

SUNRISE TELECOM®

TI ADSL2+ ATU-R Module

SSMTT-19A

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-19A TI 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 TI 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—the right solution for customers whether they need a simple, low cost 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, 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

TI AR7 TNETD7300A

ADSL Technologies

ADSL2+ (ITU-T G.992.5)

ADSL2 (ITU-T G.992.3)

Reach Extended ADSL2 (ITU-T G.992.3 Annex L)

G.dmt ADSL/POTS and S = 1/2 option (ITU-T G.992.1 Annex A and ANSI T1.413)

G.lite (ITU-T G.992.2)

ADSL2+ Extended Framing Parameters (ITU G.992.5 Amendment 1 and 2)

ATU-R Features

Modem Status Measurements

Downstream Rate

Upstream Rate

SNR Margin

Maximum Attainable Rate

Capacity

Attenuation

Transmit Power

Latency Path Mode: Fast or Interleaved

Link Measurements

Counters for CRC, FEC, HEC events

Errored Seconds, Severely Errored Seconds, Unavailable Seconds

Block Error Rate

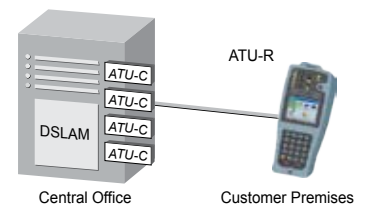
Loss of Signal Seconds

Retrans

Bits per Tone/SNR per Tone: Full graphical & tabular display

Event Tracer

Event type with time stamp



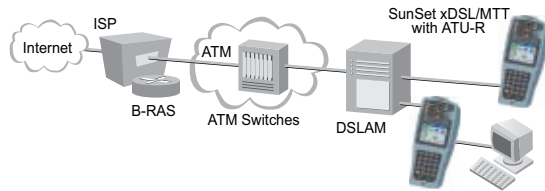
Basic IP Features

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

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

Trace Route

Protocols Supported: ICMP and UDP

Up to 30 Hops on the IP Network

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: Frames (Good, Broadcast, Multicast, Error), Collisions, Carrier Sense Errors, Total Bytes
- Receive: Frames (Good, Broadcast, Multicast, Undersized), CRC Errors, Overruns, Total Bytes

ATM

- Transmit: Cells (Good, Idle), PDUs, Total Bytes, Total Errors
- Receive: Cells (Good, Idle, Bad HEC, Dropped), PDUs, Total Bytes, Total Errors

Connectors

ADSL Line Interface: RJ-45 @ 100Ω

Ethernet Interface for Data: RJ-45 10/100 Base-T

PRODUCT DESCRIPTION

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

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

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

Humidity: 5% to 85% noncondensing

ORDERING INFORMATION

SSMTT-19A	TI ADSL2+ ATU-R Module Includes basic PING Testing
SWMTT-DSL-ADV	Advanced Features Software Suite Bundle for SSMTT-19, SSMTT-44A, SSMTT-44B, and SSMTT-19A 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, 6'
SS167	Cable, RJ-45 (m) to RJ-45 (m), 6' with Ferrite Filter
SS168	Cable, RJ-45 (m) to RJ-11 (m), 6' with Ferrite Filter

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

