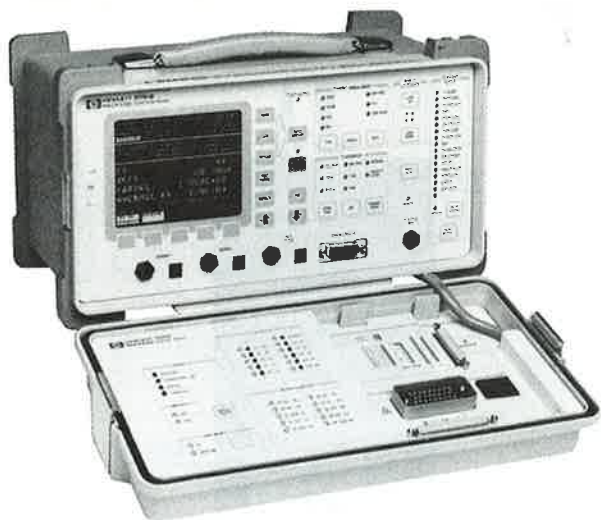


# SONET/SDH TEST SETS

## T1/FT1, DS3/STS-1 Test Sets

HP 37701B, 37702A, CERJAC Series 31XE

- Complete T1, fractional T1, DDS and datacom testing
- Graphical display of test results
- Automated setups for ease of use



HP 37701B

### HP 37701B T1/Datacom Tester

The HP 37701B T1/datacom tester offers complete T1 and fractional T1 bit error and signal measurements. It also generates tones in a channel and allows VF signals in any timeslot to be monitored. Test results are presented using easy-to-read bar charts allowing quick analysis of the circuit trouble. Tests can be performed using auto-configure or user-prestored setups for fast and easy testing. Optional pulse shape and clock slip analysis allow quick, graphic interpretation of distortion and timing problems. DTE/DCE interface and measurements can be added for datacom testing.

### HP 37702A Digital Data Tester

The HP 37702A digital data tester has all the functions of the HP 37701B plus DDS capabilities in one unit. It performs the full range of DDS testing from simple in-service tests to complete installation and acceptance tests. Built-in T1 channel access allows access to a signal in any timeslot.

### Applications

Installation and maintenance of T1, FT1, or DDS facilities at:

- Central offices
- Outside plant
- Customer premise

### Measurement Summary

**T1:** Auto code, frame, and pattern detection, error monitoring, BER testing, alarm, and event generation, ESF decode and encode, DS1 signal level and frequency, fractional T1  $n \times 56$  or  $n \times 64$  kb/s contiguous or non-contiguous

**DDS:** (DS0A, DS0B) BER testing, error correction, error monitoring, loopback operation and MJU control.

### Ordering Information

<b>HP 37701B</b> T1/Datacom Tester	<b>Price</b> \$6,950
<b>HP 37702A</b> Digital Data Tester	\$9,950
<b>Opt 001</b> Pulse Shape, Clock Slips, Wander	+ \$850
<b>Opt 002</b> Datacom Measurements	+ \$2,500
<b>Opt 003</b> 12V Battery Operation (37701B only)	+ \$950
<b>Opt 004</b> DS0B Interface (37702A only)	+ \$350
<b>Opt V01</b> Virtual Remote	+ \$510

- Tests all T-Carrier transmission rates
- Full transmit and receive functions
- Expandable to SONET STS-1



CERJAC 31XE

### CERJAC 31XE

The CERJAC 31XE is a complete DS3 test set that offers a wide range of optional features including DS0, DS1, E1, and SONET/STS-1 testing. DS0 and E1 timeslot drop and insert as well as jitter, and signal measurements at DS3, DS1, E1, and STS-1 are powerful capabilities also available. The modular configuration of the 31XE offers a cost-effective means of addressing current requirements while maintaining the flexibility to expand to future network applications.

### Applications

In-service or out-of-service testing of all T-Carrier rates and SONET/STS-1 for troubleshooting, fault isolation, service verification and acceptance testing in central office or field applications.

### Measurement Summary

**DS3:** Error monitoring, BER testing, alarm and error generation, Far-End Alarm and Control (FEAC), framing auto detection, DS3 jitter and DS3 signal power measurement

**DS1/FT1/E1:** Error monitoring, BER testing, alarm and error generation, framing auto-detection, Fractional T1 testing, DS1 and E1 jitter and signal level measurement

**DS0:** BER tone testing data monitoring

**STS-1:** Error monitoring, BER testing, DS3 and VT1.5 mapping, jitter and signal power measurement

### Ordering Information

<b>HP E4487A</b> CERJAC Series 31XE with DS3 only	<b>Price</b> \$7,650
<b>Opt UHR</b> IEEE-488 and RS-232 Interface (SCPI)	+ \$765
<b>Opt UQZ</b> Second DS3 Receiver	+ \$2,295
<b>Opt UQT</b> DS1 Rx/Tx, Drop and Monitor from DS3	+ \$1,530
<b>Opt UQU</b> DS1 Insert	+ \$970
<b>Opt UQV</b> DS0 Drop and Insert (requires UQT)	+ \$665
<b>Opt URN</b> E1 Testing with Drop from DS3	+ \$2,450
<b>Opt UR5</b> STS-1 Rx/Tx with DS3 Mappings	+ \$5,610
<b>Opt UQA</b> VT1.5 Mapping	+ \$3,570
<b>Opt UQP</b> DS3 Jitter Measurement	+ \$2,295
<b>Opt UQQ</b> DS1 Jitter Measurement (requires UQP + UQT)	+ \$400
<b>Opt UQR</b> E1 Jitter Measurement (requires UQP + URN)	+ \$400
<b>Opt URM</b> 1.544 MHz Bits Clock Input/Output (requires UR5)	+ \$705

Other options available