

SUNRISE TELECOM®

# SunLite E1

2.048 Mbit/s Test Set

Data Sheet



The SunLite E1 Test Set

Fulfill your 2.048 Mbit/s transmission testing needs by using the world's smallest full-feature 2.048 Mbit/s transmission test set, the SunLite E1. Put this economical, yet powerful SunLite E1 in your shirt pocket.

## FEATURES

- 2.048 Mbit/s transmit, receive and external clock
- Bit error rate testing (ITU-T G.821)
- ITU-T G.826, M.2100 analysis
- Level and frequency measurements
- +6 to -43 dB receiver input sensitivity
- Term, PMP (Monitor), High Impedance
- Drop and insert capability (N or Mx64k)
- Programmable NFAS Word
- CAS signaling
- Histogram analysis
- Propagation delay
- Store up to 10 test results and 10 configurations
- 75Ω and 120Ω models
- Powered by rechargeable NimH battery pack

## BENEFITS

- Lightweight
- Economical and affordable
- Compact full-featured E1 tester
- Easy to use

## APPLICATIONS

- Ideal for field testing
- Commissioning and provisioning of 2M networks
- Network maintenance and system integration
- Equipment verification

## SPECIFICATIONS

### Connectors/Ports

2.048 Mbit/s E1 interfaces: Tx, Rx, Ext. Clock

Standard: BNC (f)

Optional: BR2 (f), Bantam (f)

Serial Ports: RS-232/V.24, RJ11, 6-pins connector

Charger: 1mm, DC jack

### Status/Alarm Indicators

LED indicators

Current status and alarm history

*The SunLite E1 gives you the choice of 75Ω unbalanced or 120Ω balanced connectors.*

*A bright backlight LCD display is ideal for often encountered low light working conditions.*

*Bring LED indicators provide immediate circuit status and history at a glance.*

*With a single keystroke you can configure the SunLite E1 to your circuit and call up the menu for the test you wish to perform.*

*The speaker and microphone allow you to monitor the channel or to talk-and-listen.*

*The test set operates continuously from the charger.*



## SPECIFICATIONS

### E1 General

Bit Error test  
Drop and insert to internal test circuitry

### Test Pattern Generator

Fixed, PRBS, User programmable

### Transmitter

Clock source  
Internal clock, Received, External  
Programmable Time slot 0  
Set idle channel code and ABCD bits (IDLE/NOT IDLE state)  
Transmit signal can be turned ON/OFF or internally looped  
Error injection

### Receiver

Frequency range: 2.048 Mbit/s  $\pm$  6000 bit/s for SLE1  
Auto configuration for framing and test pattern

### Measurements

E1 signal level  
Frequency measurement  
Clock slips count  
Code errors  
Frame errors  
Count of LOS, Loss of Sync (SYLS), LOF, AIS, FAS RAI, and MFAS  
RAI seconds  
Bit errors: ITU-T G.821 analysis  
ITU-T G.826 measurements  
ITU-T M.2100 measurements (in conformance with M.2101)  
E-bit errors  
Setup and test results printing  
Test duration programmable  
Print interval programmable  
Time stamped events printing  
Delay timer settable up to 99 hrs., 59 min  
Audible alarm  
Alarm Generation

### Other Measurements

Save test results  
Histograms  
Propagation Delay measurements  
View Received Data

### Voice Frequency Capability

Talk/listen by using the built-in microphone speaker  
Companding: A-law or  $\mu$ -law  
Monitor and CAS modes  
ABCD bits display  
CAS signaling monitoring (IDLE/ NOT IDLE state)  
Set ABCD bits to 1 or 0 of selectable timeslot  
Set CAS state IDLE/NOT IDLE  
Set Idle Channel Code

### SLE1-01 Clock Offset Option

Transmitter  
Frequency: settable to 2.048 Mbit/s  $\pm$  24,400 ppm: 2.048MHz  
Receiver  
Frequency range: 2.048 Mbits/s  $\pm$  24,400 ppm

### SLE1-02 VF Measurement Option

Send/Receive tone  
Noise level measurement  
Coder offset and peak code measurement

### General

Store and recall configurations  
122 x 32 dots (4 x 20 characters, 6 x 8 dots size) graphic display  
screen with LCD backlight  
Internal battery: NimH  
Battery operation time: 4 hrs, transmitter off  
Unit charging time: 7 hrs  
Charger: 5V @ 2A, 90 to 265 VAC, 50-60 Hz  
Printer/Communication port: RS-232, RJ11, 6-PIN asynch  
Language selection: English, Italian, French, German

### Environmental

Operating temperature: 0° C to 50° C  
Storage temperature: -20° C to +70° C  
Humidity: 5% to 90% non-condensing  
Dimensions: 175 mm (l) x 75 mm (w) x 35 mm (d)  
Weight: 0.4 kg (approx)

## ORDERING INFORMATION

SLE1      SunLite E1 (Includes SLE1-01 and SLE1-02)

For more information or a directory of sales offices: [info@sunrisetelecom.com](mailto:info@sunrisetelecom.com) | [www.sunrisetelecom.com](http://www.sunrisetelecom.com)

