

ELECTRONIC COUNTERS

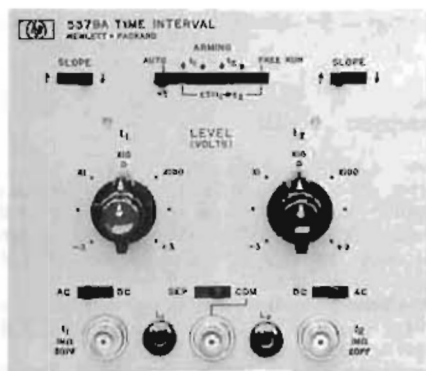


Computing counter system

Models 5360A & 5375A - 5379A



5360A



5379A



5375A

The Computing Counter is a general purpose precision digital instrument with built-in arithmetic capability. As a measuring device the Computing Counter provides unequalled precision. For example, it can measure the time between two events to a resolution of 100 picoseconds, about the time it takes light to travel one inch.

The Computing Counter's unique measurement technique employs extensive use of digital computation. Thus the mainframe contains an arithmetic unit which is an inherent, indispensable part of the measurement cycle. The arithmetic capability of the machine has been made available to the user via several programming devices. This allows the system to be programmed to solve equations where measurements are the variables, in real time. This capability enormously increases the power of the Computing Counter System.

Key specifications include a dc to 320 MHz direct count frequency range, measurement resolution of 1 part in 10^{10} per second of gate time, and ± 100 psec single shot time interval resolution using the 5379A Time Interval plug-in. A detailed description of the Computing Counter System and complete specifications are contained in the Computing Counter data sheet, available upon request.

5379A Time interval plug-in

With the 5379A Time Interval Plug-In, the Computing Counter becomes a high precision and versatile time interval meter. Measurements can be made down to zero and even "negative" times by virtue of a unique arming scheme. Single shot events can be measured with ± 100 psec resolution and an accuracy of ± 1 nsec. By programming the Computing Counter from any of a number of programming devices (such as the 5375A Keyboard), the average of a number of measurements can be displayed to resolutions better than 5 psec.

5375A Keyboard

The 5375A provides the Computing Counter with the capability to add, subtract, multiply, divide and perform square root, logarithm and exponential functions. Decision capability and branching are possible also. Electrical outputs are made available for limit testing and peak to peak measurements.

10536A Plug-In Adapter

The 10536A Adapter is a versatile accessory which allows nine of the 5245 series plug-ins to be used in the Computing Counter. Frequency range can be extended to 18 GHz with these plug-ins.

Model number and name
 5360A Computing Counter
 5379A Time Interval Plug-In
 5375A Keyboard
 10536A Plug-In Adapter

Price
 \$6695
 \$1000
 \$1570
 \$350