SUNRISE TELECOM ®
Productivity Rising™

**STT-1000 series
Control Module and
Power Supply Module shown.
A variety of test modules also available.**

The Scalable Test Toolkit (STT®) is an advanced, modular, and flexible communication testing solution to address Layer 1 through Layer 7 requirements, from fiber optics to Quality of Service. Designed to meet the challenges of designing, installing, maintaining, and troubleshooting core, metro, and access networks, it combines an innovative test platform with revolutionary test features, supporting a complete suite of capabilities and technologies for the converging global communications market.

The STT platform consists of a display unit (Control Module), a variety of test modules, and a Power Supply Module. The STT Manager software controls a wide variety of test modules from the STT Control Module or your PC. In the self-contained instrument mode, it offers the flexibility to be configured to fit your exact testing requirements. All modules and tests are managed by the STT Manager, an easy-to-use centralized application, capable of discovery and launch of all the modules in your test network.
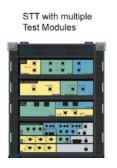
Key features

- Fully independent or stackable test modules
- Ultra-bright LCD touch screen
- Intuitive User Interface
- Familiar Microsoft Windows XP® Interface
- Fixed IP or DHCP terminal emulation
- Remote operation or standalone capabilities with PC
- Several power supply options
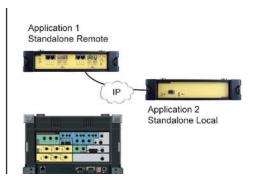- Optional battery for uninterrupted testing

Benefits

- Portable
- Flexible and dynamic
- Local or remote configuration (ideal for probing network architecture)
- Multiple tests can be run simultaneously
- Convenient and cost effective

Platform Highlights

- All STT modules are equipped with a unique standalone capability that can fully operate out of the platform with a variety of test engines for different technologies, services, and applications
- All measurements and calculations are done in the module with a Windows-independent test engine, through a combination of dedicated hardware, digital signal processors, and microprocessors
- Graphical user interface manages tests & view results using the Control Module or PC with Microsoft Windows XP®

STT with multiple Test Modules

Application 1 Standalone Remote

IP

Application 2 Standalone Local

Test applications

Metro and Ethernet (STT 10G Ethernet and Metro)

10/100/1000 Mbps Ethernet
10 GigE: LAN & WAN
Fibre Channel: 1 Gbps, 2 Gbps and 4 Gbps
Layer 1, 2, and 3, VLAN, MPLS
BERT and RFC 2544, IP Testing, Packet Capture & Decode
Multi-port and Multi-stream

Next Generation Core Network (STT ONE)

OTN OTU-1 and OTU-2
SDH, SONET, and EoS to 10 Gbps
GFP, LCAS, VCAT
Differential delay generation
Optical power and frequency measurements

40/43G

STM-256
OC-768
OTU3
NRZ and DPSK modulation
10/10.7G drop port
SDH/SONET/OTN overhead control and decode

Refer to each module's Data Sheet for more details.

Platform Specifications

STT-1000 Control Module

Tablet PC with Intel® Celeron processor
LCD Display
    10.4" (26.4 cm) color; active matrix SVGA
    Touch screen
    External monitor port, up to 1600 × 1200
Operating System
    Microsoft® Windows® XP Professional SP2
    Preloaded Applications:
    – STT Platform Manager software
    – Adobe Acrobat Reader®
    – OpenOffice® suite installer
Storage / Memory
    256MB RAM
    Internal 40 GB hard drive
    Removable flash memory support (USB, CF*)
    Compact flash card adapter not included
Interfaces
    2 USB ports
    1 Ethernet 10/100 BaseT
    1 PS/2 keyboard port, 6-pin DIN
    1 RS-232 serial port, DB-9
    1 External monitor port, HD-B15
    1 Headset (mic and headphone), 3.5 mm jack
Audio (test applications)
    Integrated audio speaker (mono)
    Integrated microphone
Size (W × H × D)
    320 × 240 × 50 mm (12.6 × 9.5 × 2.0 in)
Weight
    2.8 kg / 6.17 lb
Power Requirement
    Load: 36 Watts
    Requires STT-1500 series power supply and test module

Standalone Mode

STT modules work with an external PC, offering 100% of their testing capabilities in local or remote environments.

