







VePAL LX100+

Handheld LAN Test Set

Network testing simplified

VeEX[™] VePAL LX100+ is a next generation test solution for networks supporting Triple Play services.

- Intuitive presentation of measurements with test graphics
- High resolution, anti-glare color touch-screen viewable in any lighting conditions fitted with protective cover
- Robust, handheld chassis packed with powerful and flexible features for demanding environments and test conditions
- Optimized for field engineers or technicians installing and maintaining networks enabling triple play services
- USB memory stick and FTP upload support for test result storage/file transfer. Software upgrade by USB memory stick
- Maintain instrument software, manage test configurations, process measurement results and generate customer test reports using included ReVeal™ PC software
- Extend field testing time using interchangeable LiIon battery pack/s. Greater battery autonomy provided in standby mode
- Advanced IP connection tests; Ping, trace route, ARP Wiz, web browser, and FTP upload/download
- NetWiz cable diagnosis with network statistics
- Optional VoIP call emulation and MOS performance analysis
- Optional WiFi Wiz site survey with internet connection test
- IPv4 and IPv6 Support



Advanced IP testing

Complete IP verification is possible using either the ADSL or Ethernet test ports. Considering that all Triple Play services are IP centric, a powerful and comprehensive set of IP test capabilities is no longer considered a luxury or a "nice to have" feature. Technicians need to verify network connection during installation and/or service restoration, and thus rely on features such as Ping test, Trace Route, ARP, Web browser, and FTP upload/download to get the system "up and running".



IPTV service verification

Designed and optimized for technicians turning up IP video service. Transport stream analysis encompasses data/video/audio bit rates and Program Identification (PID) mapping. Packet jitter and loss, IGMP latency (channel zapping), PCR statistics and Viewer function complete the Video Quality of Service (QOS) application suite.



Voice over IP testing

Take advantage of the two separate software options offering different test methods to verify and provision your VoIP network. Being able to test over the Ethernet and/or ADSL test interface ensures that the technician has all bases covered when confronted with CPE related problems.

The VolP Expert generates industry standard wave files to verify MOS and R-Factor values of upstream and downstream paths and includes QOS measurements like packet jitter, packet loss, and delay.



The VoIP Call Expert emulates an IP phone and can place and receive calls using SIP or H.323 protocols. Comprehensive Codec support and call destination options verify voice encoding and translation provisioning. Real time evaluation of subjective voice quality (MOS and R-factor) is made possible using the patented Telchemy test method which has been integrated into all VePAL test sets.



Net Wiz

Ethernet network installation simplified using this basic, yet powerful feature. A built-in TDR identifies distance to short, distance to open, wire cross, and other anomalies associated with CAT-5 structured cabling. "Sniff" the network using the one-touch discovery feature - Identify routers, gateways, printers, PCs and other devices connected to the network within seconds.

ools-Net Wiz Status Discovery [3,6] Open, 11m [1,2] Open, 11m cost let wh Status Summary Networks Attribute: PAddr: 192,168,0,69 VIac: 00-18-63-00-02-82 GroupName: Machine Name: Start Attribute: PING OK PAddr: 182.168.0.1 Vlac: D0-18-38-96-de-18

GroupName: Machine Name:

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WiFi Wiz

All VPAL products adopt an by support USB Wifi adaptor to make 802.11 b/g Wireless installations a simple task. Scan for existing and available networks or perform signal strength and quality measurements to determine the best location for a new Wireless Access Point.

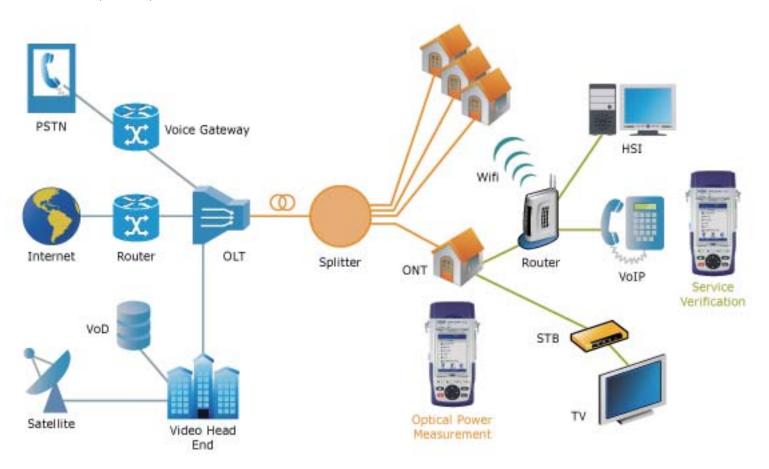
The IP Ping capability finally ensures the wireless network is properly installed and configured.



