![Sunrise Telecom logo]

SUNRISE TELECOM

SunSet MTT™

The Modular Test Toolkit

The Ultimate Service Test Platform

SunSet MTT

With over 20,000 units deployed worldwide, the SunSet MTT is the industry standard for DSL and access service testing. And, for good reasons.

With 30 released modules and counting, the SunSet MTT represents the industry's broadest selection of access network testing. No other product comes close to matching the versatility and depth of the MTT platform. Packed into a 3 pound modular unit, you'll find solutions for DSL, E1, T1, T3, Datacom, Gigabit Ethernet, Fiber Optic, and cable maintenance testing.

From the start, we've emphasized that thorough line qualification and service verification are vital to the success of service deployment, whether the service is DSL, ISDN, data, or voice. We back up that statement by providing best in class cable maintenance features and the broadest range of DSL standards and other access service types.

While we've focused on state of the art test features, we've also delivered a solution that can be realistically deployed even in challenging times. The SunSet MTT family is comprised of various configurations allowing you to best optimize the level of testing with your budget. The inherent modularity future proofs the unit-new modules are easily added as network architectures and testing responsibilities change. We've automated tests and streamlined the process from start to finish to improve test efficiency and productivity. And those are just some of the ways we've led the industry in access service testing.

Optical Return Loss
Optical Power Meter
Visual Fault Locator
Gigabit Ethernet
Ethernet

Metro IP

PSD Spectrum Analysis
Wideband Level Meter
Cable Balance
Insertion Loss
Impulse Noise
Signal-to-Noise
DMM
TDR
Crosstalk

Copper

PPPoE
PPPoA
IDSL
HDSL
HDSL2
SHDSL
SDSL
VDSL
ADSL (Annex A, B, C)

DSL

Transport & Service

T1/E1
T3
HSSI
DDS
ISDN
Datacom
TIMS / Analog
Frame Relay
Switched Voice

LEDs

LED indicators show you test status at a glance.

Integrated Speaker and Microphone

Verify voice services and listen to test tones with the integrated speaker and microphone.

Color Display

A large color display with transflective screen provides optimal contrast in all lighting conditions. An icon-based menu guides you through the test operations quickly and easily.

Auto Tests

Automated tests and strong reporting features make testing as efficient as possible.

Rugged Design

Rugged construction engineered for field use. Chassis features a thick outer layer for added protection and weather resistance.

SunSet MTT ACM shown.
SunSet MTT Basic has a monochrome display.

Field-upgrades

With the SunSet MTT's dual PCMCIA card capacity, you can instantly upgrade your software or system memory in the field.

Battery

The SunSet MTT features a 5-hour battery life. And to maximize field portability, batteries are field-replaceable and can be charged by a 12 VDC vehicle adapter while you drive between sites.

www.valuetronics.com

One Platform
Multiple Configurations
Maximum Flexibility

The SunSet MTT family is comprised of various chassis configurations to match your testing needs and your budget.

A wide range of service test modules are supported by all chassis types to streamline your test applications into a single platform. Applications include DSL, T1, E1, Fiber Optics, and Gigabit Ethernet.

SunSet MTT ACM
The SunSet MTT ACM (Advanced Cable Maintenance) offers a powerful combination of cable maintenance and service verification testing- whether that's DSL, transmission, or metro applications. It supports the entire suite of test modules and includes a bright, full-color display as shown on the left.

SunSet MTT Basic Color
The SunSet MTT Basic Color chassis is ideal for those who need service verification testing without the cable maintenance features. The SunSet MTT Basic Color is equipped with the same color screen as the SunSet MTT ACM and supports all test modules.

SunSet MTT Basic
Similar to the SunSet MTT Basic Color in features, the SunSet MTT Basic offers an economical solution for service testing. It supports the full range of test modules and includes a basic monochrome display and chassis.

Streamlining Test Procedures
Efficient testing from start to finish

We haven't just focused on advanced testing technologies, but also on how to make the total test routine more efficient. We've streamlined the entire test procedure from start to finish.

Automated tests

Nothing increases testing efficiency more than automated tests. We've defined test suites that test the major technologies at the touch of a key- ADSL, T1, HDSL, Gigabit Ethernet, and copper. For example, we've made testing Gigabit Ethernet as easy as pressing the Power key. Our Gigabit auto test determines line rate and checks for errors. ADSL's one-button acceptance test automatically turns up the link and displays line rate and noise margin. A copper qualification test sweeps through the major physical layer tests at the press of a button. And DART- Data Automated Routine Test- represents the industry's first automated test that includes both the physical and service layers.

There's no better way to reduce testing time and improve efficiency. Test automation greatly increases test reliability, regardless of the user's experience level and ensures uniformity in testing procedure throughout the organization.

VT100 Emulation

With the SunSet MTT's VT100 terminal emulation feature, there's no need to carry a laptop into the field. With VT100 emulation, you can access network equipment to set the configuration or retrieve performance data directly from the SunSet MTT.

