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®
**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.

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**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 x 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:

A > B + C + D

**Typical Module Power Consumption**

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

*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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**Standalone Power Supply Kits**

**Model** | **Output** | **Battery** | **Size (W × H × D)** | **Weight** |
<table>
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</tr>
</thead>
<tbody>
<tr>
<td>STT-1501</td>
<td>216W</td>
<td>—</td>
<td>320 × 240 × 45 mm</td>
<td>2.0 kg / 4.4 lb</td>
</tr>
<tr>
<td>STT-1521</td>
<td>340W</td>
<td>—</td>
<td>320 × 240 × 85 mm</td>
<td>3.4 kg / 7.5 lb</td>
</tr>
<tr>
<td>STT-1525</td>
<td>150W Li-Ion</td>
<td>185 × 130 × 60 mm</td>
<td>4.1 kg / 9.0 lb</td>
<td></td>
</tr>
</tbody>
</table>

**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

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**Model** | **Output** | **Battery** | **Size (W × H × D)** | **Weight** |
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>SA420</td>
<td>75W</td>
<td>External adapter</td>
<td>177 × 92 × 58 mm</td>
<td>0.9 kg / 2.0 lb</td>
</tr>
<tr>
<td>SA427</td>
<td>130W</td>
<td>External adapter</td>
<td>185 × 130 × 60 mm</td>
<td>0.9 kg / 2.0 lb</td>
</tr>
</tbody>
</table>

**Includes:**

AC/DC Power Supply Unit with Power Cord

Ethernet Cable, CAT 5, RJ-45 to RJ-45, Straight, 6’ (SA266)

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STT Bus Protective Case (SA144)

Small Accessory Storage Case (SA149)

Screw-on feet with rubber pads, 4