Table 9G-1-1. Specifications

INPUT

Range: Hz mode 5 Hz to 2 MHz
CPM mode 50 to 10M counts/minute (0.833 Hz to 166 KHz)

Sensitivity (min):

Sinewaves	Hz	CPM
10 mV rms	5 Hz - 1.2 MHz	120 CPM - 10M CPM
25 mV rms	1.2 MHz - 2.0 MHz	50 CPM - 120 CPM

Pulses

For low duty cycle pulses (<15%)

15 mV peak for 250 nsec pulses

100 mV peak for 100 nsec pulses

Basic sensitivity can be varied continuously up to 2.5 V rms by adjusting sensitivity control.

Attenuator: ÷1 or ÷100 effectively raises basic input sensitivity by a factor of 100 (10 mV→2.5 V to 1 V→250 V)

Low Pass Filters (3 dB Point):	100 Hz	10 KHz
Max Attenuation	60 dB	40 dB
Roll off	20 dB per decade	20 dB per decade

Impedance: No filters, 1 MΩ shunted by <50 pF
100 Hz filter, 1 MΩ shunted by series combination of 100 KΩ and .015 μF
10 KHz filter, 1 MΩ shunted by series combination of 100 KΩ and 150 pF

Coupling: ac

Overload Protection: 200 V rms below 10 kHz
2×10^6 V Hz (voltage times frequency) rms to 0.4 MHz
5 V rms above 0.4 MHz,
with ÷100 attenuator, 300V rms

Trigger Level: Selectable positive or negative for optimum triggering from sinusoidal inputs or pulses

Table 9G-1-1. Specifications (Continued)

FREQUENCY MEASUREMENT

Periods Averaged: Automatically selected for maximum resolution. Two periods are averaged for signals up to 100 Hz. For each decade increase in the input signal the number of periods averaged increases by a factor of 10 up to 200,000 periods averaged above 1 MHz.

Measurement Time: Varies from 312 msec for a display of 170000 to 815 msec for a display of 999000.
Hold-off adjustable from .35 μsec to 3.5 μsec and 1 msec to 10 msec.

Accuracy: $\pm 3 \times 10^{-5}$* ± 1 count ± trigger error** ± time base error.

*$\pm 3 \times 10^{-5}$ is due to reciprocating scheme and is worst case.
**Trigger error is less than ±.03% of one period ÷ periods averaged for sine waves with 40 dB or better signal to noise ratio.

Display: In Hz mode; Hz and MHz with automatically positioned decimal point.
In CPM mode; M with automatically positioned decimal point.

GENERAL

Check: Measures internal reference frequency. Displays 1.00000 MHz in Hz mode, 100000 M in CPM mode.

Operating Temperature: 0° to 50°C

Power Requirements: Including 5300 Mainframe, nominally 10 watts

Weight: Net 2 lbs. (0.9kg). Shipping 3¼ lbs. (1.5kg)

Dimensions (with 5300 Mainframe): Height: 3½ in. (89mm); Width: 5¼ in. (160mm); Depth: 9¾ in. (248mm).