ParaScope ADSL2+ DMM

Advanced Test Set for ADSL1/2/2+

The ideal tool for ILECs, CLECs, and sub-contractors, who are responsible for installing, verifying , and troubleshooting ADSL1/2/2+ circuits and Copper loops.

Main Features

- High resolution backlit LCD with smart navigation mode
- Handheld durable design
- Fast Copper tests with DMM (ACV, DCV, Loop and Insulation Resistance, Capacitance, Line length)
- Bits/Tone
- Complies with multi-standards—ITU-T G.992.1 (G.DMT), ITU-T G.992.2 (G.Lite), ANSI TI.413 Issue 2, ITU-T G.992.3(ADSL2), RE-ADSL2, ITU-T G.992.4 (Splitterless ADSL2), ITU-T G.992.5(ADSL2+) , Annex A, L and M
- Supports multi-protocols: PPPoE (RFC 2516),PPPoA/LLC (RFC 2364), PPPoA/VC-MUX (RFC 2364), RFC 1483, supporting bridged and routed modes, Static IP and DHCP, RFC 2684, supporting bridged and routed modes, Static IP and DHCP, bridged Ethernet supporting bridged and routed modes, Static IP and DHCP
- Supports ISP login and IP Ping test
- Supports 10/100M LAN IP Ping test
- Supports replacing MODEM and simulating Internet login
- Easily confirms the successful delivery of ADSL services at the customer's premises or anywhere along the local loop
- Attached clamp LAN test cable (direct and intercross) can be conveniently connected to telephone wires and Ethernet card of the PC
- Field replaceable, rechargeable lithium battery module
- Beep and LEDs alarm indications (Low power, ADSL, and Ethernet)
- Large storage capacity—can store up to 60 groups of test results
- Auto shut-off
- Compliant with all known DSLAMs
- Supports Annex A, L, M (Annex B available)
- Supports RJ45 interface with connection to Internet via PC to provide pass through and monitoring of ADSL line status

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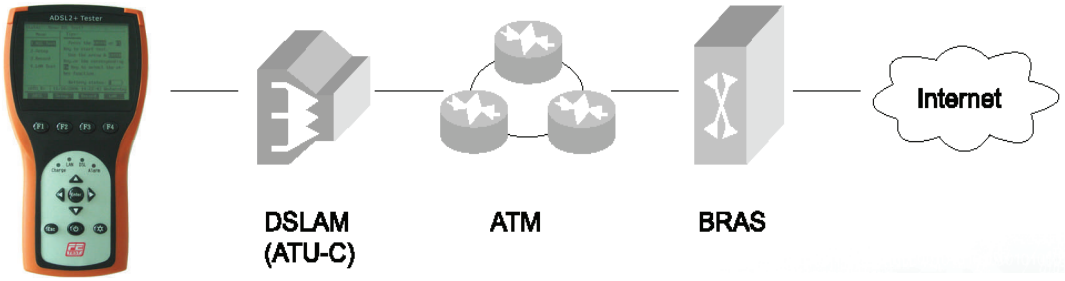
Applications

ADSL1/2/2+ Physical Parameters Test



⇒ Line Parameters Measurement: Maximum & current up/down stream line rate, actual up/down stream line rate, actual work channel (fast or interleaved), channel usage, current up/down stream noise margin, current up/down stream line attenuation, up/down stream output power.

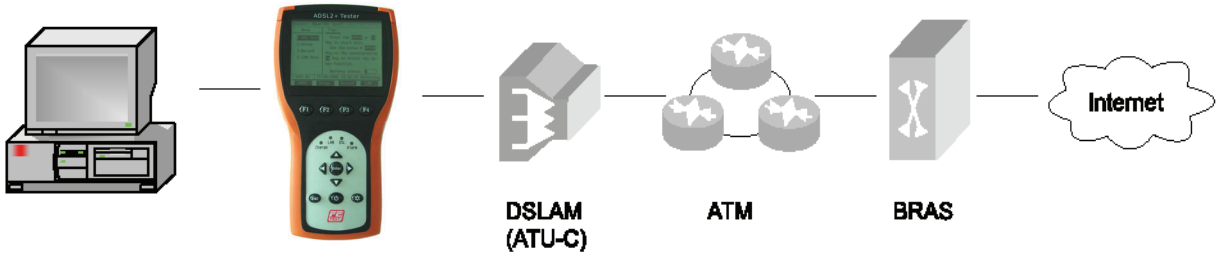
⇒ DMT Sub-channel Carrier Chart: Display graphical bit-map and numerical value of DMT modulated sub-channel. (GUI shows ADSL 256 DMT, ADSL2+ 512 DMT wave bits/tone, SNR/ tone.)

