



**DC7154A,  
M1 through M3  
DC7154, M1  
Dual Directional Coupler  
0.8–4.2GHz**

The Model DC7154A 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 Model DC7154A is uniquely suited for use with our “S” series power amplifiers, other amplifiers operating within this frequency and power range, and our PM2000 Series power meters.

**SPECIFICATIONS**

- FREQUENCY RANGE.....0.8 - 4.2GHz
- POWER (Maximum Watts) .....See Model Configurations  
5K Watts Peak, @ 5% duty cycle,  
30  $\mu$ sec pulse
- COUPLING FACTOR.....50 dB  $\pm$  1.3 dB (includes flatness)
- FLATNESS ..... $\pm$  0.8dB
- DIRECTIVITY
  - Typical.....19 dB
  - Minimum .....15 dB
- INSERTION LOSS .....0.4 dB maximum
- IMPEDANCE (Main Line) .....50 ohms, VSWR 1.25:1 maximum
- CONNECTORS
  - Main Line.....See Model Configuration
  - Coupled .....See Model Configuration
- WEIGHT.....0.29 kg (0.64 lbs)
- SIZE (WxHxD) .....3.2 x 6.3 x 10.9 cm (1.3 x 2.5 x 4.3 in)

**Model Configurations**

Model Number	Main Line J1/J2	Coupler Connectors J3/J4	Power (Watts CW)
DC7154A	N(M)/N(F)	N(F)/N(F)	400
DC7154AM1	7-16 (M)/7-16 (F)	N(F)/N(F)	700
DC7154AM2	N(M)/N(F)	SMA(F)/SMA(F)	400
DC7154AM3	7-16 (M)/7-16 (M)	SMA(F)/SMA(F)	700
DC7154	N(F)/N(F)	SMA(F)/SMA(F)	400
DC7154M1	N(F)/N(F)	N(F)/N(F)	400