Integration with back office applications

The SunSet MTT fully integrates with back office applications. It can export results directly into an Excel template that allows technicians to include results in a ticket closing. The SunSet MTT supports .csv (Comma Separated Value), .xls (Microsoft Excel), and ODBC (Open Database Connectivity) formats. This integration reduces operational time and costs. It also ensures consistent and thorough documentation for each installation or visit.

Report Wizard

The SunSet MTT's companion Report Wizard easily manages test results. This Windows application downloads all test results from the MTT. It automatically reformulates all results into Excel format so you can generate reports for multiple tests in an instant.

Multi-Layer Testing

Every technician knows all too well that problems can reside in countless places. Complaints of service disruption or degradation? There's no single answer. Common culprits include: binder group crosstalk, defective line cards and modems, or NSP/ISP network bottlenecks. We developed the SunSet MTT with this in mind. It provides complete end-to-end service testing without any additional test gear. The SunSet MTT can locate faults at any layer, from copper to application, giving you the best tool to quickly and correctly diagnose faults. Having the right tools on hand speeds up service delivery and problem resolution.

Comprehensive, multi-layer testing also ensures quality installations. A single test checks all the connections of a DSL network - from the customer to the DSLAM, through the NSP network, to the ISP. With the SunSet MTT, a technician verifies the entire service at once, eliminating potential hidden problems. In turn, this decreases operational costs with fewer repeat visits and increases customer retention.

FTP/HTTP

IP

PPPoE/PPPoA

ATM

DSL Link

Copper

- Best of class cable maintenance
- Fiber analysis
- Broadest selection of DSL flavors and encapsulation types
- Application layer service testing
- Ethernet/Gigabit Ethernet testing
- Transmission and signaling testing for T1, E1, T3

DART- A Multi-layer Automated Test

DART- Data Automated Routine Test- automates the HDSL installation procedure for the field technician by including the physical and service layers in a single test. It provides an efficient and automated way to test the line- from the physical copper layer to the HDSL/T1 service layer- with the press of a button.

It first sweeps through a series of comprehensive physical layer tests to check the quality of the copper pair and its ability to support HDSL/T1 service. It then controls the span and runs a stress test to verify error free transmission. And again, all with a single key press.

Commitment to Modularity

At Sunrise Telecom, modularity is not just a buzzword. It's our core belief. There are now over 30 test modules available for the SunSet MTT. We've expanded from traditional DSL testing to T1/E1/T3 transmission applications and on to Gigabit Ethernet and optics. Most importantly, we have no plans of stopping now.

The SunSet MTT's modular design offers many advantages:

- **A future-proof solution** that allows you to add new modules as technologies or network architectures evolve instead of discarding entire hardware platforms.

- **Sunrise Telecom's commitment to modular technology.** You'll benefit from an extensive library of existing modules and a reputation for fast development of new technologies.

- **Increased efficiency.** The common user interface and operations shared across modules practically eliminate the learning curve when moving among technologies.

- **Lowered cost of ownership.** One platform provides a complete testing solution for multiple network layers, technologies, and standards. This reduces equipment inventory, in addition to minimizing training and increasing test efficiency.

DSL

Alcatel ATU-R Module
Remote modem (ATU-R) emulation for ADSL. Based on Alcatel/ST chipset.

Alcatel ATU-C Module
Central office (ATU-C) emulation for ADSL. Based on Alcatel/ST chipset.

ADI ATU-R Module
Remote modem (ATU-R) emulation for ADSL. Based on ADI chipset.

SDSL Module
Central (HTU-C) and Remote (HTU-R) modem emulation and testing for SDSL. Based on Conexant chipset.

SHDSL/HDSL2 Module
Central (STU-C) and Remote (STU-R) modem emulation and testing for SHDSL and HDSL2. Based on GlobespanVirata chipset.

Centillium ATU-R Annex C Module
Remote modem (ATU-R) emulation for Centillium ADSL Annex C.

ADSL Annex B ATU-R Module
Remote modem (ATU-R) emulation for ADSL Annex B. Based on GlobespanVirata chipset.

ADSL Annex B ATU-C Module
Central office (ATU-C) emulation for ADSL Annex B. Based on GlobespanVirata chipset.

ADSL Annex A ATU-R Module
Remote modem (ATU-R) emulation for ADSL Annex A. Based on GlobespanVirata chipset.

ADSL CAP ATU-R Module
Remote modem (ATU-R) emulation for CAP modulation ADSL. Based on GlobespanVirata chipset.

HDSL Module
4-wire HDSL installation and maintenance testing. Based on PairGain chipset.

Transport & Service

HSSI Module
DTE emulation for testing HSSI circuits up to 52 Mbps.

T1 Module
Comprehensive T1 testing including 2Rx/2Tx and applications for voice, ISDN, frame relay, and GR-303.

E1 Module
E1 testing with 2Rx/2Tx, including applications for voice, ISDN, frame relay, and V5.x.

DS3 Module
DS3 and DS1 testing with 2Rx/1Tx for DS3 and 2Rx/2Tx for DS1.

