

ADSL2+ ATU-R Module

SSMTT-44

Data Sheet



The **ATU-R** Module is part of a family of Plug-In modules for the SunSet MTT and xDSL test sets

The SSMTT-44 ADSL2+ ATU-R Module, part of the SunSet® Modular Test Toolkit (MTT) family of products, is a rugged, battery-operated handheld test solution geared for the Tier 1 technician tasked with fast and efficient ADSL2+ service verification. The ADSL2+ ATU-R module addresses the testing needs of service providers who are migrating to ADSL2+ for its superior bandwidth, extended reach and, as a result, its ability to deliver triple-play services, providing the right solution for new customers whether they need a low cost, simple tool or a more powerful diagnostic solution.

FEATURES

- Link turn-up with far end DSLAM
- Pass through modem emulation
- Detailed modem/link status
- Link measurement
- Network connectivity verification
- Advanced features, including Trace Route, Web Access Test, IP DTE mode, ATM OAM, and Network Statistics

BENEFITS

- Lightweight
- Handheld
- Leverages existing MTT platform
- Cost-effective and future-proof
- Portable design for easy site-to-site transport
- One-button configuration and measurement simplifies and shortens testing time

APPLICATIONS

- ADSL, ADSL2, ADSL2+
- Network connectivity verification

SPECIFICATIONS

Chipset

Conexant Argon 432

ADSL Technologies

Annex A, Annex B

ADSL2+ (ITU-T G.992.5)

ADSL2 (ITU-T G.992.3)

ADSL (G.dmt ITU-T G.992.1, ANSI T1.413)

G.lite (ITU-T G.992.2)

ATU-R Features

Modem Status Measurements

Downstream Rate

Upstream Rate

SNR Margin

Maximum Attainable Rate

Capacity

Attenuation

Latency Path Mode: Fast or Interleaved

Link Measurements

Results for Local and Remote

Counters for CRC, FEC, HEC, and NCD

Errored Seconds, Severely Errored Seconds, Unavailable Seconds

Block Error Rate

Loss of Signal Seconds

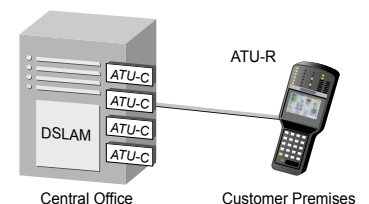
Number of Link Drops

Bits per Tone

Full graphical and tabular display

Event Tracer

Event type with time stamp



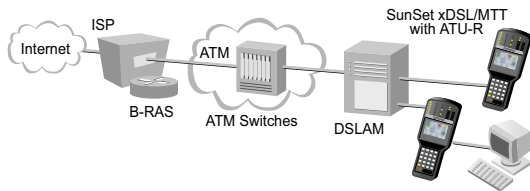
Basic IP Features

Protocol Standards Supported

- RFC 1483/2684: LLC-Bridged (Static & DHCP), LLC-Routed
- RFC 2364: PPP over ATM
- RFC 2516: PPP over Ethernet
- Encapsulation: VC MUX/LLC SNAP

Basic PING Test

PASS/FAIL results for PPP session and PING Test



10/100 Base-T Pass Through Modem Emulation

Transparent Bridging (supported only in Advanced Features software)

Routed PPPoE, PPPoA, LLC-Routed

Encapsulation: VC MUX/LLC SNAP

DHCP Server

Network Address Translation

Advanced Features Software Suite (SWMTT-DSL-ADV)

PING

To URL or IP address

Adjustable packet size from 64 to 1500 bytes

PING Statistics

Number of Messages Sent, Received, and Loss Rate %

Roundtrip Delay for Average, Maximum, and Minimum

PPP/DHCP Session Analysis

IP Addresses for Local, Gateway, and Network Mask

Trace Route

VCC Scan

ATM OAM Test

Automatic response to far end F4 & F45 OAM requests

Transmit F5 End-to-End and Segment OAM commands

Network Statistics

Ethernet

- Transmit/Receive: Total Packets, Total Bytes, Bad Packets

ATM

- Transmit: Rate, Count

- Receive: Rate, Count, Dropped

Web Access Test

HTTP web page download and FTP file download: Server response time, download size and duration, average download rate

FTP file upload with user defined file size: Server response time, upload duration, average upload rate

IP DTE

Advanced IP features & Web Access Test through 10/100 Base-T interface

Connectors

ADSL Line Interface (ATU-R): RJ-45 @ 100Ω

Ethernet Interface: 10/100 Base-T (per IEEE 802.3)

PRODUCT DESCRIPTION

Module Size (WxLxH): 12.6 x 9 x 2.2 cm (5.0 x 3.5 x 0.9 in)

Operating Temperature: 0° to 50°C (32° to 122°F)

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

Humidity: 5% to 85% noncondensing

ORDERING INFORMATION

SSMTT-44A	ADSL2+ ATU-R Annex A Module Includes basic PING Testing
SSMTT-44B	ADSL2+ ATU-R Annex B Module Includes basic PING Testing
SWMTT-DSL-ADV	Advanced Features Software Suite Bundle for SSMTT-19, SSMTT-44A, and SSMTT-44B Supports the following features: ATM OAM, VCC Scan, Network Statistics, IP Statistics, IP Trace Route, Web Access Test*, and IP DTE*. *SSMTT-44A and -44B only

Recommended Cables

SS161	Cable, RJ-45 (m) to 3 Probe Clips, 2 m
SS167	Cable, RJ-45 (m) to RJ-45 (m), 2 m with Ferrite Filter
SS168	Cable, RJ-45 (m) to RJ-11 (m), 2 m with Ferrite Filter
SA261	Cable, RJ-45 to 2 small alligator clips

For more information or a directory of sales offices: info@sunrisetelecom.com | www.sunrisetelecom.com