



**Model DC7490, M1**  
**Dual Directional Coupler**  
**3000 Watts CW**  
**8GHz–12GHz**

The Model DC7490 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 DC7490 is intended for use with the 4000TP8G12, 8300TP8G12 and other T series microwave TWT amplifiers.

**SPECIFICATIONS**

- FREQUENCY RANGE.....8–12 GHz
- POWER (maximum) .....3kW CW, 208kW peak
- COUPLING FACTOR.....See Model Configurations
- COUPLING FLATNESS.....± 1.5 dB
- DIRECTIVITY
  - Typical.....40 dB
  - Minimum .....35 dB
- INSERTION LOSS .....0.14 dB maximum
- VSWR (Main Line).....1.1:1 maximum
- CONNECTORS
  - Main Line.....WR90
  - Coupled .....N(F)
- WEIGHT.....0.45 kg (1.0 lbs)
- SIZE (WxHxD) .....2.54 x 8.43 x 33 cm (1.0 x 3.32 x 13 in)

Model	Model Configurations
	Coupling Factor
DC7490	40 dB ± 2.0 dB (includes flatness)
DC7490M1	60 dB ± 2.0 dB (includes flatness)