Datacom/DDS Module
WAN/Data service analysis including DTE and DCE emulation.

VF TIMS Module
Voice Frequency testing in the analog voice range of 20 Hz to 400 kHz.

IDSL Module
Comprehensive combination of IDSL and ISDN BRI testing.

Cable Maintenance

TDR/DMM Module
Complete TDR and DMM testing (for use in SunSet xDSL Light and SunSet MTT Basic chassis).

Wideband TIMS Module
Wideband TIMS testing from 10 kHz to 2000 kHz.

Metro IP

Gigabit Ethernet Module
Gigabit Ethernet testing with dual fiber ports.

Ethernet Module
Ethernet and Fast Ethernet with dual copper ports.

Optical Loss Test Module
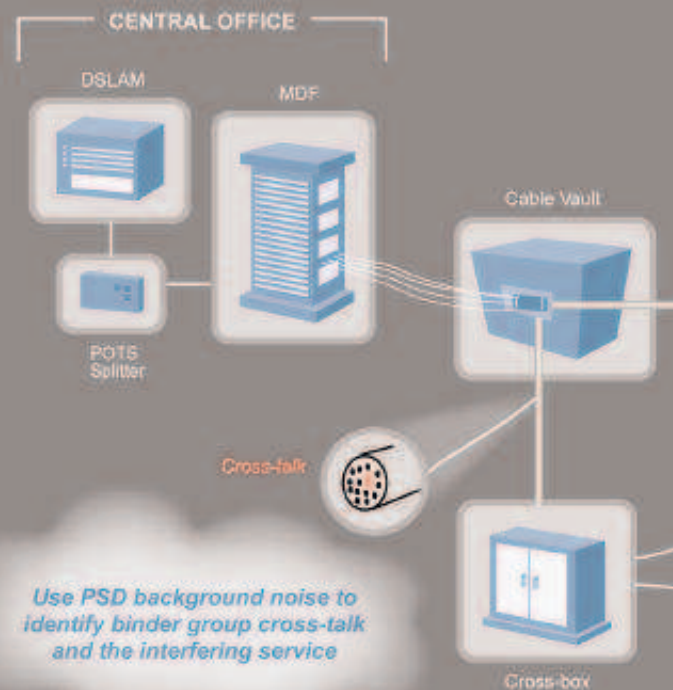Bidirectional optical loss, power meter, laser source, and visual fault locator.

Cable Maintenance
Best in Class Physical Layer Testing at Your Fingertips

Load coils- undocumented bridge taps- crossed pairs- interference- you know the drill. The original copper plant was not designed with high frequency services in mind. The best defense against failed installations and costly repeat visits is a thorough test procedure. The SunSet MTT eases the load. All necessary cable maintenance tools are right at your fingertips and an automated test ensures that testing is performed thoroughly each time, even by inexperienced users.

The SunSet MTT ACM provides comprehensive cable maintenance features to qualify, maintain, and troubleshoot the local loop. The tests accurately locate cable faults- like opens, shorts, crosses- that can prevent service. And they determine the pair's ability to support any copper service (POTS, T1, ADSL, SHDSL, HDSL, and more). In addition, TIMS tone generation and noise measurements are available within the voice frequency range.

CENTRAL OFFICE

DSLAM

MDF

Cable Vault

POTS Splitter

Cross-talk

Use PSD background noise to identify binder group cross-talk and the interfering service
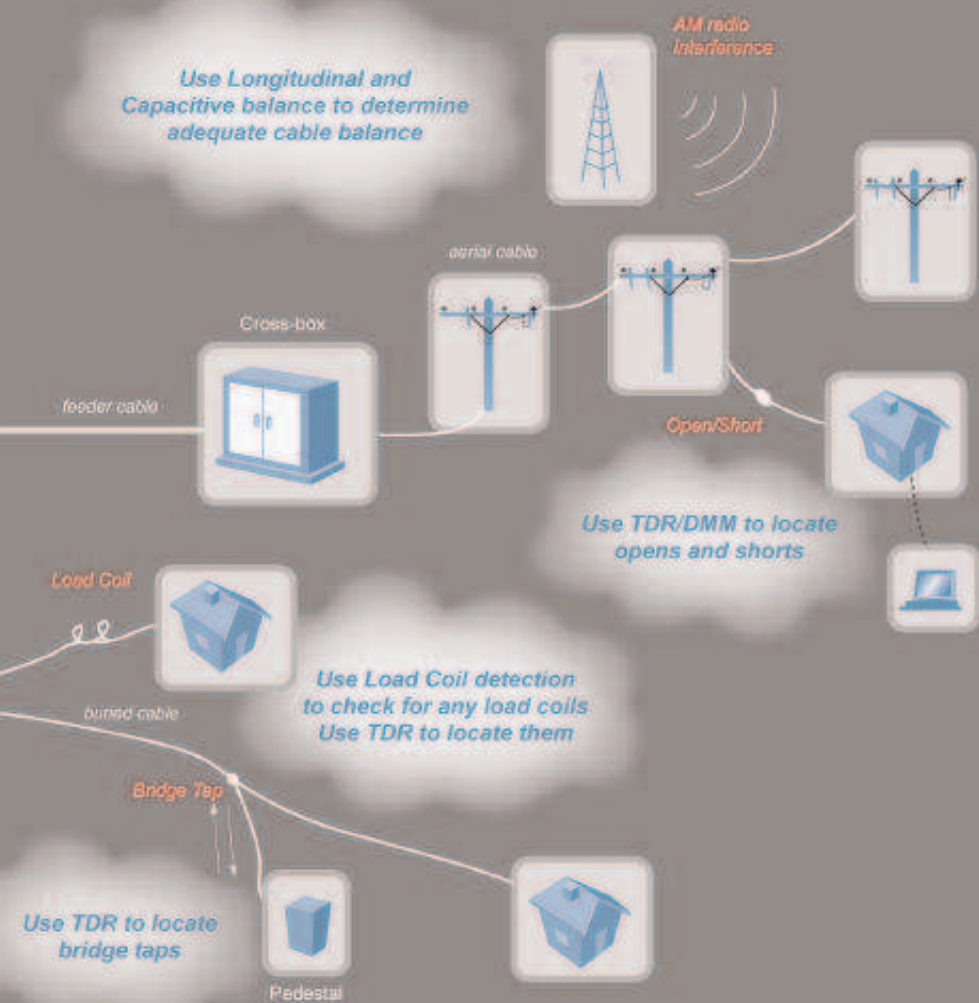
Cross-box