Minimum System Requirements:
    Intel® Celeron 400 MHz processor
    Microsoft® Windows® XP
      Professional SP2
    SVGA (800 × 600) screen
    256 MB of system RAM
    20 GB Hard Drive
    100 BaseT Ethernet port
    Removable storage (USB, CF, or CD-ROM)
    Pointing device (mouse or touch screen)
    STT Power Supply
    STT Manager software installed
    STT Module test application (GUI) software installed

STT-1500 Power Supply

AC operation
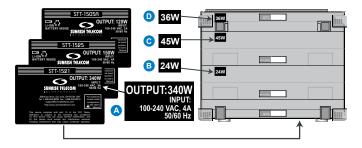 100 – 240 VAC, 50 - 60 Hz
Battery backup operation (optional)
  Provides uninterrupted operation during power outages
  Internal rechargeable lithium ion battery pack
  Operation time depends on the instrument configuration (types and number of modules attached)

Attached Power Supply Options

A number of power supply options are available for the STT, to match the application and number of modules installed: **Ⓐ > Ⓑ + Ⓒ + Ⓓ**

Model	Output	Battery	Size (W × H × D)	Weight
STT-1501	216W	–	320 × 240 × 45 mm 12.6 × 9.5 × 1.8 in	2.0 kg 4.4 lb
STT-1521	340W	–	320 × 240 × 85 mm 12.6 × 9.5 × 3.3 in	3.4 kg 7.5 lb
STT-1525	150W	Li-Ion	320 × 240 × 85 mm 12.6 × 9.5 × 3.3 in	4.1 kg 9.0 lb

Includes Power Supply Unit and Power Cord

Standalone Power Supply Kits

Model	Output	Battery	Size (W × H × D)	Weight
SA420	75W	External adapter	177 × 92 × 58 mm 7.0 × 3.6 × 2.3 in	0.9 kg 2.0 lb
SA427	130W	External adapter	185 × 130 × 60 mm 7.3 × 5.1 × 1.8 in	0.9 kg 2.0 lb

Includes
  AC/DC Power Supply Unit with Power Cord
  Ethernet Cable, CAT 5, RJ-45 to RJ-45, Straight, 6' (SA266)
  RS-232 Cable, DB-9 to DB-9, 6' (SA232)
  RS-232 Null Modem Adapter, DB-9 to DB-9 (SS122B)
  CD-ROM with STT Software (SA905)
  Carrying Strap (SA421)
  STT Bus Protective Case (SA144)
  Small Accessory Storage Case (SA149)
  Screw-on feet with rubber pads, 4

Typical Module Power Consumption

Description	Load	Configuration	Size (D)
STT Control	36W	—	50 mm / 2.0 in
STT 10G Ethernet	55W 105W	10GE 10GE×2	65 mm / 2.5 in 150 mm / 5.9 in
STT Metro	55W 62W 75W 81W	RJ-45×2 + SFP×2 RJ-45×8 RJ-45×6 + SFP×2 RJ-45×4 + SP PPP	65 mm / 2.5 in 65 mm / 2.5 in 65 mm / 2.5 in 65 mm / 2.5 in
STT ONE	105W	SDH / SONET / OTN / EoS	150 mm / 5.9 in
STT40G	110W	40G SDH/SONET, 43G OTN	110nm / 4.4 in

Refer to each module's Data Sheet for more details.

Environmental

Operating Temperature: 0° to 40°C [32° to 104°F]
Storage Temperature: -20° to 70°C [-4° to 158°F]
Humidity: 5% to 90% noncondensing
STT Platform US patent No. 6,898,720

Ordering Information

STT-1001 . . . . STT Control Module
STT Control and Display Module. Windows XP Professional SP2 OS English version*. Includes STT Manager Software (STT-1000-SW1) , STT User's Manual (SA920), 2 Stylus (SA142), STT bus bridge case (SA144), Small Accessory Storage case (SA149), and one-year warranty on chassis, battery and accessories. Requires STT Power Module and Test Module(s)

STT-1501 . . . . Power Module, AC only.
216 Watt maximum output.

STT-1521 . . . . Power Module, AC only. 340W maximum output.

STT-1525 . . . . Power Module, AC and Battery.
150W maximum output.

SA155-NA . . . . 3-prong Power Cord for use in North America, Latin America, and Asia.

SA155-EU . . . . 2-prong Power Cord plus ground for use in Europe (Except UK)

SA155-UK . . . . 3-prong Power Cord for use in United Kingdom

Available with Multilingual User Interface Pack for Windows XP SP2 OS in the Control Module (check with factory for availability)

Note: The total number of modules supported depends on the power supply output and modules' consumption (load). Do not configure an STT with module or module combinations that overload the power module.

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