



**Model DC7144A, AM1  
DC7144, M1 through M3  
Dual Directional Coupler  
400 Watts CW  
0.7GHz–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 PM2003 power meter.

**SPECIFICATIONS**

FREQUENCY RANGE.....	0.7–4.2GHz
POWER (Maximum Watts).....	400 Watts CW 4K Watts Peak, @ 5% duty cycle, 30 µsec pulse
COUPLING FACTOR.....	40 dB ± 1.3 dB (includes flatness)
FLATNESS .....	± 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 .....	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)
EXPORT CLASSIFICATION.....	EAR99

**MODEL CONFIGURATION**

<b>Model Number</b>	<b>Main Line J1/J2</b>	<b>Coupled Connector J3/J4</b>
DC7144A	N(M)/N(F)	N(F)/N(F)
DC7144AM1*	N(M)/N(F)	N(F)/N(F)
DC7144	N(F)/N(F)	SMA(F)/SMA(F)
DC7144M1	N(F)(NF)	N(F)/N(F)
DC7144M2*	N(F)(NF)	SMA(F)/SMA(F)
DC7144M3*	N(F)(NF)	N(F)/N(F)

\*Uses A2LA Calibration