Auto-acceptance test

A single button determines the quality of the copper pair and its ability to support DSL and other services. At the press of a key, the SunSet MTT sweeps through a series of cable maintenance features and reports pass/fail criteria for the pair. In a matter of minutes, you've thoroughly qualified the copper pair.

Auto Test checks:

- Loop length
- Presence of load coils
- Bridge taps
- Cuts and opens
- Shorts
- Interference and noise
- Pair balance
- Foreign AC/DC voltages
- Isolation resistance

AM radio Interference

Use Longitudinal and Capacitive balance to determine adequate cable balance

aerial cable

Cross-box

feeder cable

Open/Short

Use TDR/DMM to locate opens and shorts

Load Coil

burled cable

Use Load Coil detection to check for any load coils
Use TDR to locate them

Bridge Tap

Use TDR to locate bridge taps

Pedestal

- TDR
- DMM: ACV, DCV, resistance, loop resistance, capacitance, current
- Load coil detection
- Longitudinal, capacitive, and resistive balance
- Impulse noise
- PSD spectrum analysis
- Wideband level meter
- Insertion loss
- Near End/Far End Crosstalk
- Signal-to-noise
- Background noise
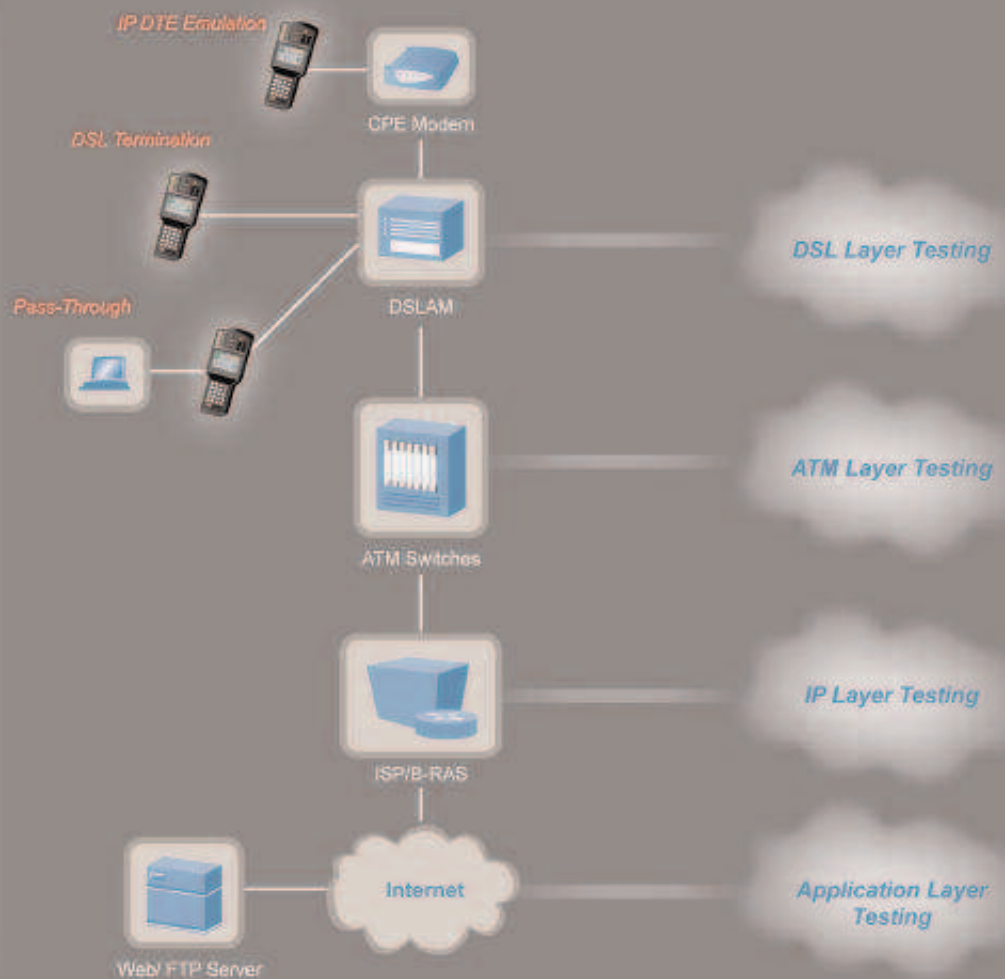- VF TIMS tone generation and noise measurements

