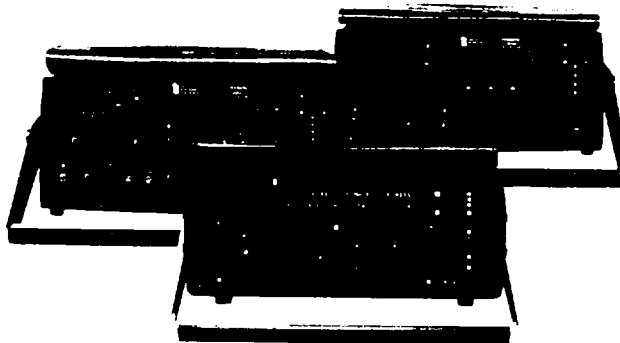


The FIREBERD product family is comprised of three test sets — the 1500A, 2000, and 6000 — used for testing the transmission quality of digital communications circuits. The FIREBERD products are multifunction instruments capable of performing a comprehensive set of measurements to evaluate the protocol-insensitive characteristics of digital communications systems. The inherent flexibility of the FIREBERD products makes them the preferred test sets for both end users and carriers alike. The FIREBERD instruments are able to test over a wide range of data rates — with synchronous, asynchronous, or recovered timing — by utilizing a complete selection of data interfaces ranging from RS-232 through T2. Carefully designed for ease of use by expert and novice, the lightweight and rugged FIREBERD is equally suited for field or laboratory work. The FIREBERD products' flexible architecture and comprehensive capabilities ensure that they will remain useful and current in the dynamic world of digital communications testing. With thousands of FIREBERD products already in use it is obvious why the FIREBERD has become the defacto standard in the industry for quality test instruments.

## COMMON FEATURES

- Error analysis from 50 b/s to 15 Mb/s
- 18 Interchangeable data interfaces
- In-service and out-of-service measurements
- Long-term and unattended testing
- Remote control capabilities
- RS-232 and IEEE-488 printer interfaces
- Portable or rack-mount configuration
- 3-Year mainframe warranty



**FIREBERD 1500A**

- 7 bit and block error analysis results
- Basic field service testing tool
- Easy to use for all technical skill levels
- Extremely cost-effective

**FIREBERD 2000**

- Comprehensive error analysis results
- Simultaneous measurement capability
- Tx and Rcv frequency measurements
- RS-232 and IEEE-488 remote control
- Real-time clock

## FIREBERD 6000

- Over 50 measurements/results (including G.821)
- Advanced error analysis for in-service or out-of-service testing
- Frequency synthesizer permits testing at any data rate
- Timing and signal analysis
  - Frequency measurements
  - Clock slip measurements
  - Delay measurements
- Comprehensive remote control
- Jitter generation/analysis
  - 5 standard jitter masks (including 62411)
  - Wideband jitter and jitter hits
  - Spectral analysis
- T-Carrier testing
  - Unframed, D4, ESF or SLC\*96 framing
  - AMI and B8ZS coding
  - BPV, Frame, and CRC analysis on live traffic
  - BPV and logic error insertion on live traffic

## APPLICATIONS

- |                             |   |
|-----------------------------|---|
| <i>for testing</i>          | T-Carrier Systems . . . Multiplexers . . . Digital Radio Circuits . . . Fiber Optic Systems . . .<br>Satellite Communications Systems . . . DDS . . . Modems . . .                |
| <i>in such locations as</i> | Central Office . . . Tech Control Centers . . . End User Sites . . . Laboratories . . . Earth<br>Stations . . .   |
| <i>during</i>               | Installation . . . Acceptance Testing . . . Maintenance and Fault Isolation . . . Production<br>Testing . . . Hardware Development and Evaluation . . . Remote Unattended Testing |

## OPTIONS AND ACCESSORIES

The FIREBERD product family is complemented by a variety of options and an extensive line of accessories that are interchangeable among the three FIREBERD test sets. In addition to cables, printers, and other peripherals, TTC offers a complete selection of data interface modules that permit testing of RS-232, V.35, RS-449 (V.10, V.11), X.21, MIL 188, WECO 303, TTL, DS0, T1, TIC, T2, and G.703 systems.

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