

## HEA-37 1GHz Headend Amplifier

Model	Bandwidth
HEA37 (1GHz/42)	5-42 MHz / 54-1000 MHz
HEA37 (1GHz/65)	5-65 MHz / 85-1000 MHz

CE

## FEATURES

- 1 GHz forward bandwidth,
- GaAs Power Doubler Hybrid for high output levels with low distortions,
- Active Push Pull reverse path with seperate output, field selectable active/passive operation,

•Both fixed plug-in and variable gain/equalization controls, all accessible from front panel,

•Rack Mount - 1 EIA (1.75") spacing, rugged aluminum chassis

•Surge protection at all ports,

• UL and CE listed power transformers,



Figure 1 – Block Diagram



## **INSTALLATION NOTES:**

1. Unpack the distribution amplifier.

2. Mount the amplifier in the desired location inside the rack cabinet. Please leave 1U rack space below and above the amplifier for proper ventilation.

- 3. Connect the input and output cables to the amplifier.
- 4. This product is shipped with default 0 dB pad for all plug-in attenuator and equalizers.

5. Before applying power to the amplifier make sure that the forward input level to the amplifier is not too high or damage to the amplifier might occur. To be on the safe side, you should select the input fixed attenuator to a max. value (e.g:20 dB) before powering the amplifier or preset forward path slope control fully clockwise. Forward input pad and equalizer plug in modules are reachable under the front panel window cover. Variable control for midstage equalizer is present at the front panel.

6. Ground connection is provided at the rear panel to ensure proper grounding to the amplifier.

7. Please use the power adapter supplied with the amplifier, plug the power line cord into a 115VAC/60Hz power source.



Rear Panel



SPECIFICATIONS	Forward Path	Return Path	
Technology	Power Doubling, GaAs, Hybrid	Push Pull, Si-Bipolar	
Frequency Range	54-1000 MHz (85-1000MHz optional)	5-42 MHz (5-65MHz optional)	
Gain	38 dB (+/-1dB)	24 / -2dB switchable	
Input Gain Control	Plug-in, fixed value , 0 to 20dB in 2dB steps,	0 to 18dB variable	
Second Stage Gain Control	0 to 10dB variable, mid stage	Plug-in, fixed value , 0 to 20dB in 2dB steps	
Input Slope Control	Plug in, fixed value, 0 to 20dB in 2dB steps	NA	
Second Stage Slope Control	0 to 10dB variable, mid stage	NA	
Input / Output Return Loss	14 dB	14dB	
Noise Figure	5 dB	6 dB	
Channel Loading / Output Level	NCTA 79ch,Flat Output / 47dBmV	4	
Output Level	47dBmV	52 dBmV	
Composite Tripple Beat (CTB)	-67 dBc	-60 dBc	
Composite Second Order (CSO)	-71 dBc	-60 dBc	
Crossmodulation (XMOD)	-63 dBc	-58 dBc	
Max. Input Level (per channel, without using fixed input attenuator)	20dBmV @ 79ch 18dBmV @ 110ch		
Optimum Input Level Range	+7 dBmV to 12dBmV		
Impedance	75 ohm	75 ohm	
Hum Modulation	-70 dBc	-70 dBc	
Input / Output Test Port Level	-30 +/- 1dB		
Operating Temperature Range	-10C+55 degree C.		
Input / Output Connections	F type		
Surge Withstand (IN/OUT)	IEEEC62.41 Cat.A3(6kV,200A)		
Power Requirement	Wall Power Transformer, Input = 90-240VAC , 50-60Hz, 1A Output = 24 +/-1VDC, 1.25A		
Size (L x W x H)	22" x 15,75" x 3"		
Shipping Weight	6,75 lbs		

Ordering Information – Plug In Accessories

TBLE-9518\*\* Attenuator pads are plug in devices used to balance the signal. \*\* Specify value when ordering

**TBLE-MLEQ**\*\* Forward Equalizers are plug in devices used to compensate for the slope in cable. They are installed in the amplifier to balance the signal. \*\* Specify value when ordering

**TBLE-9504**\*\* Plug-in Reverse Equalizers are plug in devices used to balance the reverse path signal in two-way amplifiers \*\* Specify value when ordering

\*\*Available in 1 dB steps from 0 to 20 dB