DSL Service Verification

Multi-layer Testing for Successful Installations and Troubleshooting

DSL service does not stop at the DSLAM, so your DSL test methods should not either. The SunSet MTT provides the tools needed to properly verify DSL service: check end-to-end connectivity from the customer to the ISP and test the performance of upper layer applications. And with tests for DSL, ATM, IP, and application layers, you can systematically locate errors wherever they occur.

DSL Layer Testing

Modem emulation provides a quick and thorough method for installing DSL circuits. This test not only verifies service and connectivity to the central office DSLAM, but also provides vital performance measurements like line rate, line capacity, attenuation, and noise margin. This offers a major benefit over "plug and play" installations with an actual modem, since it identifies borderline circuits and potential pitfalls. For example, a quick check of the line's noise margin could uncover an unstable connection and prevent the need for a costly repeat visit. The major DSLAM and chipset vendors are supported.

- ADSL over POTS
  (Annex A)
- ADSL over ISDN
  (Annex B & C)
- SHDSL
- HDSL2
- HDSL 4-wire
- VDSL
- IDSL
- SDSL
- PPPoE
- PPPoA
- LLC Bridge/Routed
  Static & DHCP
- CLIP

IP DTE Emulation

DSL Termination

Pass-Through

CPE Modem

DSLAM

ATM Switches

ISP/B-RAS

Web/ FTP Server

Internet

DSL Layer Testing

ATM Layer Testing

IP Layer Testing

Application Layer Testing

Screen 1:
```
13:28:14
>SHOWTIME
>              MULTI/ANNEX B<
ATU-R MFR:ALCT  ATU-C MFR:N/A
ATU-R REV:N/A   ATU-C REV:N/A
  [DOWNSTREAM]    [UPSTREAM]
FAST:0    kbps  FAST:0    kbps
INTL:2112 kbps  INTL:288  kbps
MAX :7552 kbps  MAX :544  kbps
CPTY:28   %     CPTY:52   %
SNR :36.0 dB    SNR :24.0 dB
ATTN:0.0  dB    ATTN:4.5  dB
PWR :6.5  dBm   PWR :10.5 dBm

CONTINU  CLOSE   OPEN   STORE
```

Screen 2:
```
12:18:35
>SHOWTIME
>PASSTHRU        ANSI/ANNEX A
ET:000:01:52
        SUMMARY
                  DN    UP
DSL LAYER(kbps):  1536   160
ATM LAYER(kbps):
    CURRENT :     1198    58
    PEAK    :     1206    63
IP LAYER(kbps)
    CURRENT :     1171    40
    PEAK    :     1171    40

STOP                    EVENT
```

Screen 3:
```
19:02:55
ST:19:06:28          ET  0:0
LOCAL IP:10 .0  .0  .5
DEST  IP:209.130.76.142

ROUTER : PASS

PPP    : PASS

PING   : PASS
```

Screen 4:
```
11:10:51
>SHOWTIME              PPP UP
>               ANSI/ANNEX A
        WEB DOWNLOAD
PROTOCOL : HTTP
URL      : www.sunrisetelecom.c
DESTINATION IP: 216.157.102.182
RESPONSE TIME : 103 msec
PAGE DOWNLOAD : PASS
DURATION: 173 msec
SIZE    : 17957 byte
AV. RATE: 830.38 kbps

HTTP    FTP    IMAGE   STOP
```

ATM Testing

The SunSet MTT's ATM features verify ATM connectivity in new circuits and troubleshoot ATM problems. ATM BER testing verifies ATM throughput and link quality. A VCC scan easily checks the VPI/VCI configuration at the customer location. In addition, OAM loopback cells verify end-to-end connectivity from the customer to the B-RAS and can locate faults on the ATM layer.

Advanced IP Testing

The SunSet MTT offers comprehensive IP test functions including ISP connectivity testing with session analysis, PING testing, TraceRoute, DNS server verification, and Echo response. It provides point-to-point protocol support for PPPoA, PPPoE, CHAP, PAP, and DHCP. These tools verify connectivity to the ISP and can easily locate the point of failure when troubleshooting.

