

Table 1-1. Specifications

## — RANGES —

**Frequency:** 4 Hz to 2 MHz in 6 ranges.

## — PERFORMANCE RATINGS —

**Dial Accuracy:**  $\pm 3\%$  of frequency setting.

**Flatness:** At maximum output into 600 ohm load.  
1 kHz reference.

Low Distortion Mode	$\pm 1\%$	$\pm 0.5\%$	$\pm 1\%$	$\pm 5\%$
Normal Mode	$\pm 5\%$ $-1\%$	$\pm 0.5\%$	$\pm 1\%$	$\pm 5\%$

(Hz)    4        100        300k        1M        2M

### Distortion:

Frequency (Hz)	Normal Mode Distortion (%)	Low Dist. Mode Distortion (%)
4	1.0	-
20	0.5	0.1
100	0.1	0.1
200	0.1	0.1
1000	0.1	-
2000	0.5	-
20000	1.0	-

**Hum and Noise:** less than 0.01% of output.

## — OUTPUT CHARACTERISTICS —

### SINE WAVE

**Output Voltage:** 5 V rms (40 mW) into 600 ohms; 10 V open circuit. Output can be floated up to  $\pm 500$  V peak between output and chassis ground.

**Output Impedance:** 600 ohms.

**Output Control:** 20 dB range continuously adjustable.

**Output Balance:** greater than 40 dB below 20 kHz.

## SQUARE WAVE

**Output Voltage:** 20 V p-p open circuit symmetrical about 0 V. Output can be floated up to  $\pm 500$  V peak between output and chassis ground.

**Rise and Fall Time:** less than 50 ns.

**Symmetry:**  $\pm 5\%$

**Output Impedance:** 600 to 900 ohms depending upon setting of output control.

## — EXTERNAL SYNCHRONIZATION —

**Sync Impedance:** 10 kilohm.

**Sync Output:** Sine wave in phase with output; amplitude working into 1 megohm shunted by 100 pF is greater than 1.7 V rms from 4 Hz to 50 kHz, greater than .1 V from 50 kHz to 2 MHz.

**Sync Input:** Oscillator can be synchronized to external signal. For 5 V rms input, sync frequency can be as much as  $\pm 7\%$  away from set frequency (sync range). Sync range is a linear function of sync voltage.

## — GENERAL —

**Operating Temperature:** Instrument will operate within specifications from 0% C to 55% C.

**Storage Temperature:** -40% C to +75% C

**Power:** AC-Line 115V or 230V  $\pm 10\%$ , 48 Hz to 440 Hz. less than 7 W.

### Dimensions:

Refer to Figure 2-1, page 2-2.

**Accessories Available:** HP 11075A Instrument Case.