



Part Number DEM2304 13cm Transverter

DEM 2304-144 Operating Specifications

Operating Voltage:	10.0 - 15.5 VDC, 13.8 nominal
Current Drain:	450 mA Receive 1 amp Transmit
Output Power:	
-LP version	50mW
-standard version	>1 Watt
144 MHz. IF Drive Power:	1 mW minimum to 10 Watt maximum
Receive Noise Figure:	<2.0 dB
Conversion Gain:	>20 dB (adjustable)
Spurious response:	>-40dBc
Frequency stability:	>200Hz (after 5 minutes warm-up)

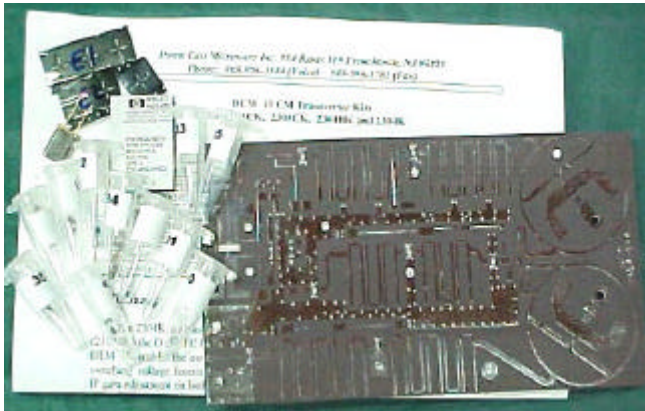
The DEM 2304-144 design is based on the "No-Tune" filter concept. It utilizes a modern GaAs-FET MMIC (MGA85676) for improved receive noise figure, newly developed MMIC's (the ERA Series), and a >1 watt power amplifier on a Teflon PCB with plated through ground vias. The concept is to shorten construction time for kit builders while improving overall performance, and increasing reliability. This PCB has been designed to fit in an extruded aluminum enclosure that measures 4.125" W x 1.875" H x 10.0" L. **No more "BRASS BOX" construction for microwave kit builders!** The complete kit consist of the transverter, a local oscillator (the MICRO-LO), a transverter control board (DEM-TC), a clam shell enclosure, aluminum pallet to support transverter board and all connectors for easy assembly.

The local oscillator is a new design that is regulated and operates at approx. 1GHz. It is temperature compensated and designed for frequency stability. The DEM TC is the new transverter control board that enables the use of any 144 MHz drive level up to 10 watts. The DEM-TC also contains 9V regulated circuitry for the transverter, AUX switching controls, and a 24V relay driver that allows the use of common SMA relays with the transverter. It also provides the switching voltage functions for the transverter.

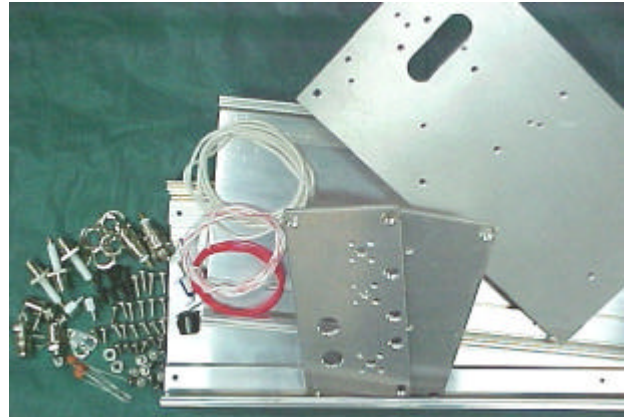
Ease of assembly is stress with the complete kit version of this transverter. All mounting and connector holes are drilled and tapped where necessary. All testing can be accomplished with a volt meter. Frequency meter is optional.

The assembled version of this transverter is a complete package, ideal for portable operation and versatile enough to be the basis for the most demanding high performance home station. Options include T/R switch configurations and external DC for power amps or pre-amplifiers.

Interfacing can be simplified by using one of the various interfacing options available from DEMI or simply configure your 2M IF rig yourself to correspond with the options installed in the transverter.



2304K-PC Board Parts Kit



2304CK-Contains Parts Kit and Hardware