



Hand-Held DS3 Analyzer

In the Monitor mode, the PF-47 monitors a live DS3 signal for errors and alarms. In the Test mode, the PF-47 sends and receives a repeated pattern and determines the errors that have occurred in transmission. In the Thru mode, signals can be monitored in-service and errors inserted.

- Comprehensive testing of all major DS3 network elements and digital transmission systems
- Full DS3 Bit-Error-Ratio-Test-Set (BERTS)
- Complete PRBS/Programmable/Digital Word selection
- Self-contained rechargeable battery-pack provides 5 hours in Test Mode (Tx & Rx active), 8 hours in Monitor Mode (Rx active)

Portability Carried by its shoulder strap, the PF-47 is always ready when needed, and its high capacity, rechargeable battery pack can perform a full day's work. Although it is small, it is ruggedly built and feature-packed. The results can viewed



Specifications

Modes: Test, Monitor, Through

Error/Alarm insertion: Bit, BPV, Frame, Par, C-Par, FEBE

Rx Status LEDs: No Signal, No Frame, No Pattern, C-Par, AIS, Idle, X-bit

Test patterns: PRBS $2^{23}-1$, $2^{20}-1$, $2^{15}-1$, $2^{11}-1$, 2^9-1 , 1000, 1100, 1010 (not AIS), 100, 1111, DigWrd 1, DigWrd2

Alarms: AIS, Yellow, Idle

on the front-panel display whose backlight can be turned on for excellent readability under low-light conditions.

Everything at a glance The PF-47 is built for straightforward operation. The AutoSetup feature is very handy for monitoring since the PF-47 will determine the received signal's frame format and pattern (if any). All instrument settings are indicated on the LC display, while the status LEDs provide information on recorded alarms and inserted errors.

RS232 Printer/Remote Control Port The PF-47 can be remote-controlled via the RS232 port, so complete instrument functionality can be gained from a remote location. Connected to a printer via the RS232 port, the PF-47 provides a versatile set of print features. When the Man Print key is pressed, a summary of the measurement run results is printed out, as well as the complete instrument setup. With the Summary AutoPrint feature, the PF-47 will automatically print a summary at regular time intervals (such as every 5 minutes or 24 hours).

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PF47 Summary          Manual
Time: 02:18:55          ElapsSecs: 9
Date: July27.92        ElapsTime: 0000:00:09
Mode: Test              Aux Err: Fbit
Pattern: 2E15-1         Test Duration: Cont.
TxLevel: DSX            Hr/Min/Sec Continuous
RxLevel: H1/L0          AutoPrint OFF
Frame: C-Par
TxClock: Int

| Bit | BPV | Parity | CParity | FEBE | Frame |
-----|-----|-----|-----|-----|-----|
|ErrCat | 01 | 01 | 01 | 187801 | 229271 | 01
|Err/S | 01 | 01 | 01 | 46721 | 57491 | 01
|DrbCnt | 01 | 01 | N/A | N/A | N/A | N/A
|CurBER | 0E-08 | 0E-08 | 0E-08 | 06E-04 | 1.30E-04 | 0E-06
|AugBER | 0E-08 | 0E-08 | 0E-08 | 1.06E-04 | 3.0E-04 | 0E-06
|DrbBER | 0E-08 | 0E-08 | N/A | N/A | N/A | N/A
|ErrSec | 01 | 01 | 01 | 41 | 41 | 01
|E-6ES | 01 | 01 | 01 | 01 | 01 | N/A
|E-6ES | 01 | 01 | 01 | 41 | 41 | N/A
|E-6ES | 01 | 01 | 01 | 41 | 41 | N/A
|E-9ES | N/A | N/A | N/A | N/A | N/A | 01
|E-9ES | 01 | 01 | 01 | 41 | 41 | 01
|E-9ES | 01 | 01 | 01 | N/A | N/A | 01
|E-2ES | N/A | N/A | N/A | N/A | N/A | 01
|EFS | 100.01 | 100.01 | 100.01 | 0.01 | 0.01 | 100.01
-----|-----|-----|-----|-----|-----|
| Event | Alarm | NoSig | NoFrm | NoPtn | AIS | Idle | Xbit | NoPrt |
-----|-----|-----|-----|-----|-----|-----|-----|-----|
|Secs | 41 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
PF47 Summary: END
    
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The summary print includes time-stamped events and alarms. Individually designed printouts can be generated by setting event thresholds.

For more information:
PF-47 DS3 Analyzer **BN 9403/01**