

rf/microwave instrumentation

Model AT€10K100M Broadband €-Field Generator 10kHz-100MHz 500 Watts

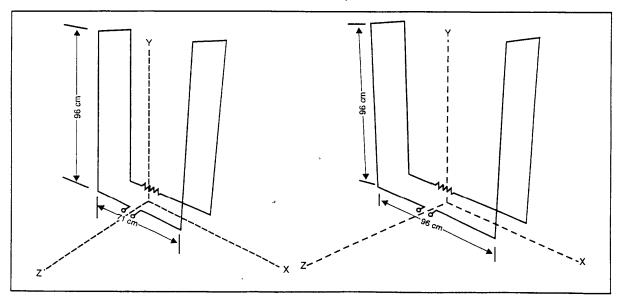
The ATE10K100M is a broadband E-field generator of unique design, which offers operation to 100 MHz, good spatial field uniformity, and high field intensities. This generator is compact and easily supported and positioned using a tripod. It uses high-power low-inductance internal load resistors to terminate 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 $36 \times 46 \times 36$ cm ($14 \times 18 \times 14$ in). The larger set, Type B, is suitable for testing objects up to $48 \times 46 \times 36$ cm ($19 \times 18 \times 14$ in).

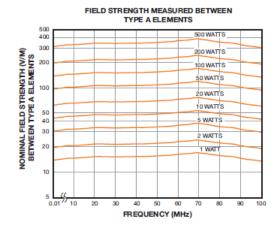
SPECIFICATIONS

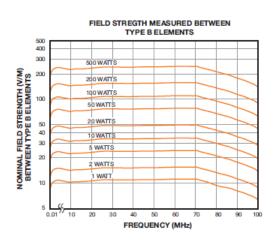
Frequency Range	10 kHz–100 MHz	
Input Impedance	50 ohms	
VSWR	2.5:1 maximum (1.4:1 typical)	
Power Handling	500 watts maximum	
Field Intensity (in defined test volume) Between Type A elements Between Type B elements	Nominally 350 V/m with 500 W input Nominally 200 V/m with 500 W input	
Maximum Test Object Volume Between Type A elements	36 x 46 x 36 cm (14 x 18 x 14 in) 48 x 46 x 36 cm (19 x 18 x 14 in)	
Size With Type A elements With Type B elements		
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 Δx,Δy,Δz	Test Zone Center Location x,y,z
10kHz-40MHz	52 V/m	41 x 71 x 41 cm	0, 61, 0 cm
		16 x 28 x 16 in	0, 24, 0 in
40MHz-60MHz	54 V/m	36 x 56 x 41 cm	0, 74, 0 cm
		14 x 22 x 16 in	0, 29, 0 in
60MHz-80MHz	54 V/m	36 x 41 x 41 cm	0, 81, 0 cm
		14 x 16 x 16 in	0, 32, 0 in
80MHz-90MHz	52 V/m	36 x 36 x 41 cm	0, 84, 0 cm
		14 x 14 x 16 in	0, 33, 0 in
90MHz-100MHz	46 V/m	36 x 36 x 41 cm	0, 84, 0 cm
		14 x 14 x 16 in	0, 33, 0 in





Field strengths are typical and do not include cable losses. Individual shielded rooms, reflections, amplifiers, and test-system characteristics will influence performance.