

TMND-1416,1516,1616,1716

VHF Compact Duplexers (4.5 MHz Spacing)

Telewave.io TMND-1416/1516/1616/1716 Compact Duplexers provide high performance while using minimal space. These rugged duplexers excel in portable, mobile or base applications.

The duplexers can be mounted inside of any repeater chassis with a space that has at least 6.4" wide x 9.0" deep x 3.0" tall.

Each duplexer consists of six High "Q" reject helical resonators (3 per side). Field tuning can be performed with easily accessible tuning elements opposite side from the connectors. These duplexers are not recommended for fixed sites with other VHF radios that have antennas or frequencies near those associated with this duplexer.

For better performance, we recommend when ordering, specify exact high side and low side frequencies. The duplexers are tuned and tested at the factory using the customer-specified frequencies.



Electrical Specifications

Frequency range (MHz)	1416: 138-150 MHz 1516: 148-157 MHz 1616: 150-160 MHz 1716: 162-174 MHz
Frequency separation (min)	4.5 MHz
Frequency separation (max)	10 MHz
RF Input power (max)	50 Watts (+47 dBm)
Impedance / VSWR (max)	50 ohms / 1.3:1 (18 dB RL)
Insertion loss (TX/RX to-ant) (max)	1.2 dB
TX noise at RX (min)	75 dB
RX attenuation at TX (min)	75 dB
TX-RX Isolation (min)	75 dB

Mechanical Specifications

Connectors	N Female Standard BNC-F Optional
Finish	Black acrylic enamel
Temperature range	-4°F to 140°F (-20°C to +60°C)
Filter Dimensions (HWL) in. (cm)	1.4 x 4.5 x 6.9 (3.5 x 11.4 x 17.5)
Footprint (mounting plate) in. (cm)	6.1 x 8.5 (16 x 22)
Installed Weight lb. (kg)	2.2 (1)
Cavity Space required in. (cm)	6.4 x 9.0 x 3.0 (16.25 x 23 x 7.75)
Shipping Dimensions (kg)	12 x 7 x 2 (30.5 x 18.0 x 5.0)
Shipping weight lb. (kg)	3.0 (1.4)