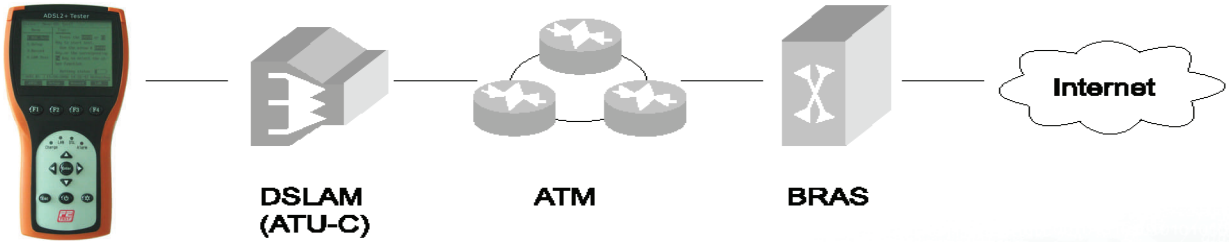
⇒ ADSL error frame statistics: Forward Error Corrections (FEC), Cyclic Redundancy Check (CRC), and Header Error Check (HEC) at both the near and far end.

⇒ ADSL Defect Information: Loss of Signal (LOS), Loss of Frame (LOF), Loss of Power (LOP), Loss of Margin (LOM) and Loss of Cell Delineation (LCD) at both the near and far end.

ADSL Modem Emulation

Replace ADSL1/2/2+ Modem





ISP Login and PING Test

⇒ Simulate PPPoE/PPPoA virtual dialing user behavior by inputting VPI, VCI, username and password, to validate user login with PPPoE/PPPoA virtual dialing mode.

⇒ Send consecutive PING packets to a specified host to validate connectivity of WAN and display error rate and delay.

⇒ Supports fixed PING test including gateway IP address settings, and MER, MAC Encapsulated Routing mode settings.

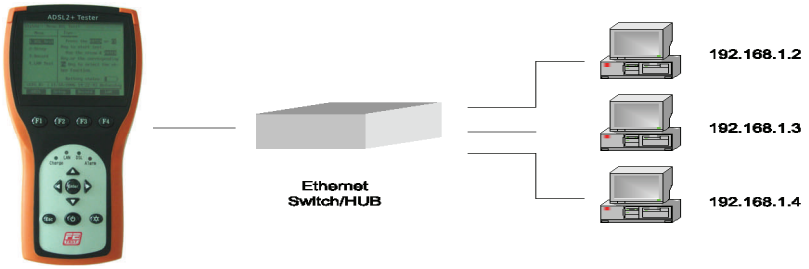
⇒ Simulate CPE via Ethernet interface to connect with ATU-R showing sequence noise margin and time contrast relationship.

⇒ Supports loop resistance test and measures coaxial open-or-short circuit status.

Applications Continued

LAN Test

Send PING packets to validate connectivity of LAN using the integrated Ethernet port to connect to an Ethernet switch.



Specifications

Item	Description
ADSL Line Connector	RJ-11
Ethernet Connector	RJ-45@100Ω
Line Code	DMT
Downstream Rates Supported	Up to 24Mb/s
Upstream Rate Supported	Up to 2.5Mb/s
Transmission Distance Supported	Up to 6.5km
Alarm and Status Indications	ALARM, LAN LINK, WAN LINK, CHARGE, etc
DMM	DMM Parameter Ranges DC Voltage: Range: -240V to 240V Accuracy: +/- 5% AC Voltage: Range: 0V to 240V Accuracy: +/- 5% Loop Resistance: Range: 5 Ohms to 5 KOhms Accuracy: +/- 5% Insulation Resistance: Range: 5 Ohms to 50 M Ohms Accuracy: +/- 10% Capacitance: Range: 0nF to 500nF Accuracy: +/- 10%
Standards Supported	Comply with: ANSI T1.413 Issue 2 ITU-T G.992.1(G.dmt), ITU-T G.992.2 (G.lite), ITU-T G.992.3(ADSL2), RE-ADSL2 ITU-T G.992.4(Splitterless ADSL2), ITU-T G.992.5(ADSL2+)
Encapsulation Supported	PPPoE (RFC 2516)、PPPoA/LLC (RFC 2364)、PPPoA/VC-MUX (RFC 2364) RFC 1483, supporting Bridged and Routed modes, Static IP and DHCP RFC 2684, supporting Bridged and Routed modes, Static IP and DHCP Bridged Ethernet supporting Bridged and Routed modes, Static IP and DHCP
LCD	320X240 Dot Matrix with backlit
Rechargeable Batteries	7.2V/1200mAh lithium batteries, continuous working for more 3 hours
AC Power Adapter	Input: AC 100V-240V, 50/60Hz Output: DC12V/1.0A
Record View II	Operating System:WIN98/ME/2000/XP
Operating Temperature	0 to 50 degress C, 32 to 122 degrees F
Humidity	5%—90% non-condensing
Dimensions	L×W×H: 7.87"X4.3/3"X1.42" or 200mmX75/110mmX36mm
Weight	600 grams or 1.32 lbs.