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DEM Part Number 5760-144, and 5760-144LP
5.7 GHz. Transverter in Assembled , Board Kit, and Complete Kit forms

Specifications

Frequency:	5760.000 = 144.000 standard	
IF Power Input (144MHz)	1 mw min. to 10 W max. Adjustable, depending on configuration	
	5760-144	**5760-144LP**
Noise Figure and Gain	< 1.5 dB NF, > 17 dB G	< 3.5 dB NF, > 17 dB G
Power Out	> 2 Watts.	>10 mw
DC Power	11-16 VDC @ 2.5 A	11-16 VDC @ < 600 mA

Description:

The New DEM 5760-144 is a 5.7GHz. to 144 MHz transmit and receive converter. It is available in two basic versions. Our standard version (5760-144) that has a linear output power of >2 watts and a low noise PHEMT gain stage in the receive section or a low power version (5760-144LP) that has >10mW of output power and a GaAs MMIC in the receiver chain. The LP version would be the unit of choice if you were planning on adding high power TWT type amplifier with a external LNA to be used as a home Tropo or EME class system. It is a basic transverter. The 2 watt version makes a great unit for portable operation because of its "All in one package" approach that can be mounted directly behind a dish type antenna. It would also be the transverter to tower mount behind a dish for a home system.

Both versions have improvements over the previous DEMI 5760 transverters. The major one is the implementation of a machined aluminum pallet that aids in heat-sinking the power amplifier and provides mechanical stability to the entire transverter. This new technique relives temperature stress on the circuit board which improves over all reliability, and minimizes temperature change of the transverter. The transmit and receive section of 5760-144 has added filtering to eliminate all other spurious emissions. Both versions have a built in transmit / receive relay driver to provide voltages required by common SMA relays and provisions for external switching so adding a high power amplifiers or preamplifiers to your 5.7 GHz. system is easy. IF level options of 1 mW to 10W have been built into the transverter. The 144 MHz IF levels are adjustable on both transmit and receive and have a dynamic range of approx. 25dB. This is useful for adjusting your maximum output power and setting the "S" meter level on your IF receiver. The IF connections are via BNC connectors. Options have been provided for a key line input PTT-H (+1 to 15 VDC) or PTT-L (a closure to ground) and auxiliary contacts on either transmit or receive with a common line for many applications. The control, power, and auxiliary connections are via DC feed thru connectors and the 5.7 GHz. connectors are SMA. The 5760-144 is housed in a 4.125" x 1.875" x 9.75" extruded aluminum enclosure and the LP version is 4.125" x 1.875" x 7.75".

Both versions are available as complete kits (5760-144CK or 5760CK). All circuits boards, components, enclosure, and all hardware necessary for a complete working unit are supplied. The 5760K is a board kit consisting of the 3 circuits boards and components that may be assembled into your own enclosure or system design. The 5760-144 (the2 watt version) will not be sold as a board kit. All kit versions have complete manuals and do require RF power measuring equipment for alignment. All filters will need to be assembled and adjusted. These kits require specialized RF/microwave assembly techniques. Therefore, they are not for beginners but do make excellent club projects!