

rf/microwave instrumentation

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 \pm 1.3 dB (includes flatness)
FLATNESS	.± 0.8dB
DIRECTIVITY Typical	
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 Number	Main Line J1/J2	Coupled Connector J3/J4
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