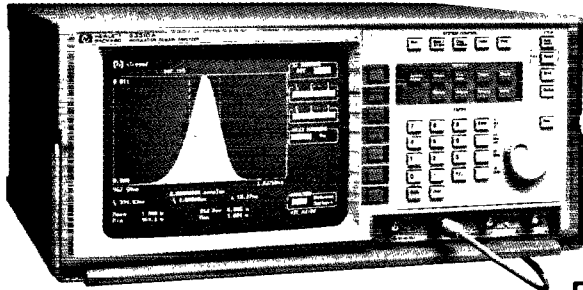


# ELECTRONIC COUNTERS

## Modulation Domain and Time Interval Analyzers

HP 53310A, E1725A, E1740A, E1741A, E1742A, E1743A, E1744A, E1747A

- 200 ps rms single-shot resolution, 1 ps with averaging
- DECT, CT2, CT3 mobile communications measurements
- Easy-to-use



HP 53310A



### HP 53310A Modulation Domain Analyzer

#### Affordability and Ease of Use

The most affordable modulation domain analyzer, the HP 53310A, includes many innovations for ease of use. Characterization of modulation and jitter is easy with built-in analysis. Parameters such as peak-to-peak deviation, carrier frequency, and modulation rate are all quickly and automatically displayed. Jitter analysis is simplified with automated mean, standard deviation, and probability functions. Key features of this frequency and time interval analysis product include:

- **Automated setup:** A single button can set up the HP 53310A for measurement. Signals are automatically evaluated.
- **Single-touch measurements:** Peak-to-peak deviation, carrier frequency, and modulation rate are easily and quickly measured for quantifying modulation. The Save/Recall function stores up to 10 measurement steps for fast repeat operations.
- **Built-in statistics:** Mean, standard deviation, and probability function buttons simplify jitter analysis.
- **Softkey-driven menus:** Measurement parameters and analysis functions are easily selected while viewing measurement data.
- **Large display:** The expanded screen displays measurement results clearly and aids analysis.
- **Low cost:** The HP 53310A is priced to fit budget-constrained projects and departments.

#### Product Features

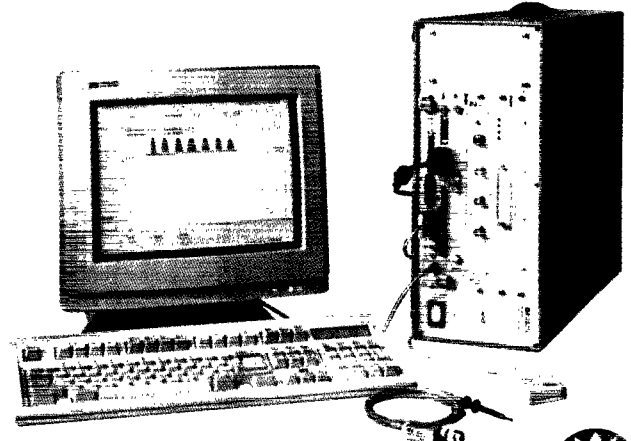
The HP 53310A offers powerful analyzer features:

- **Dual timebases:** Main timebase and window timebase allow data capture while viewing measurement details in the window.
- **Auto or triggered operation:** Select auto triggering, edge-triggering (rising or falling), or a unique feature: measurement value triggering (frequency or time interval). Value triggering can eliminate the need for and expense of external sync signal generation, shortening project time and lowering costs.
- **Display vs. time or histogram:** Select appropriate views.
- **Fast histograms:** Up to 16 million measurements per acquisition.
- **Automated measurements:** Autoscale selects appropriate setup parameters; built-in analysis functions eliminate calculations.

#### Specifications and Ordering Information

See page 158 for key specifications and ordering details.

- Highest performance HP TIA
- Fast histograms, statistics, and window margin analysis
- Analyze data storage devices
- Study and identify clock jitter
- Analyze jitter in SONET/SDH networks
- Study jitter in Token Ring networks



HP E1725A



### HP E1725A Time Interval Analyzer

The HP E1725A Time Interval Analyzer (TIA) combines a fast measurement sampling rate with a large memory and advanced analysis capabilities. Optional software packages, purchased separately or as options with the HP E1725A instrument, tailor the instrument to meet a variety of demanding application areas.

Configured with the HP E1741A time interval analyzer software, the HP E1725A is the first TIA tailored for the characterization of high-speed data storage devices. This year, HP has added new options to address other applications involving jitter analysis.

#### Versatile Design and Operation

Tailored for benchtop use, the HP E1725A instrument integrates a high-performance time interval analyzer with an embedded IBM-compatible PC based on the Intel 486™ processor. The MS®-Windows interface streamlines setup and offers complete control of measurement and analysis parameters. Measurements are carried out and stored in the instrument's 512K of memory. Built-in histograms, window margin analysis, and statistics functions speed access to many results.

For customers that desire a VXI solution, HP offers the HP E1740A time interval analyzer card. The HP E1725A benchtop instrument and HP E1740A VXI TIA card offer equivalent measurement capabilities, and the software packages that run on the HP E1725A can be purchased as add-on products for the HP E1740A.

#### Advanced Analysis Software

The current HP E174XA software solutions address four application areas described in the two previous pages of this catalog. These applications and corresponding software include:

- Data storage and test: HP E1741A and HP E1747A
- SONET/SDH tributary jitter analysis: HP E1742A
- Clock jitter analysis: HP E1743A
- Token Ring jitter analysis: HP E1744A

#### Specifications and Ordering Information

See page 158 for key specifications and ordering details.