

## DEM Part Number L3-3PA 10GHz Linear Amplifier

### Specifications

Frequency range:	10.0 - 10.5 GHz.
Power Out:	3Watts nominal 3.2W Saturated
Power Input for rated power out:	10mW for linear operation (20mW maximum drive)
IN/OUT Return Loss	>10dB@ 10.368 GHz
DC requirements:	13.8 volts DC@ 2.5 amps. for nominal output 16 volts DC absolute maximum 10Volts Minimum
RF Connectors:	SMA(F) only
Size:	2.5" L x 4." W x 1.125" H
Active devices:	FM5061VF (Sumitomo or Eudyna)
Keying Option:	PTT - L (Ground for transmit)

**DESCRIPTION:** The Down East Microwave Inc. L3-3PA linear amplifier is a “new look” design of the basic gain block we have been producing for the amateur 3 cm band. The electrical specifications are the same but it is housed in a completely different physical design to ease kit assembly and final use in any system.

It will provide >3 Watts saturated output power with 10mW of drive. It requires external T/R switching and can be used by itself or as a driver for a higher power amplifier.

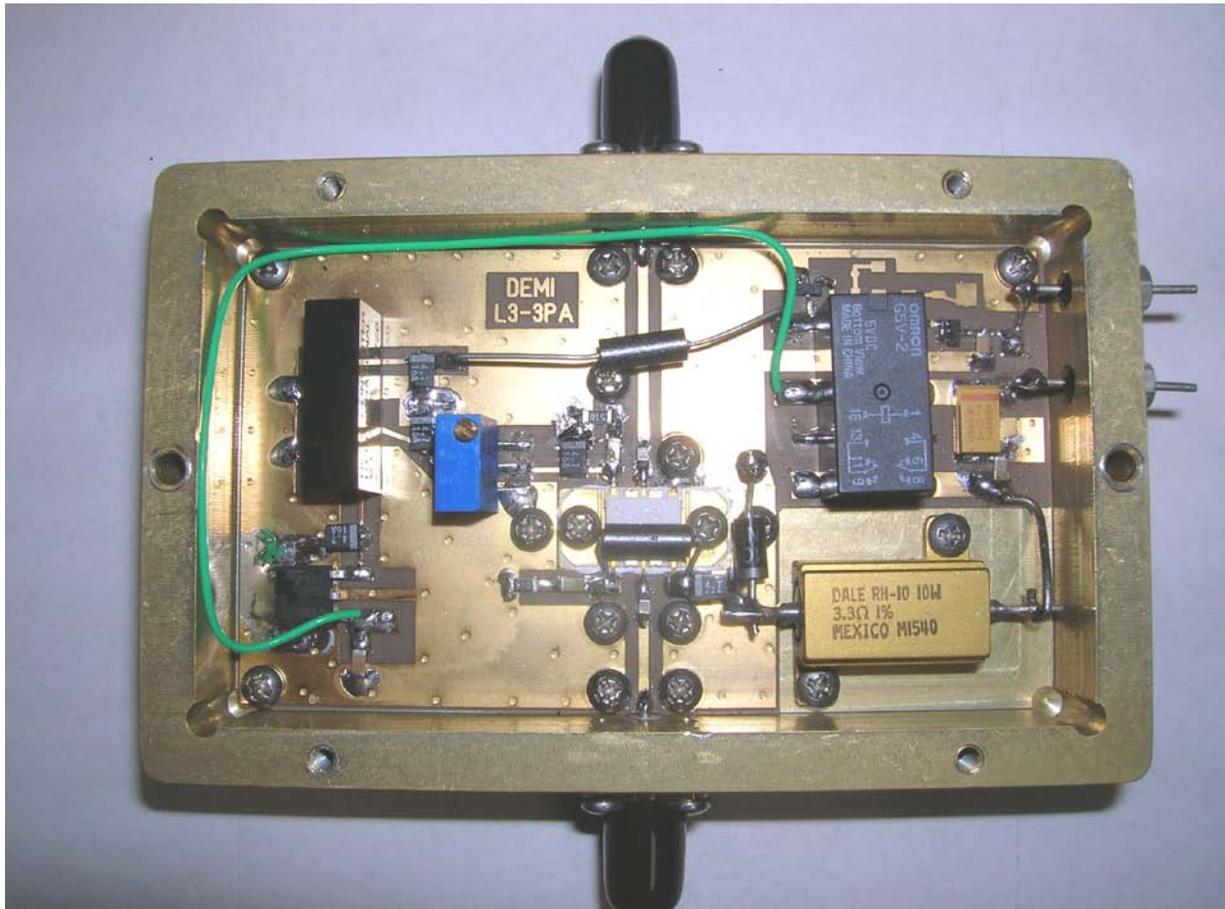
The amplifier requires a single 13.8 volts DC supply at 2.2 amps, but will operate at reduce ratings down to 10 volts and up to 16 volts. The unit is provided with an internal negative bias supply and keying circuit for ease of use.

To achieve maximum performance the amplifier should be mounted to a heat sink or metal conductive surface for optional heat dissipation. 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.

This amplifier coupled with our L3-2ULNA is a perfect match for our 10368-144LP transverter for those that desire to remote the LNA/PA close to the antenna feed.



The L3-3PA is available as an Assembled unit, a Complete Kit (L3-3PACK) or as a PC Board kit (L3-3PAK) to install in your own enclosure but it is highly recommended to utilize our enclosure to ensure a final product working up to its full specifications. Please review our web site for pricing or contact DEMI with any question about its operation or applications within your system.