PON Applications

With its optional Optical Power Meter, the LX100+ is the ideal tool for FTTH Networks. It can verify the physical layer as well as triple play services in one compact unit.

The Advanced PON Power Meter functions allows in-servoce measurement of bi-directional signals between OLT and ONT with an industry standard 2x2 optical coupler.



Specifications

Advanced IP Test Suite

Ping, trace route, ARP wiz, FTP/Web tests. These tests are done via the chassis 10/100-T port

VoIP Expert

Provides VoIP Metrics

- MOS and R-factor measurement
- Packet Statistics: packet loss, jitter, delay

VoIP Call Expert

VoIP Call setup with VoIP USB adaptor Supports SIP and H.323 Protocol

Codec: G.711U, G.711A, G.723, G.729, Auto

IPTV

Provides true STB emulation

Supports IGMP/RTSP signaling, MPEG2/4, H.264 encoding,

RTP/VC1/MPEG-TS transport streams

Packet Statistics: packet loss, jitter, delay, PID mapping

Video/Audio rates

Channel zapping for quick and complete installation check

WiFi Wiz

Supports IEEE 802.11 b/g

General Specifications

Size 210 x 100 x 55 mm (H x W x D)

(8.25 x 3.75 x 2.25 in)

Weight Less than 1 kg (less than 2.2 lbs)

Battery LiIon smart battery 2400 mAh 10.8VDC

AC Adapter Input: 100-240 VAC, 50-60 Hz

Output: 15VDC, 3.5A

Operating Temperature -10°C to 45°C (14°F to 113°F) Storage Temperature -20°C to 70°C (-4°F to 158°F) Humidity 5% to 95% non-condensing

Display 3.5" QVGA 320x240 full color touch screen

Ruggedness Survives 1.5 m (5 ft) drop to concrete

on all sides

Water-resistance Water resistant - may be used in heavy rain

Interfaces USB 2.0 Host and Client, RJ45

10/100T Ethernet, Bluetooth 2.0 (optional)

Languages Multiple languages can be supported

SSID detection, Infrastructure, Ad-hoc, and encryption Signal strength and quality site survey

IP connection verification

Net Wiz

Available on 10/100-T chassis port

Detect distance to open/short, wire cross, impedance mismatch

Network device discovery Auto ping verification

Optical Power Meter

Universal Connector

Calibrated Wavelengths: 850nm, 1310nm, 1490nm, 1550nm

Measurement Range:-50 dBm to +25 dBm

Resolution: 0.1 dBm

Advanced PON Power Meter

Simultaneously measures 1310, 1490 and 1550nm

2 dedicated measuring ports (SC or FC type)

1310nm pulsing signal

1490/1550nm with internal filter

Works with industry standard 2x2 coupler (80%/20%)

Ordering Information

Z01-00-007P VePAL LX100+ Handheld LAN Test Set

Interfaces/Test Options

499-05-053 Ethernet Cable Fault Locator Z66-00-006P Optical Power Meter Option

Additional Options

(via USB, 10/100 Base-T Management Port)

 499-05-003
 Remote Control

 499-05-008
 IPTV Expert

 499-05-102
 VoIP Check

Z33-00-001 VoIP Expert, incl. VoIP Check

Z33-00-002 NetWiz, incl. Ethernet Cable Fault Locator

Option

Z88-00-001G WiFi Wiz, incl. USB WiFi Adaptor

Z88-00-001P VoIP Call Expert, incl. VoIP USB Adaptor &

Earplug

Recommended Accessories

A02-00-001G Car Adaptor C02-00-002G Carrying Pouch

Z77-00-006G LCD Protective Film (Pack of 5)

Replacement Items

403-15-001G Top Connector Cover Hinge (Pack of 5)

405-02-001G Screen Protector 405-02-002G Top Connector Cover

A01-00-001G AC Adaptor B02-03-002G Battery Pack

C01-00-001G Carrying Case (Basic)
C03-00-001G Shoulder Strap

F02-00-001G Ethernet Cable RJ45 to RJ45 2 m (6 ft)

F04-00-002G Power Cord - US 2 m (6 ft)
F04-00-003G Power Cord - UK 2 m (6 ft)
Power Cord - UK 2 m (6 ft)

Z77-00-001G Stylus with String (Pack of 5)



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