



**Home Test Toolkit
for FTTN Installation**

The Home Test Toolkit (HTT) is a new addition to the vast variety of products currently offered by Sunrise Telecom. The HTT provides customers with a test tool specifically tailored to mass market FTTN deployment. This innovative product provides automatic "Go/No-Go" test routines for VDSL, VDSL2, Home Phoneline Networking Alliance (HPNA) networks, video, Ethernet, 802.11x wireless, copper loop fault identification, Plain Old Telephone Service (POTS) testing, and in-home wiring identification and testing.

KEY FEATURES

- VDSL and VDSL2 VTU-R
- HPNA Analysis
- Cable Test
- POTS
- DC Voltage and Ohm Measurements
- Ground Continuity Test
- Wireless (802.11) Analysis
- Signal Level Meter
- Ethernet Link Verification
- PC Utility (Bluetooth)

BENEFITS

- Low cost
- All-in-one test set
- Go/No-Go service verification
- Rapid installation
- Simple pass/fail display
- Easy-to-use

SPECIFICATIONS

Chipset

VDSL Chipset: Conexant Accelity Packet EoVDSL CPE
HPNA Chipset: CopperGate CopperStream CG3110

Connectors (Interfaces)

VDSL/VDSL2: RJ-11 @ 100Ω
HPNA: RJ-11 and F-81 75Ω (coaxial) connector
Cable Test: RJ-45
POTS/DC/Ohm: RJ-11
SLM: F-81 75Ω (coaxial) connector
Ethernet: RJ-45
Headset: 2.5 mm jack

VDSL2 VTU-R Features

Line Code: Discrete MultiTone (DMT)

Standards

ITU-T G.993.1
ITU-T G.993.2, Profile 8d and 12a
ANSI T1.424

Modem Status Measurements

Rate
Maximum Rate
SNR Margin
Capacity
Attenuation
Transmit Power
Delay

Link Measurements

Counters for CRC, FEC, HEC events
Counters for LOS, SEF, NCD, OCD
Errored Seconds, Severely Errored Seconds, Unavailable
Seconds Retrans

Bits/SNR per Tone: Full graphical and tabular display

Band Plan Selection: Plan 998, Plan 997

HPNA Receiver/Analyzer

Host and Client mode: User selectable
Auto-discover HPNA stations and MAC addresses
Auto Test between user selected stations
Data Rate
Power Level
Signal-to-Noise Ratio (SNR)
Transmit and Receive Packets
Packet Loss
User configurable Packet count and length
Test coaxial and twisted pair HPNA networks

Cable Testing

Wiremap

Wire mapping for RJ-45 8-pin twisted pair cable
Maximum cable length: 500 ft/150 m
Displays connected, open, short, and map

Cable Loss (Coaxial and Twisted Pair)

Test Signal: 7 and 14 MHz
Diplexer Verification
Provide estimated cable length (Twisted Pair Only)

Cable ID (HTT-ID-5)

Connectors: RJ-11, F-81 coaxial
Provide termination for cable identification

Wiremap Probe (HTT-WP)

Connectors: RJ-45 and F-81 coaxial
Uses 2 x AA batteries
Auto Shut Off: 5 minutes

POTS/Caller ID

Loop Start, DTMF dialing, Caller ID
Talk/listen via headset
DC Voltage
Range: 0 to ± 200 Vdc
Ohm Measurements
Range: 100 Ω to 1 M Ω
Tone Generation Frequency: 570 Hz
Ground Continuity Test

Wireless

Detect 802.11 b/g SSID
Signal Strength
Channel Identification
MAC Address Identification
Detect WEP 64 and 128 bytes encryption

Signal Level Measurement (SLM)

Input Frequency Range: 575 to 1000 MHz
Measurement Range: -10 dBmV to +35 dBmV
Maximum RF Input: +35 dBmV
Adjacent Channel Rejection: 45 dB
Level Accuracy: ± 2 dB Typical
Level Resolution: 0.5 dB
Input Impedance: 75 Ω
Tuning Resolution: 62.5 kHz

Ethernet

Link Status
Link Speed (10/100M, Half/Full Duplex)

PC Utility

Bluetooth
Configurable Threshold Criteria and result download (CSV)

PRODUCT DESCRIPTION

Chassis Size (WxLxH): 7.7 x 2.4 x 4.0 in (190 x 53 x 96 mm)
Operating Temperature: 32° to 113°F (0° to 45°C)
Storage Temperature: -4° to 158°F (-20° to 70°C)
Humidity: 5% to 85% noncondensing
Battery: Li-Ion battery with smart battery system
Screen: 64 by 128 pixels, black and white with back light and graphical capabilities

ORDERING INFORMATION (Check factory for availability)

HTT	Home Test Toolkit Test Set Includes: POTS, DC Test, VDSL, HPNA, Ethernet Check 10/100, Cable Test Function, Wireless 802.11 signal meter, charger, manual
HTT-SLM	Home Test Toolkit and Test Set with Signal Level Meter
HTT-FED	HTT Far End Devices; Includes Wiremap Probe and Cable ID Responder, 5-Pack, Addresses 1-5
HTT-ACC-KIT	HTT Accessory and Cable Kit Includes: SA313 earbud headset, SA671 carrying case, SA297 RJ-11 to Clip Lead Cable 6', SA298 RJ-11 to Coaxial (F-type connector) Cable 6', SA150-NA RJ-11 to RJ-11 Cable 6', SA310 Coaxial cable (male to male F-type connector) 6', SA312 Coaxial adapter (female to female F-type Connector), SA311 Coaxial snap-on adapter (screw-on to push-on F-type connector), and SA318 RJ-45 to RJ-11 and Coaxial F-type connector
SA317	Vehicle charger
SA671	Carrying case

Replacement Accessories

HTT-WP	HTT Wiremap Probe for Twisted Pair, Cat 3/5 & Coaxial cable
HTT-ID-5	HTT Cable-ID Responder 5-Pack, Address 1-5
SA150-NA	RJ-11 to RJ-11 cable, 6'
SA185	Battery Pack, HTT
SA186	AC Charger, HTT
SA187-NA	Power Cord, HTT
SA297	RJ-11 to clip lead cable, 6'
SA298	RJ-11 to coaxial (F-type connector) cable, 6'
SA310	Coaxial cable (male to male F-type connector), 6'
SA311	Coaxial snap-on adapter (screw-on to push-on F-type connector)
SA312	Coaxial adapter (female to female F-type connector)
SA313	Earbud Headset
SA318	Cable Assembly, RJ-45 to RJ-11 and Coaxial F-type connector
SA671	Carrying Case
SA976	HTT User's Manual

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