Advantages:
- Reliable, rugged and compact
- Stable internal frequency standard
- Low power consumption with solid-state components
- Modular cabinet permits bench or rack operation

Uses:
- Accurate low frequency measurements with multiple period averaging
- Low-level measurements without accessories
- Higher sampling rates; sampling time independent of gate timing

These six Hewlett-Packard electronic counters offer the advantages of solid-state construction, broad measurement capabilities, rugged and compact packaging and a wide selection of performance characteristics.

Maximum counting rate ranges from 300 kc to 1.2 mc. A variety of visual readouts contain from 4 to 6 digits, with both in-line digital tube and neon columnar displays. Features offered in common by all six counters include modular cabinets only 3-1/2” high, low heat dissipation and power consumption with solid-state components, 0.1 v sensitivity, display storage for non-blinking readout, four-line BCD output for systems and recorders, flexible operation and reduced operator errors. When a counter is in the frequency mode, the time between counts is adjustable from less than 0.2 second to more than 5 seconds and is independent of gate time. Because time between counts is not dependent upon gate time, faster sampling rates are often possible.

The instruments are compact and reliable, have low power consumption and can operate with specified accuracy over a wide temperature range. Plug-in module construction increases instrument versatility and simplifies maintenance. Conservative design features, such as the use
of decade dividers in the gate generating circuits, provide operational stability and eliminate
calibration problems. Input sensitivity is 0.1 volt rms, input impedance, 1 megohm.

**5212A, 5512A, 5232A, 5532A Counters**

With this group of solid-state instruments, two basic counters give maximum counting rates of
300 kc and 1.2 mc, with a choice of column or in-line readout. Each makes direct frequency,
period, multiple period average and ratio measurements. Models 5212A and 5512A have a
maximum counting rate of 300 kc, 5-digit resolution and respective displays of neon columns
and long-life digital display tubes. Models 5232A and 5532A have maximum counting rates of
1.2 mc and 6-digit resolution with the same readout choice.

The front panel of each counter has input attenuation control, display control, reset button and
function switch. In the rear are the storage-disable switch, external standard input jack (permits
use of an external oscillator as the counter time base) and digital recorder output connector.
Self-check is provided for both frequency and period measurement modes.

**General Specifications**

**Operating temperature range:** -20°C to 60°C (-20°C to +5°C for 5211A,B).

**Weight:** all models, net less than 15 lbs (6.8 kg).

**Dimensions:** 16-3/4'' wide, 3-1/2'' high, 11-1/4'' deep (425 x 89 x 286 mm) ; hardware furnished
for converting to 19'' wide by 3-1/2'' high rack mount.

**Power:** 115 or 230 V +/-10%, 50 to 60 cps*, less than 40 W.

**Accessories furnished:** 10503A Cable, 4 feet long, BNC connectors; detachable power cord;
circuit board extender.

* hp 5211A,B require 50 or 60 cps operation (specify Option 01. For 50 cps operation); 5212A, 5512A, 5232A and 5532A operate between 50 and 60 cps line frequency with limit imposed by fan.

This excerpt uses data from a [www.hparchive.com](http://www.hparchive.com) website document.