



rf/microwave instrumentation

Model ATE10K100M Broadband E-Field Generator 10kHz–100MHz 500 Watts

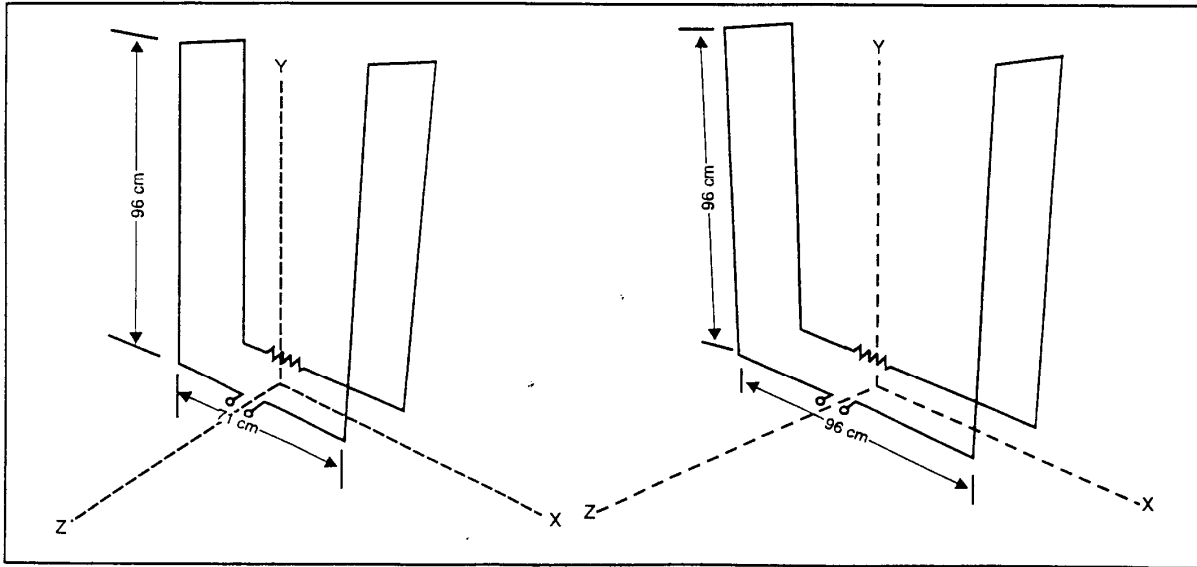
The ATE10K100M is a broadband E-field generator of unique design, which offers operation to 100 MHz, good spatial field uniformity, and high field intensities. This generator is compact and easily supported and positioned using a tripod. It uses high-power low-inductance internal load resistors to terminate the RF drive power and a low-loss broadband impedance transformer to achieve high field intensities.

The ATE10K100M is supplied with two sets of interchangeable elements with a quick-disconnect attachment feature. The smaller set, Type A, provides the highest field intensities and is suitable for use with test objects up to 36 x 46 x 36 cm (14 x 18 x 14 in). The larger set, Type B, is suitable for testing objects up to 48 x 46 x 36 cm (19 x 18 x 14 in).

SPECIFICATIONS

Frequency Range	10 kHz–100 MHz
Input Impedance.....	50 ohms
VSWR.....	2.5:1 maximum (1.4:1 typical)
Power Handling	500 watts maximum
Field Intensity (in defined test volume)	
Between Type A elements.....	Nominally 350 V/m with 500 W input
Between Type B elements.....	Nominally 200 V/m with 500 W input
Maximum Test Object Volume	
Between Type A elements.....	36 x 46 x 36 cm (14 x 18 x 14 in)
Between Type B elements.....	48 x 46 x 36 cm (19 x 18 x 14 in)
Size	
With Type A elements	74 x 41 x 102 cm (29 x 16 x 40 in) maximum
With Type B elements	104 x 41 x 102 cm (41 x 16 x 40 in) maximum
Connector	Type N female
Weight	13 kg (28 lb) maximum
Mounting.....	Accepts standard tripod threaded stud on 3 faces (optional nonmetallic tripod available)

Test Volume Specification



Frequency	Nominal Field Level (10 watt input)	Test Zone Size $\Delta x, \Delta y, \Delta z$	Test Zone Center Location x, y, z
10kHz-40MHz	52 V/m	41 x 71 x 41 cm 16 x 28 x 16 in	0, 61, 0 cm 0, 24, 0 in
40MHz-60MHz	54 V/m	36 x 56 x 41 cm 14 x 22 x 16 in	0, 74, 0 cm 0, 29, 0 in
60MHz-80MHz	54 V/m	36 x 41 x 41 cm 14 x 16 x 16 in	0, 81, 0 cm 0, 32, 0 in
80MHz-90MHz	52 V/m	36 x 36 x 41 cm 14 x 14 x 16 in	0, 84, 0 cm 0, 33, 0 in
90MHz-100MHz	46 V/m	36 x 36 x 41 cm 14 x 14 x 16 in	0, 84, 0 cm 0, 33, 0 in