



DEM Part Number 3-8 PA

8 Watt, 10.0 to 10.5GHz Linear Amplifier

Specifications

Frequency range:	10.2 – 10.4 GHz.
Power Out	8 Watts nominal (6 dB minimum gain)
Power Input for rated power out:	2.0Watt Maximum for linear operation
Return Loss	>10dB @ 10.368 GHz
DC requirements:	13.8 volts DC@ 5amps. for nominal output 15 volts DC absolute maximum
Connectors:	SMA (F) only
Size:	3.5" L x 3.0" W x 3" H
Active devices:	NEZ 1011-3E
Keying Option:	PTT – L (Ground on transmit)

The Down East Microwave Inc. 3-8PA linear amplifier is a simple gain block amplifier for the amateur 3 cm band. It requires external T/R switching and can be used by itself or as a driver for a higher power amplifier. The amplifier requires a single 13.8 volts DC supply at 5 amps, but will operate at reduce ratings down to 10 volts and at increased power dissipation up to 15 volts. The unit is provided with an internal negative bias supply and keying circuit for ease of operation. The PTT circuit is toggled to Ground to activate (PTT-L).

To achieve maximum performance, the amplifier should be mounted in a well ventilated area with heat sink fins in the vertical position for optimum cooling. A cooling fan is required for 100% duty cycle operation. A version without a heat sink (3-8PAP) is available for installations on a larger heat sink or large enclosure installation where adequate heat sinking is available. It is advisable but not necessary to use circulators and band pass filters when available. This will prevent stray oscillations and needless waste of power by amplifying local oscillator frequencies or generating high power out of band spurious signals.

The 3-8PA's output power will compress between 8 and 10 watts with 1.5 –2.0 watts of drive. All units are tested for a minimum of 8 watts compressed output power and optimized for maximum gain before compression occurs. 1 watt of drive may produce as much as 5-6 watts of output power with this type of optimization. The 3-8PA is being sold as an assembled unit only! No kit versions are available.

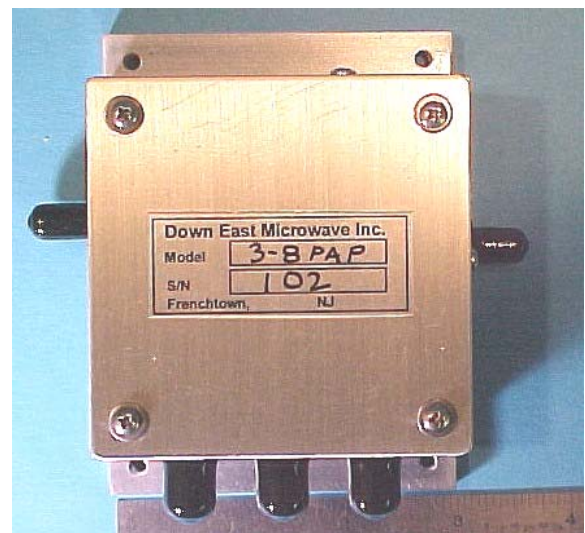
This amplifier is a perfect match for our 10368-144 2-watt transverter. Simply use a standard SMA relay or our WTR option to perform the RF switching functions. The PTT-L of both the amplifier and transverter may be daisy chained together. Please contact DEMI with any question before ordering.



3-8PA



3-8PAP



3-8PAP