

TGA SERIES

PHEMT PREAMPLIFIERS

FEATURES

- VERY LOW NOISE
- 50 OHM INPUT/OUTPUT
- OVER-VOLTAGE / POLARITY PROTECTION
- VERSATILE MOUNTING OPTIONS
- COMMON PORT INDUCTANCE

Telewave.io TGA Series in-line preamplifiers utilize PHEMT devices to amplify low-level RF signals by up to 18 dB. The primary application of these preamplifiers is to improve the noise figure of a receiver system. Preamps compensate for splitter insertion loss or losses from long coax cable runs, and increase signal levels to spectrum analyzers or other test equipment.



Each preamplifier is housed in a rugged, custom-made, RF-tight aluminum enclosure. The DC input is reverse polarity protected, and equipped with a high-pass filter to eliminate RFI.

NOTE: These preamplifiers are for receiver use only. They are not designed to accept transmitter power levels.

MODEL	TGA150-12	TGA220-12	TGA450-12	TGA750-12	TGA860-12
Frequency range	132-174 MHz	220-250 MHz	400-512 MHz	763-824 MHz	806-960 MHz
Bandwidth (typ)	5 MHz	6 MHz	60 MHz	100 MHz	100 MHz
Noise figure (typ)	0.4 dB	0.5 dB	0.5 dB	0.7 dB	0.7 dB
Gain (typ)	+18 dB	+18 dB	+17 dB	+13 dB	+13 dB
COMMON SPECIFICATIONS					
Impedance / VSWR (max)	50 ohms / 1.3:1				
1 dB compression (typ)	+12 dBm				
3rd order intercept (typ)	+26 dBm				
Power requirements	+9 to +18 VDC, 40 mA				
Transient protection	40 kV / 1 μ s				
Temperature range	0° to +40°C				
Enclosure	Irridited aluminum				
Hardware	Stainless steel				
Connectors	N Female Teflon dielectric, gold pin				
Dimensions (HWD) in. (cm)	1.5 x 2.5 x 0.7 (3.8 x 6.4 x 1.8)				
Net weight oz (g)	5.4 (154)				
Shipping weight lb. (kg)	1 (0.45)				