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MODEL TC3020
TEM CELL
500 WATTS CW
DC-375 MHz

Capable of accepting a test object up to 30 cm wide by 20 cm deep the Model TC3020 is a broadband TEM (transverse electromagnetic mode) cell designed for susceptibility and emissions testing. Because of its highly controllable and measurable characteristics as an EMI and RF test chamber, the Model TC3020 is commonly used to calibrate electromagnetic and radio frequency field strength and power density meters. The dimensions and taper of the TEM cell provide a 50 ohm impedance from end to end. When terminated in 50 ohms, a uniform, high impedance field approaching that of free space is produced throughout the test object location. The Model TC3020 broadband TEM cell incorporates special resonance suppression techniques developed by Amplifier Research to provide over 50% more bandwidth than competing cells with similar test object volume.

The termination load used with the Model TC3020 TEM cell must have a minimum power rating of 500 watts. Our Model LR0500 (a 30 dB, 500 watt attenuator) is recommended as a termination. Use of such an attenuator provides an output which can be used for making power measurements or for providing a leveling reference.

SPECIFICATIONS

SIZE OF DEVICE UNDER TEST(WxHxD) 30.0 x 10.0 x 20.0 cm
11.8 x 3.9 x 7.9 in

POWER INPUT,CW..... 500 watts maximum

FREQUENCY RESPONSE..... DC-375 MHz

IMPEDANCE OF CELL..... 50 ohms

VSWR..... 1.2:1 maximum

CONNECTORS(select from kit provided)..... Type BNC female
Type TNC female
Type N female

CELL DIMENSIONS

Total width..... 211.3 cm(83.2 in)

Total height..... 60.2 cm(23.7 in)

Total depth..... 106.7 cm(42.0 in)

Septum depth..... 72.4 cm(28.5 in)

ACCESS PORT DIMENSIONS

Top,outer diameter..... 14.2 cm(5.6 in)

Top,inner diameter..... 2.8 cm(1.1 in)

Side,outer diameter..... 14.2 cm(5.6 in)

Side,inner diameter..... 2.8 cm(1.1 in)

Side(WxH)..... 59.9 x 25.4 cm
23.6 x 10.0 in

WEIGHT..... 52 kg(114 lb).

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE REV0588