



Model DC7490, M1
Dual Directional Coupler
2400 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 and other T series microwave TWT amplifiers.

SPECIFICATIONS

- FREQUENCY RANGE.....8–12 GHz
- POWER (maximum)See Model Configurations
- COUPLING FACTOR.....See Model Configurations
- COUPLING FLATNESS.....± 1.5 dB
- DIRECTIVITY
 - Typical.....40 dB
 - Minimum.....35 dB
- INSERTION LOSS0.14 dB maximum
- VSWR (Main Line)1.1:1 maximum
- CONNECTORS
 - Main Line.....WR90
 - CoupledN(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 Configurations

Model	Power	Coupling Factor
DC7490	2400 Watts CW, 6.5K Watts Peak @ 4% duty cycle, 100 μsec pulse	40 dB ± 2.0 dB (includes flatness)
DC7490M1	2400 Watts CW @ 10% duty cycle, 15K Watts Peak	60 dB ± 2.0 dB (includes flatness)