Internet/Throughput Application Testing

HTTP web and FTP application tests check the performance of real-world customer applications. FTP testing verifies the connection to the FTP server and checks application layer data throughput. Results include data rate analysis for either the upstream or downstream direction. HTTP pages can be downloaded from any web server or from Sunrise Telecom's specially designed test server. Results include simple pass/fail criteria along with web response time, download duration, average download rate, and file size.

Advanced Troubleshooting- Pass Through Mode

A through mode isolates configuration problems at the customer premise. During this in-service application, the SunSet MTT monitors traffic between the DSLAM and the customer's computer. It shows live traffic statistics, ADSL link measurements, as well as any error or alarm conditions.

- Verify PPP connection across the entire network
- Test DSLAM translations and ATM VCC mappings
- PING test to confirm IP connectivity
- TraceRoute to identify point of failure
- Web download to test HTTP connectivity
- FTP upload and download to test application throughput performance
- Through mode (10Base-T) to isolate configuration problems

Transport and Service Testing

Within the SunSet MTT there's a complete transmission test toolkit-equipped with all the tests needed to qualify the local loop for analog and digital services, as well as the most complete set of signaling and service tests. Physical interfaces range from T1, E1, T3, ISDN BRI, analog, DDS-4W, Datacom, and HSSI.

T1-T3 Service Testing

A variety of modules are available to transform your SunSet MTT into a complete T1 and T3 test solution. You won't need to sacrifice test features in order to benefit from the enormous cost savings and efficiency of the modular platform. Dual DS3 receivers, full-duplex DS1, extensive BERT features, loopback codes, and pulse mask are just the beginning. From network timing to signal level, the SunSet MTT tackles the most difficult DS1 and DS3 network problems.

And the T1/T3 testing goes well beyond the physical layer. You have all the tools needed to qualify and troubleshoot the major T1 services.

- Frame Relay   - DDS
- ISDN PRI   - HDSL
- Voice   - GR-303
- Loopback testing   - SS7

TIMS Testing

A variety of modules support installation and maintenance of analog voice, analog data, and digital data services. The VF-TIMS Module provides complete voice frequency testing in the analog voice range of 20 to 400,000 Hz, while the W-TIMS tests within the range of 10 to 2,000 kHz.

ISDN Service Testing

If you've tested ISDN circuits, you know that trouble can be caused from a variety of sources like physical layer, timing, switch translation, or protocol problems. Luckily the SunSet MTT provides full-featured testing to comprehensively verify and identify errors for both BRI and PRI circuits.

BRI:
- Protocol analysis
- LT, TE, NT emulation
- Place/receive calls:
    talk/listen & BERT
- X.25 emulation & analysis

PRI:
- T1/E1 access
- NT/TE emulation
- Protocol analysis
- Place/receive calls:
    talk/listen & BERT

Business Service Testing - Datacom. DDS. HSSI.

Ensure quality service installations at business customers. The SunSet MTT's testing packages for Datacom, DDS, and HSSI offer a cost-effective, simple, and handheld solution for turning up and troubleshooting business data services. Whether it's at the back of a router, bridge, modem, DSU, or CSU, the SunSet MTT provides complete datacom end-to-end verification and bidirectional monitoring for datacom circuits- V.35, RS232, RS449, and X.21. DDS local loop testing analyzes four-wire DDS circuits with CSU/DSU emulation, loopback testing, and bidirectional monitoring. The HSSI Module verifies performance and quality when turning up high speed HSSI links and installing routers at business customers.

E1 Service Testing

Commission and troubleshoot E1 circuits. Just plug in the E1 Module and you have a full-duplex E1 test set equipped with advanced features like frequency/level, pulse mask, and histograms. Jitter testing and analysis offer a portable solution for troubleshooting jitter problems in 2 Mbps networks. Advanced software options test the major services and protocols.

|			
- ISDN PRI	- Voice	- Frame Relay	- GSM
- V5.x	- GPRS	- Jitter	- MFC-R2

HDSL Testing

If you're responsible for HDSL service, look no further. The SunSet MTT provides the complete solution for HDSL testing for all stages of network deployment. It prequalifies the cable pair for HDSL installation. Modem emulation turns up the link with the central office. T1 interfaces offer BER testing, loopback testing, and troubleshooting from a T1 access point.

- HDSL 4-wire modem emulation
- HDSL 2-wire modem emulation
- Loopback and BER testing

