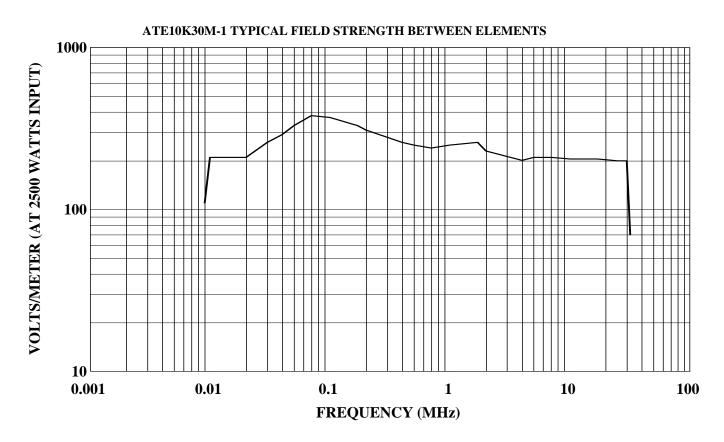


rf/microwave instrumentation

Model AT€10K30M-1, M1, M2 € Field Generator 3000 Watts CW 10kHz-30MHz

The Model ATE10K30M-1 is a broadband, high power E-Field Generator. It uses low-inductance internal load resistors to terminate the RF power and incorporates a broadband transformer to increase the output voltage. The transformer output is unbalanced so that the bottom flange may be unbolted from its wheeled cart and grounded, enabling use above a ground plate or turntable. These features provide a well matched input VSWR with relative freedom from reflections caused by the test object. A high power input rating enables generation of over 200 volt/meter fields.

Field strength data as shown in the following specifications is derived from measurements taken at the center between the elements of the E-Field Generator using broadband isotropic field sensors and an AR RF/Microwave Instrumentation Model 2500L power amplifier. These measurements include 25-foot cable losses as well as RF field losses due to radiation and VSWR effects. The measurements were made in open air and it should be noted that, when using the Model ATE10K30M-1 in a shielded enclosure, additional field strength may be lost due to proximity of the ceiling. AR recommends the use of shielded enclosures having a minimum ceiling height of 6 meters to reduce the effect. Introducing a conductive test object into the E-Field Generator also affects field measurements, usually increasing them.



SPECIFICATIONS, MODEL ATE10K30M-1

POWER INPUT, CW	3000 watts maximum	
FREQUENCY RESPONSE	10 kHz–30 MHz	
INPUT IMPEDANCE	50 ohms, VSWR 2.5:1 maximum VSWR 1.5:1 average	
ELECTRIC FIELD INTENSITY	200 volts/meter minimum between elements (at 2500 watt input)	
RF INPUT CONNECTOR	See Model Configuration	
COOLING	Natural convection to 40°C ambient temperature	
WEIGHT, MAXIMUM	113 kg (250 lb)	
SIZE (WxHxD)	See drawing below	

MODEL CONFIGURATION

MODEL NUMBER	CONNECTOR	SPECIAL FEATURES
ATE10K30M-1	C Female	None
ATE10K30M-1M1	C Female	Top Elements Lower by 13.88"
ATE10K30M-1M2	7-16 Din female	None

