

2.1 FREQUENCY CHARACTERISTICS

FREQUENCY RANGE:	Indicated (in GHz) by model number suffix (e.g. Model 600/2-8: 2 to 8 GHz)
FREQUENCY RESOLUTION:	1 MHz (standard) 1 kHz (instruments with option 03)
FREQUENCY ACCURACY/STABILITY:	Same as time base
INTERNAL TIME BASE	
FREQUENCY/ACCURACY:	10 MHz, $\pm 1 \times 10^{-6}$
INTERNAL TIME BASE STABILITY:	$<1 \times 10^{-6}$ /year (standard) $<1 \times 10^{-9}$ /day (with option 06)
EXTERNAL TIME BASE:	10 MHz, $\pm 1 \times 10^{-6}$ or better, 0.5 Vpp (overrides internal time base)
TIME BASE OUTPUT:	Buffered 10 MHz, 2 Vpp into 50 ohms (derived from internal or external time base)

2.2 SPECTRAL PURITY

HARMONICS, SUBHARMONICS:	<-40 dBc
SPURIOUS (NON-HARMONICS):	<-55 dBc
POWER LINE/FAN RELATED:	<-45 dBc
SSB PHASE NOISE:	<-75 dBc/Hz (typical) at 10 kHz offset, 1 Hz BW

2.3 OUTPUT CHARACTERISTICS

OUTPUT LEVEL RANGE:	-110 dBm to +10 dBm
OUTPUT LEVEL RESOLUTION:	0.1 dB
OUTPUT LEVEL ACCURACY:	± 2 dB
LEVEL FLATNESS:	Included in accuracy
LEVEL DISPLAY FORMAT:	5-digit display; 0.1 dB resolution
OUTPUT IMPEDANCE:	50 ohms, nominal
OUTPUT CONNECTOR:	type-N female
OUTPUT VSWR:	$<2:1$
EXTERNAL ALC:	Negative crystal detector; gain and offset adjustments provided

2.4 PULSE MODULATION CHARACTERISTICS

PULSE RATE:	10 Hz to 1 MHz (internal or external)
PULSE DELAY:	10 nanoseconds to 100 milliseconds
PULSE WIDTH:	100 nanoseconds to 100 milliseconds (internal), >100 nanoseconds (external), $<75\%$ duty factor
RISE/FALL TIMES:	<25 nanoseconds (RF output)
ON/OFF RATIO:	>80 dB
EXTERNAL MODULATION INPUT:	TTL compatible, 10 Hz to 1 MHz, positive level for RF on

SYNC OUTPUT: + 1 V pulse into 50 ohms, width approx.
50 nanoseconds, follows modulation rate

VIDEO OUTPUT: TTL compatible, follows modulation rate and width

2.5 AMPLITUDE MODULATION CHARACTERISTICS

MODULATION RATE: 10 Hz to 10 kHz (3 dB points referenced to 1 kHz),
square or sine (internal), any waveform (external)
1 kHz fixed square (internal)

DEPTH: 0 to 82% (0 to 20 dBm), min measured at +3 dB

INPUT SENSITIVITY: 1 Vpp = 50% modulation at 1 kHz rate

INPUT IMPEDANCE: 600 ohms, BNC

DISTORTION: <10% at 1 kHz rate, 50% depth (sine wave) measured at +3 dBm

DISPLAY ACCURACY: $\pm 10\%$ at 1 kHz rate, 50% depth

2.6 FREQUENCY MODULATION CHARACTERISTICS

MODULATION RATE: 10 Hz to 1 MHz (external)
10 Hz to 100 kHz sine or triangle (internal)
1 kHz fixed triangle (internal)

DEVIATION: ± 5 MHz, peak

INPUT SENSITIVITY: 2 Vpp for maximum deviation

INPUT IMPEDANCE: 50 ohms (nominal), BNC

DISTORTION: <5% at 500 kHz rate, 5 MHz peak deviation

DISPLAY ACCURACY: $\pm 10\%$ at 100 kHz rate, 3 MHz peak deviation

2.7 GENERAL

REMOTE INTERFACE: IEEE STD 488-1978

WARM-UP TIME: 20 minutes, max

OPERATING TEMPERATURE RANGE: 0 to + 50 degrees Celsius

ENVIRONMENTAL REQUIREMENTS: Type tested to MIL-T-28800C, type III,
Class 5, Style E, Color R

POWER: 100/120/220/240 VAC $\pm 10\%$, 50-400 Hz, 200 watts max

DIMENSIONS: 16.75" X 5.25" X 18"; 40 lbs nominal

CALIBRATION INTERVAL: 9 months