# Portable Field Testing
for Metro IP Networks

The pressure is on to quickly provision and roll out Gigabit Ethernet services in the Metro. Increased broadband deployment to homes and businesses, along with faster core technologies, has led to the metro bottleneck. There's a serious need to deploy and optimize metro networks, quickly and inexpensively. Are you prepared? The SunSet MTT answers the call. With test modules for Ethernet, Gigabit Ethernet, and Fiber, the SunSet MTT provides a cost-effective platform for testing in the Metro.
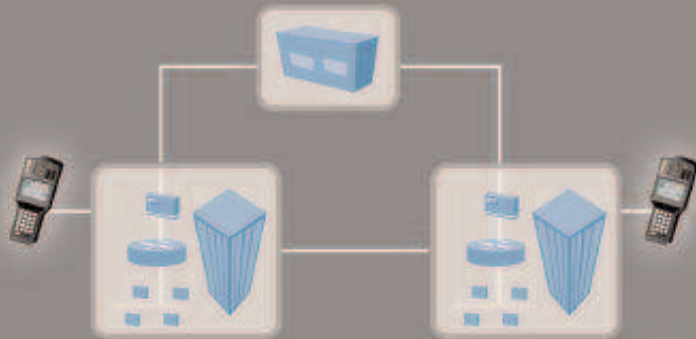
Transparent LAN Services
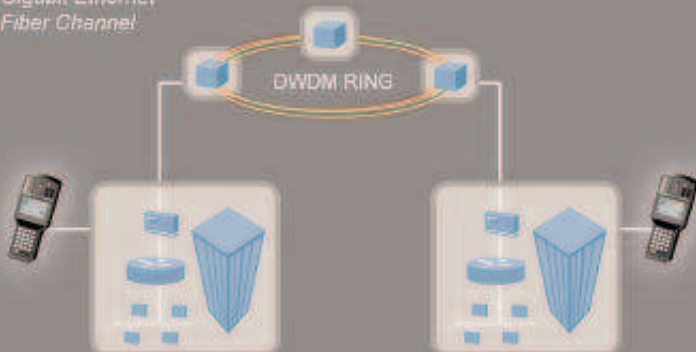Gigabit Ethernet

TLS   EOS
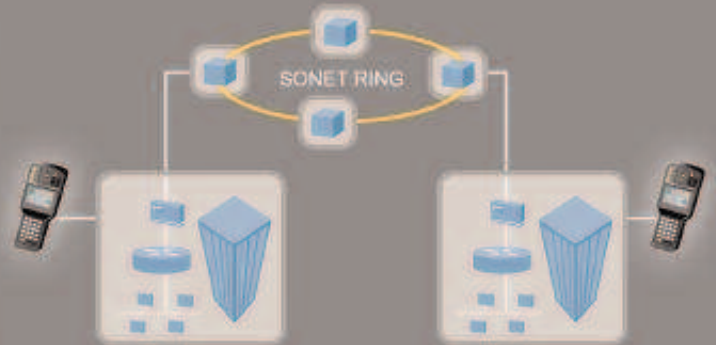
Ethernet over SONET/SDH
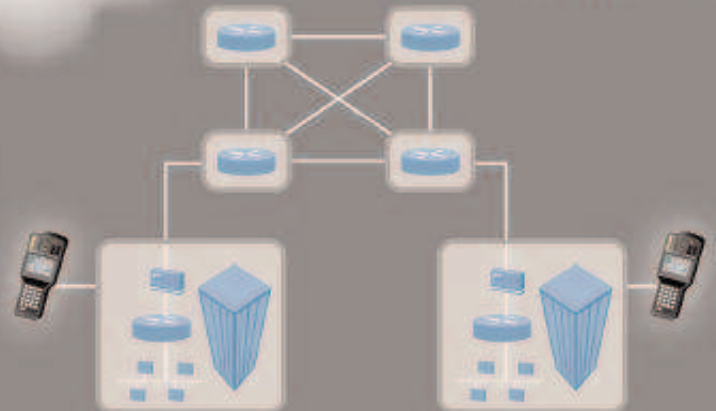Ethernet 1000Base-X
Ethernet 10/100Base-T

SONET RING

Metro Optical Networking
FICON
ESCON
SONET
Gigabit Ethernet
Fiber Channel

MON   EON

Enhanced Optical Networking
Switched Ethernet Services

DWDM RING

SunSet MTT Ethernet Series

The SunSet MTT offers a broad assortment of Ethernet modules to verify the performance of Ethernet links before they're handed over to customers. Wirespeed traffic generation and BER testing verify performance and throughput. Traffic shaping - burst, constant, or ramp- simulates actual customer traffic pattern for realistic test results. Multi-layer diagnostics allow you to test any Layer 1 transport service (point-to-point or over CWDM/DWDM), Layer 2 transport (EoS, RPR), Layer 2 with VLAN, or Layer 3 Ethernet network configuration. Dual receivers and through mode certify that networks are operating within the defined Service Level Agreement by monitoring live customer traffic. The one-button test makes testing Gigabit Ethernet as simple as pressing the power key.

