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MODEL DC7144A  
MODEL DC7144  
M1  
Dual Directional Coupler  
400 Watts CW  
0.8-4.2GHz

The Model DC7144A 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 DC7144A is uniquely suited for use with our “S” series microwave power amplifiers, other amplifiers operating within this frequency and power range, and our PM2002 power meter.

### *SPECIFICATIONS*

#### *Model DC7144A*

*FREQUENCY RANGE* .....0.8 - 4.2GHz

*POWER (Maximum Watts)*.....400 Watts CW  
4K Watts Peak, @ 5% duty cycle,  
30  $\mu$ sec pulse

*COUPLING FACTOR* .....40 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* .....0.24 kg (.525 lbs)

*SIZE (WxHxD)*.....2.35 x 5.84 x 19.0 cm  
0.925 x 2.3 x 7.48 in

#### *Model Configuration*

<i>Model Number</i>	<i>Main Line J1/J2</i>	<i>Coupled Connector J3/J4</i>
<i>DC7144A</i>	<i>N(M)/N(F)</i>	<i>N(F)/N(F)</i>
<i>DC7144</i>	<i>N(F)/N(F)</i>	<i>SMA(F)/SMA(F)</i>
<i>DC7144M1</i>	<i>N(F)(NF)</i>	<i>N(F)/N(F)</i>

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