68 for truck, >65 for feeder
XMOD	-dBc	>65 for truck, >65 for feeder
Reverse		
RF Performance		
Bandwidth	MHz	5 to 42
Flatness	dB	+/-0.75
Return loss	-dB	≥16
Gain level	dB	18
Noise figure	dB	<9
Slope control	dB	0 to 12(1dB step), plug-in EQs
Attenuator	dB	0 to 20(1dB step), plug-in PADs
Test point	dB	-20+/-1

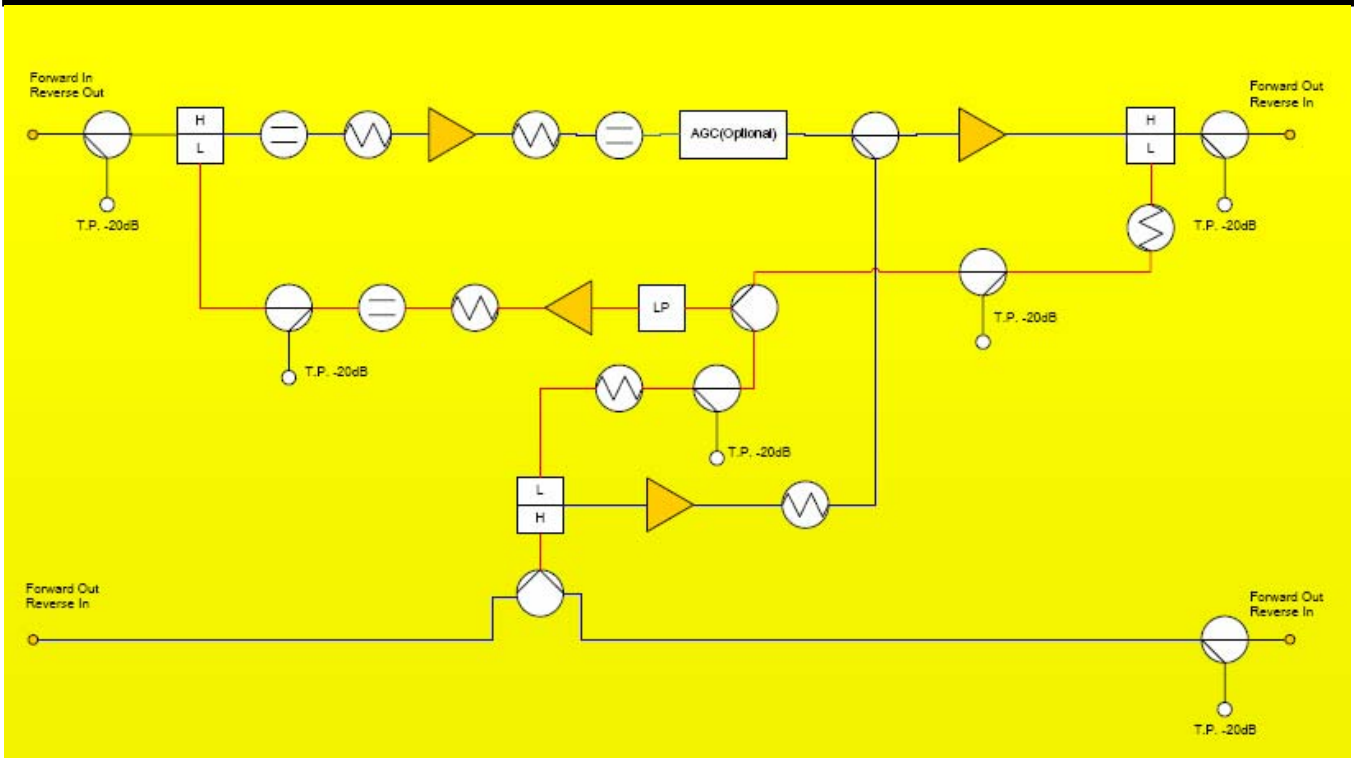
Distortion Performance (13 and 19MHz, 0dB attenuator and 35dBmV output)

CSO	-dBc	>82
CTB	-dBc	>90
XMOD	-dBc	>80

Electrical/Physical/Environmental Performance

Supply voltage	VAC	40 to 90
Input current capability	A	15
Hum modulation	-dBc	>60
Power consumption	W	<43
Dimensions	mm	LxHxW, 320x190x226
Weight	Kg	7
Operating temperature	°C	-40 to +60
Storage temperature	°C	-40 to +70
Humidity	%	95% , non-condensing

Block Diagram



Features

- Two way amplifier with 1 truck output and 2 feeder outputs
- 870 MHz bandwidth
- compact size
- -20dB test point
- Plug-in EQ & Pad for easy installation
- Power-doubling amplifier IC for high power output
- 15 Ampere Power Passing
- AGC optional
- Surge protection

Ordering Information

VBA-870 -- X -- X

Frequency :
4:42/54
5:55/70
6:65/85

Type :
VBA-870: two way
VBA-870S: forward only

Power supply :
A: with AGC
N: without AGC