- 10, 100, 1000 Mbps testing
- Copper and fiber solutions
- **Dual receivers:** Bidirectional, in-service monitoring
- **Wirespeed traffic generation:** Throughput testing for installation and stress testing
- **One-button test:** Auto test reduces training and increases efficiency
- **Layer 1-4 BER testing:** Multi-layer for testing a variety of service and network topologies
- **Customer Unit Replacement:** Emergency repair kit when an installed customer unit fails
- Integrated optical power measurement
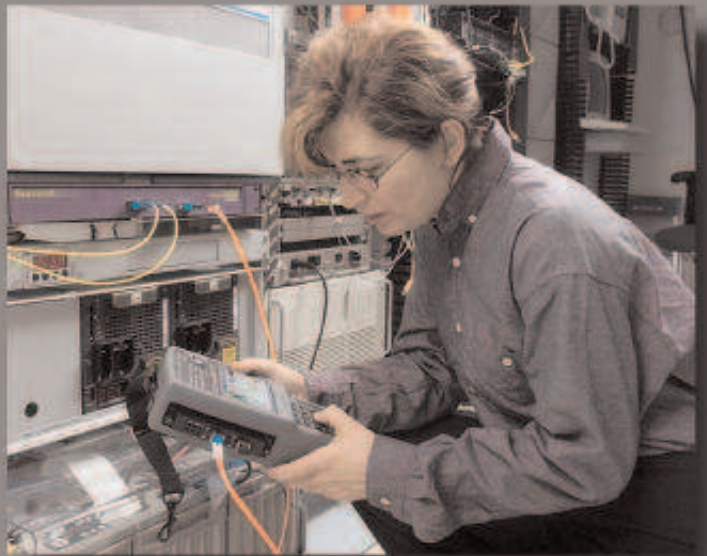
Optical Testing

The same tool you use to install and maintain copper can also be used to install and maintain fiber links. The SunSet MTT combines all the tests needed to qualify optical fiber networks and identify faults including a light source, power meter, bidirectional loss test, and a visual fault locator. Tests are geared toward multiple transmission environments including long-haul/short-haul single mode fiber, fiber-optic CATV, and multi-mode LAN. No features or performance have been sacrificed to bring the cost savings and convenience of this integrated solution to you.

- **Power Meter:** Qualifies optical fiber and offers a high power range
- **Bidirectional Optical Loss Test:** Measures attenuation in both directions simultaneously
- **Visual Fault Locator:** Verifies optical continuity and isolates faults
- **Optical Return Loss:** Checks for reflections which are problematic in DWDM and high speed transmission networks
- **Laser Source:** Multiple wavelength options - 850, 1310, 1550, 1625 nm - for testing varied services like Gigabit Ethernet, SONET/SDH, DWDM, SAN, LAN

Related Products

CardTest ADSL

As the lightest and most inexpensive ADSL tester available, CardTest makes it possible to cost-effectively equip the entire field staff with an ADSL test solution. This hot-swappable PCMCIA card is compatible with the majority of laptops and operating systems. CardTest offers extensive ADSL measurements like bit loading graphs and complete line statistics. It verifies network mapping for PPPoA, PPPoE, and DHCP services. Added features- like web surfing, PING, and FTP testing- further verify connection performance.

Handheld optical and ATM solutions

We have a broad offering of handheld SONET and SDH test solutions with our SunSet 10G, OCx, and SDH families. These products work hand-in-hand with the SunSet MTT to perform dual-ended ADSL qualification. These innovative tests allow you to not only verify installation, but also qualify the Optical Carrier and DSL copper pair simultaneously. This helps qualify Digital Loop Carrier (DLC) systems and verify provisioning of the remote DSLAM.

- SunSet OCx: SONET testing from DS1 to OC-48
- SunSet SDH: SDH testing from E1 to STM-16
- SunSet 10G: SONET and SDH testing from T1/E1 to 10 Gbps

Scalable Test Toolkit

Complement your SunSet MTT metro testing with our Scalable Test Toolkit (STT) platform. Like the SunSet MTT, the STT features a modular architecture allowing it to grow with your testing needs. Designed for next-generation optical network testing, the STT offers a flexible package for DWDM, SONET/SDH up to 10 Gbps, Ethernet, and Fiber testing. Test directly from a DWDM access point- load traffic onto a wavelength to check continuity or analyze a wavelength for signal quality. The STT even works with the SunSet MTT for dual-ended IP throughput testing.

- SONET-SDH testing from T1/E1 to 10 Gbps
- DWDM, Ethernet, Fiber cable testing

Sunrise Telecom is a global leader in providing service verification equipment for a growing variety of telecommunications environments and technologies. Our products offer broad functionality and leading edge technology to test a variety of new DSL services, fiber optics, cable TV networks, and signaling networks. Sunrise products are designed to maximize the technician's effectiveness in the field and to provide realistic network simulations for equipment manufacturers to test their products.

Sunrise products have found broad acceptance in domestic and international markets. Our customers include incumbent local exchange carriers, competitive local exchange carriers, and other service providers, network infrastructure suppliers and installers throughout North America, Latin America, Europe, and the Asia/Pacific region. We distribute our products through a network of sales representatives, distributors, and a direct sales force throughout six continents.

Sunrise Telecom was incorporated on October 1, 1991 and became a public company July 2000, trading under the NASDAQ symbol SRTI.

Service & Support

Sunrise Telecom proudly gives its customers excellent service and support. Technical assistance is available from local representatives in over 70 countries, from factory experts, on the Internet, and via Sunrise's customer support line.

Contact Sunrise Telecom to find your local Sales Representative or Distributor and discover how the SunSet MTT can solve your testing needs.