

rf/microwave instrumentation

Model DC3010A, M1, M2 Model DC3010, M1, M3 Dual Directional Coupler 100 Watts CW 10kHz-1000MHz

The Model DC3010A is a high power, ultra-broadband dual directional coupler with excellent performance characteristics over a range of more than 14 octaves. This dual directional coupler is a convenient means of simultaneously monitoring forward and reflected power in RF power systems using normal laboratory oscilloscopes, voltmeters, power meters and spectrum analyzers. The Model DC3010A is particularly recommended for use with our "A" and "W" series amplifiers, and other amplifiers operating within the frequency and power range.

SPECIFICATIONS

FREQUENCY RANGE	.10 kHz–1000 MHz
POWER (maximum)	.100 watts CW 200 watts Peak
COUPLING FACTOR	$.40 \pm 0.8$ dB (includes flatness)
COUPLING FLATNESS	.± 0.6 dB
DIRECTIVITY	.25 dB typical 20 dB minimum
INSERTION LOSS (maximum)	.0.6 dB
IMPEDANCE (main line)	.50 ohms, VSWR 1.3:1 maximum
CONNECTORS	.See model configurations
WEIGHT (maximum)	.0.9 kg, 2.0 lbs
SIZE (maximum) (W x H x D)	.12.7 x 5.1 x 3.8 cm (5.0 x 2.0 x 1.5 in)

MODEL CONFIGURATIONS

Model Number	Mainline Connector J1/J2	Coupled Connector J3/J4	Comments
DC3010A	N(M)/N(F)	N(F)/N(F)	
DC3010AM1	N(M)/N(F)	N(F)/N(F)	See DC3010AM1 Specification Sheet for 200W operation
DC3010AM2	N(M)/N(F)	N(F)/N(F)	Same as DC3010A with Calibration Data
DC3010	N(F)/N(F)	BNC(F)/BNC(F)	
DC3010M1	N(F)/N(F)	N(F)/N(F)	
DC3010M3	N(F)/N(F)	N(F)/N(F)	See DC3010M3 Specification Sheet for 200 W operation