

rf/microwave instrumentation

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	
INSERTION LOSS	0.14 dB maximum
VSWR (Main Line)	1.1:1 maximum
CONNECTORS Main Line Coupled	
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 Coupling Factor	
DC7490	40 dB \pm 2.0 dB (includes flatness)
DC7490M1	60 dB ± 2.0 dB (includes flatness)