## PERFORMANCE SPECIFICATIONS 1.3

## 1.3.1 **CW** Operation

FREQUENCY RANGES AVAILABLE (GHz): FA  $\mathbf{FB}$ 

.01 to

12 .01 to

18 .01 to

8 2 to

2 12 to

2 to 18

6 12 (5.4 to 12.5 GHz) to

6 18 to

10 to 18

1 MHz (standard) RESOLUTION:

(1 kHz with Option 03)

Identical to time base oscillator ACCURACY/STABILITY:

10 MHz TIME BASE (INTERNAL):

<1 X 10<sup>-6</sup>/year after 20 minutes continuous operation (<1 X 10<sup>-9</sup>/day with Option 06) AGING RATE:

10 MHz, ± 1 X 10<sup>-6</sup> or better TIME BASE (EXTERNAL):

**Spectral Purity** 1.3.2

HARMONICS (up to maximum frequency

of the generator):

<-45 dBc at >2 GHz (-50 typical)

<-30 dBc at <2 GHz

SUBHARMONICS:

None

NONHARMONICS:

<-55 dBc

POWER LINE/FAN RELATED:

<-45 dBc, typical

RESIDUAL FM (50 Hz to 15 kHz BW):

<200 Hz rms

SSB PHASE NOISE (1 Hz BW, 10 kHz offset):

<-75 dBc (<-65 dBc >16 GHz in .01 or 2-18)

**RF** Output Power 1.3.3

MAXIMUM LEVELED OUTPUTS:

+10 dBm

(+8 dBm in Model 6000/.01-18)

RESOLUTION:

0.1 dB

MINIMUM OUTPUT LEVEL:

-120 dBm

RF OFF:

Typically attenuates a 0 dBm signal to <-140 dBm

at the output connector

OUTPUT ACCURACY (Internally Leveled):

 $\pm 2 dB$ 

**OUTPUT FLATNESS:** 

Included in accuracy

**OUTPUT IMPEDANCE:** 

50 ohms, nominal

**OUTPUT SWR:** 

<2:1

EXTERNAL LEVELING:

Negative detector; gain and offset adjustments

provided

1.3.4 General Specifications

REMOTE INTERFACE:

IEEE STD 488-1978, all parameters

except AC power on/off

**OPERATING TEMPERATURE:** 

0 to + 50 degrees Celsius

**ENVIRONMENTAL:** 

Complies with MIL-T-28800D, Type III, Class 5,

Style E

POWER:

 $100/120/220/240 \text{ VAC} \pm 10\%$ , 50-400 Hz,

200 Watts, nominal

WEIGHT AND DIMENSIONS:

	Net	Packed for Air Shipment
Width	16.75 in. (42.5 cm.)	23 in. (56.4 cm.)
Depth	18.00 in. (45.6 cm.)	25 in. (63.4 cm.)
Height	5.25 in. (13.3 cm.)	12 in. (30.4 cm.)
Volume	.92 cu. ft. (.026 cu. m.)	3.99 cu. ft. (.1128 cu. m.)
Weight	40 lbs. (18.2 kg.)	48 lbs. (21.8 kg.)