



## SA580-1550 (1000Base-ZX)

### Transmitter

- Wavelength: 1550 nm single-mode
- Power: +3 dBm to -2 dBm

### Receiver

- Wavelength: 1270 nm to 1570 nm
- Signal: -24 dBm to -3 dBm max

Optical Power Measurement (OPM) function not available

## Operation Mode

Point-to-Point mode

Auto-negotiation enabled or disabled

Auto-negotiation parameters: Pause flow control, 10/100/1000 full/half duplex mode

## BER/Throughput Testing

End-to-end testing with two test sets

Single-ended testing with loop on the other end

## Traffic Generation

Layer 1, Layer 2, or Layer 3 traffic

Configurable source and destination MAC address

Configurable 802.1q VLAN tag and 802.1p priority

Configurable source and destination IP address (IPv4)

Configurable IP header fields (ToS, TTL, Protocol, and Frame Offset) for QoS verification testing

Up to 8 traffic flows (MAC address, IP address, VLAN tag)

Test patterns: All 1s, All 0s, ITU-T PRBS (2e7, 2e15, 2e20, 2e23, 2e31) normal or invert, or user defined (2 bytes)

Frame length 48 to 1522 bytes or Jumbo frame (up to 12 kbytes)

Frame rate 0% to 100% bandwidth utilization with steps of 1%

Traffic shaping: Constant, ramp, or burst

Error/Alarm injection: Bit, CRC, IP Checksum error and rate injection

Test duration

## Measurements

Performance statistics: Transmitted and received bandwidth utilization (Min, Max, Average), frame rate (Min, Max, Average), transmitted and received line rate and data rate (kbps)

Frame statistics: Aggregate and per stream statistics in number of transmitted and received frames, number of received VLAN tagged frames, number of lost, out of sequence frames, number of received runt, oversized, multicast, flow control, broadcast and unicast frames, inter-frame delay measurement (Min, Max, Avg, Variation)

## Loopback Mode

Automatically loops incoming frames with swapping the source and destination

MAC/IP address

Manual or controller/responder mode

Loopback filters

## IP Features

### Ping

Sends Echo (Ping) requests

Statistics on Ping messages

### Trace Route

Trace the IP route over the IP network

Gateway, Router IP address traceability

## RFC 2544

Throughput, latency, frame loss rate, and back-to-back frames tests conform to RFC 2544 standard

Recommended frame sizes (64, 128, 256, 512, 1024, and 1518 byte) plus one user configurable frame size (64-12000 byte) can be tested

Tests can be run individually or in sequence

Available for Layer 2, and Layer 3 testing, including Ethernet routed circuits

Configurable IP header fields (ToS, TTL, Protocol, and Frame Offset) for QoS verification testing

## Other Features

### Multiple User Profiles

Up to 16 different test configuration profiles may be saved

Test profiles saved and loaded with the press of a button

### Results

Test results are saved in text format for easy retrieval, sharing, print and analysis of data through the management port or USB memory device

## PRODUCT DESCRIPTION

Size (W x L x H): 3.6 x 6.3 x 1.6 in (90 x 160 x 40 mm)

Weight: 1.10 lb (0.50 kg)

Color TFT-LCD screen: 320 x 240

Operating temperature: 32° to 104°F (0° to 40°C)

Storage temperature: -4° to 158°F (-20° to 70°C)

Humidity: 10% to 85% non-condensing

Link/Activity, Signal/Error, Pat. Sync, Power/Battery, LEDs

Li-Ion rechargeable batteries

Retractable stand

Water projection proof

Other connectors

- DC power jack for charger
- USB Host connector for file transfer. RJ-45 ports can be used for field software upgrade, file management and transfer.

## ORDERING INFORMATION

SLGE	Single port, dual media, 10/100/1000 Mbps Ethernet test unit
SA580-850	850 nm LC SFP Field Interchangeable Optical Transceiver
SA580-1310	1310 nm LC SFP Field Interchangeable Optical Transceiver
SA580-1550	1550 nm LC SFP Field Interchangeable Optical Transceiver

### Additional Accessories:

SA148	SFP Optics Container
SA265	Cable, 100 Ohm, CAT 5, RJ45 (M) to RJ45 (M), Cross-over, 6'
SA266	Cable, 100 Ohm, CAT 5, RJ45 (M) to RJ45 (M), 6'
SA561	Optical Patch Cord, LC-SC duplex, MMF, 62.5/125 um, 6'
SA562	Optical Patch Cord, SMF, LC-SC duplex, 6'

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

