



rf/microwave instrumentation

**Model DC7450,
 M1 through M3
 Dual Directional Coupler
 3000 Watts CW
 7.5GHz–18GHz**

The Model DC7450 is a dual directional coupler with excellent frequency range and power handling capability. The wide range assures flexibility in coupling medium power amplifiers to oscilloscopes, voltmeters, power meters, spectrum analyzers and other measuring instruments. The dual directional design allows the user to monitor both forward and reflected power, a much needed characteristic in RF susceptibility testing for amplifier overdrive protection, field control and load protection. Low insertion loss allows efficient coupling to the load. The DC7450 is intended for use with the 200T8G18, 500T8G18, 1000T8G18, 2000TP8G12, 2000TP8G18 and other "T" series microwave TWT amplifiers.

SPECIFICATIONS

- FREQUENCY RANGE.....7.5–18 GHz
- POWER (maximum)3000 Watts CW
 21K Watts Peak, @ 5% duty cycle,
 30 µsec pulse
- COUPLING FACTOR.....50 dB ± 2.0 dB (includes flatness)
- COUPLING FLATNESS.....± 1.5 dB
- DIRECTIVITY
 Typical.....28 dB
 Minimum25 dB
- INSERTION LOSS0.15 dB maximum
- VSWR (Main Line).....1.1:1 maximum
- CONNECTORS
 Main Line.....WRD-750 D24
 CoupledSee Model Configuration
- WEIGHT.....0.64 kg (1.42 lbs)
- SIZE (WxHxD).....3.5 x 4.4 x 30.5 cm (1.4 x 1.7 x 12 in)

MODEL CONFIGURATION

Model Number	Coupled Connector
DC7450	SMA Female
DC7450M1	N Female
DC7450M2	N Female with pressure sealing option, standard flanges
DC7450M3	N Female with pressure sealing option, grooved flanges