

SUN

SUNSET E1

The Sunrise Telecom SunSet E1 is a industry-standard handheld transmission analyzer designed for installing, maintaining, and troubleshooting 2.048 Mbps E1 lines, voice frequency services, and datacom networks. It is widely recognized for its robust, handheld design and comprehensive ITU-T performance analysis suite.

SPECIFICATIONS

General

Interfaces	RS-232C (DB-9), RJ-45, BNC, and 2.5 mm headset jack
Display	Backlit graphic LCD, 8 lines × 32 characters

Physical

Power Supply	Rechargeable NiMH battery pack; AC power adapter (100 to 240 V AC, 50/60 Hz)
Operating Temperature	0 to 50 °C °C
Dimensions (W×H×D)	272 x 102 x 64 mm mm
Weight	1.3 kg

Transmitter

Bit Rate	2.048 Mbps
Frequency Accuracy	± 5 ppm
Line Codes	HDB3, AMI
Pulse Shape	Complies with ITU-T Recommendation G.703
Clock Sources	Internal, Loop (Recovered), External reference
Connectors	BNC (75 Ω unbalanced), RJ-45 (120 Ω balanced)
Transmitter Output Impedance	75 Ω (unbalanced), 120 Ω (balanced)

Receiver

Receiver Input Impedance	75 Ω (unbalanced), 120 Ω (balanced), >1000 Ω (high impedance bridge)
Frequency Range	2048 kHz ± 100 ppm
Receiver Sensitivity (Terminate)	0 to -43 dB
Receiver Sensitivity (Monitor)	Resistive monitor down to -30 dB
Jitter Tolerance	Complies with ITU-T G.823

Framing & Patterns

Framing Formats	Unframed, PCM-30, PCM-31, PCM-30C, PCM-31C (with CRC-4)
Test Patterns	2^11-1, 2^15-1, 2^20-1, 2^23-1, QRSS, All 1s, All 0s, 1:1, 1:7, Alternating
Error Insertion Types	Bit, Code (Bipolar), CRC-4, FAS, E-Bit
Error Insertion Modes	Single, Constant Rate (10^-3 to 10^-7)
Alarm Generation	LOS, AIS, RAI (Yellow), LOF

Measurements & Analysis

Alarm Detection	LOS, LOF, AIS, RAI (Yellow), FAS Dist, MFAS Dist
Error Measurements	Bit errors, Code errors, CRC-4 errors, FAS errors, E-bit errors, Frame slips
Performance Analysis Standards	ITU-T G.821, G.826, M.2100

User Interface

LED Indicators	Current and history LED indicators for rapid alarm and error diagnosis
Internal Storage Capacity	Up to 100 test results and configurations

Connectivity & Voice

Voice Frequency Testing	Built-in speaker & microphone, channel monitor, talk/listen
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Environmental

Storage Temperature Range	-20 to 70 °C
Operating Humidity	5% to 90% non-condensing

Receiver Specifications

Receiver Bridge Impedance	> 1000 Ω
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Delay & Interruption Measurements

Round Trip Delay Resolution	1 μs
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Level Measurements

Line Level Measurement Range	+6 dB to -43 dB
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Frequency Measurements

Frequency Measurement Resolution	1 Hz
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Power & Battery

Battery Type	Rechargeable NiMH
Battery Operating Time	Up to 8 hours

Pulse Analysis

Pulse Mask Analysis	ITU-T G.703
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Standards & Compliance

ITU-T Compliance Standards	G.703, G.704, G.706, G.821, G.826, M.2100
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TECHNOLOGY

E1 (2.048 Mbps) Transmission Testing

APPLICATIONS

Telecommunications testing, circuit validation, and network maintenance

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.