A full-function counter for both microwave frequency and selective power measurement: The EIP 545A.

A combination of accuracy, simple operation, and a range of features and options not available in any other counter make EIP's 545A the perfect choice for production test bench, research lab or field maintenance, or for when your counter must do double or triple duty.

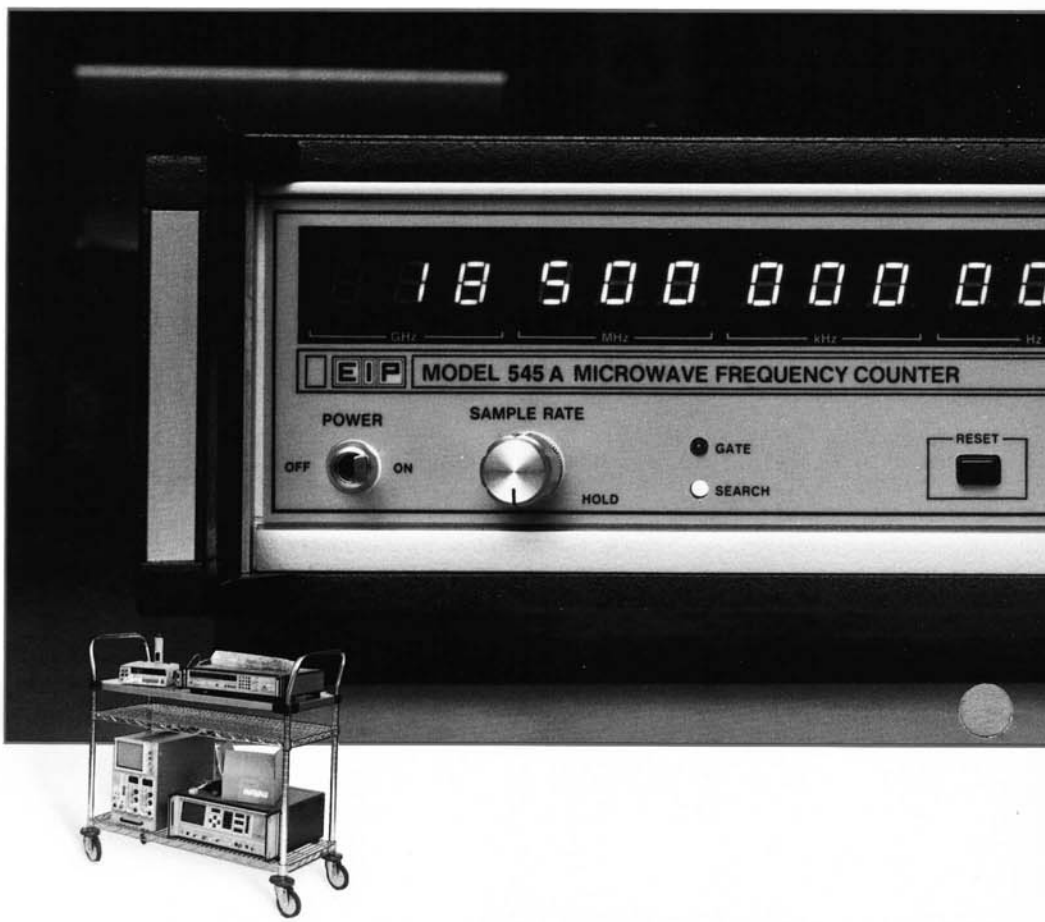
The 545A provides high-level burn-out protection, plus the other inherent benefits of a YIG front-end described on pages 1 and 2 of this brochure. It also provides the following features that broaden its application and make it especially cost-effective for a facility where test equipment flexibility is important.

EIP's 545A at a glance

- ☐ Keyboard controlled frequency limit selection
- ☐ Power measurement to 0.1 dB resolution
- ☐ Power Measurement Accuracy to 0.5 dB, typical
- ☐ – 30 dBm sensitivity
- ☐ 10 watt (+ 40 dBm) damage protection
- ☐ 10 dB automatic amplitude discrimination
- ☐ 250 ms acquisition time
- ☐ Up to 400 MHz/sec tracking speed
- ☐ 20 MHz P-P FM tolerance up to a 10 MHz rate

Frequency Limits. In the normal mode of operation, automatic amplitude discrimination enables the 545A to measure the largest signal in the microwave spectrum, provided there is a 10 dB difference in amplitude. However, front-panel programming makes it easy to select upper and lower frequency limits, permitting the counter to "look" for signals only within the selected frequency range. This lets you count and measure the power of a low-level signal (such as a harmonic) even when a signal of much higher level is present.

Optional Power Measurement. With the 545A's ability to simultaneously measure frequency and power, you can often eliminate the

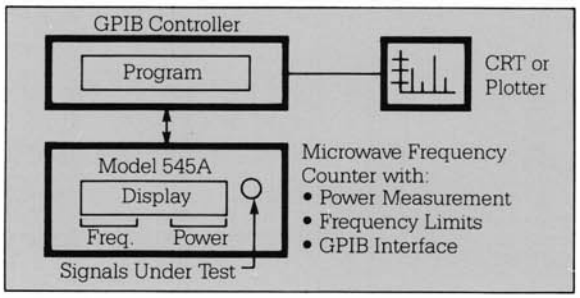


need for a separate microwave power measurement instrument. With a bandwidth of approximately 25 MHz, EIP's unique YIG-tuned pre-selector measures the power of the specific displayed frequency.

Thus, the user can simultaneously measure both the frequency and the power of individual signals in a multi-signal environment. In the power measurement mode, the counter will measure frequency and power of the selected signal to a resolution of 100 kHz and 0.1 dB, respectively. Convenient keyboard-entered power offsets can be used to measure power deviation from a reference signal or to compensate for losses in external hook-ups, such as cable or attenuator losses.

Frequency Domain Analysis. When equipped with GPIB (option 8), frequency limits and power measurement capabilities, the 545A can perform spectrum analysis automatically and accurately using a controller and a CRT or plotter.

This often eliminates the need for an expensive spectrum analyzer—and thus provides a very cost-effective technique for frequency domain analysis.



Frequency domain analysis may be accurately performed with a microwave frequency counter in a simple setup.