



**Model DC7530,  
M1 through M3  
Dual Directional Coupler  
300 Watts CW  
18 GHz –26.5GHz**

The Model DC7530 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 DC7530 is intended for use with the 40T18G26 and other "T" series microwave TWT amplifiers, operating within the frequency and power range.

**SPECIFICATIONS**

- FREQUENCY RANGE..... 18-26.5GHz
- POWER (maximum) .....300 Watts CW  
80K Watts Peak
- COUPLING FACTOR.....See Model Configuration
- COUPLING FLATNESS..... ± 1.0dB
- DIRECTIVITY
  - Typical.....40 dB
  - Minimum.....30 dB
- INSERTION LOSS .....0.20 dB maximum
- VSWR (Main Line).....VSWR 1.10:1 maximum
- CONNECTORS
  - Main Line.....WR42 Waveguide
  - Coupled .....See Model Configuration
- WEIGHT.....204 g (7.2 oz.)
- SIZE (WxHxD).....2.2 x 3.5 x 22.9 cm (0.88 x 1.4 x 9.0 in)

**MODEL CONFIGURATION**

<b>MODEL NUMBER</b>	<b>COUPLING FACTOR</b>	<b>COUPLED CONNECTOR</b>
DC7530	40dB ± 2.0dB	K (female)
DC7530M1	40dB ± 2.0dB	2.4 mm (female)
DC7530M2	30dB ± 2.0dB	K (female)
DC7530M3	50dB ± 2.0dB	K (female)