

## **HEA-37** Headend Amplifier



## 1 GHZ, 2 Way, GaAs Power Doubling Headend Amplifier, 38 dB Gain

This rack mount amplifier is specifically designed as a headend amplifier to be used in analog or digital headends after combining of the various signals. The HEA-37 features a single output on the rear which incorporates both the forward path output and the reverse path input. The HEA-37 then features an internal diplex filter which provides a separate forward input connector and reverse output connector. The headend amplifier features midstage gain and slope controls as well as plug in pads and equalizers on the forward path. The reverse path has a separate gain control along with an input plug in attenuator (pad). The headend amplifier also has a passive/active reverse feature which is user selected by means of a jumper.

## **FEATURES**

- · 1 GHz forward bandwidth
- · GaAs power doubler for high output levels and low distortions
- 38 dB gain with 47 dB output level (0 slope)
- · Active push-pull reverse with user selectable active / passive operation
- Plug in pads and equalizers along with gain and slope control
- 1 RU rack mount chassis with external heat sink
- UL and CE listed external power transformer (110 / 230 VAC)
- · Surge protection on all ports
- -30 dB test ports on both input and output
- · Uses standard Toner TBLE pads and EQ's



**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



## **HEA-37** Headend Amplifier

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
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 Triple Beat (CTB)	-67 dBc	-60 dBc
Composite Second Order (CSO)	-71 dBc	-60 dBc
Cross Modulation (XMOD)	-63 dBc	-58 dBc
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)	19" x 8.5" x 1.75"	
Shipping Weight	6.75 lbs	