

# *GPON Protocol Analyzer*



## ***GPON Xpert™***

*The Only Passive Protocol Analyzer for GPON*

# GPON Xpert™ Overview

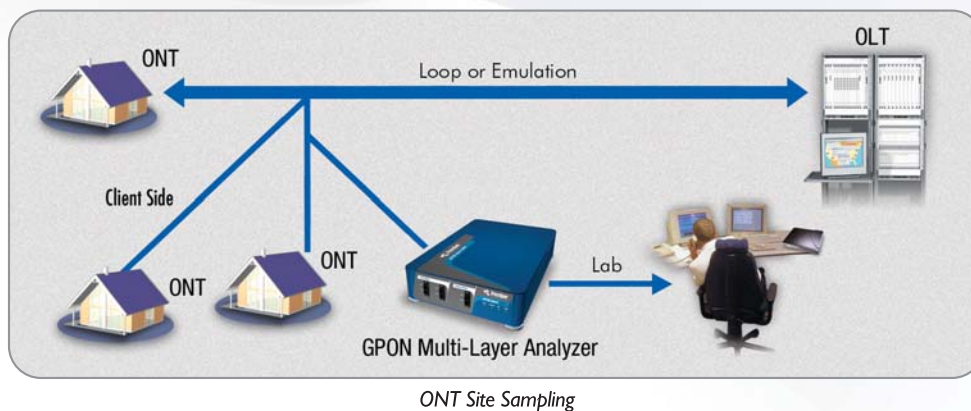
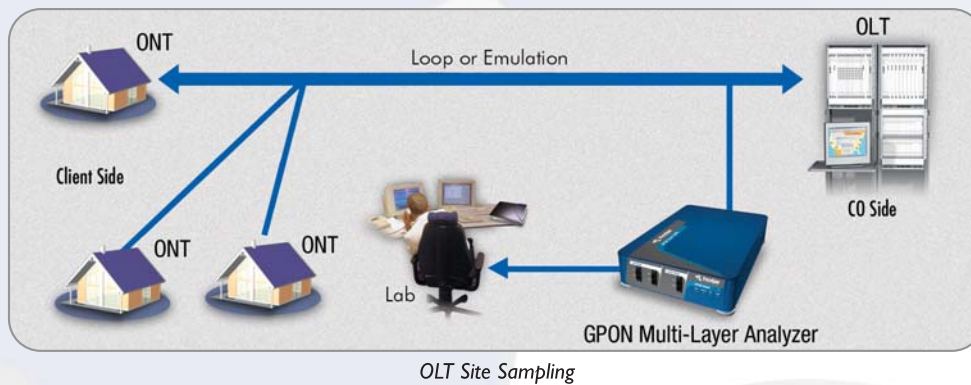
The GPON Xpert multi-layer analyzer is a unique protocol analyzer for GPON products. GPON Xpert is a modular tool designed for R&D, laboratory and field application engineers engaged in the development, testing and deployment of GPON standard-compliant solutions. Cutting significant time from GPON development, deployment, debugging, and interoperability testing, GPON Xpert accelerates time to market and return on investment.

The innovative GPON Xpert analyzer verifies the interoperability of GPON products offered by different vendors, and indicates compliance of any combination of OLT and ONU/ONT modems to the GPON standard. GPON Xpert is a powerful tool for service providers (Telcos and CLECs), equipment manufacturers and technology and chipset developers.

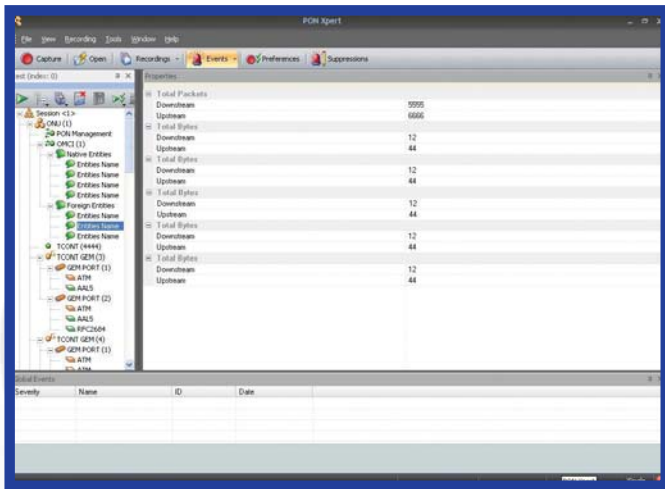
Following the overwhelming industry acceptance and tremendous success of the company's field proven systems, the DSL Xpert and VDSL Xpert analyzers, the GPON Xpert defines a class by itself by providing a complete and accurate analysis of GPON product performance, standard compliance and interoperability without using any GPON chipset. With its unique multi-layer probing capability, GPON Xpert provides comprehensive analysis of data in multiple forms: MAC layer, GTC Framing sub-layer, TC Adaptation sub-layer and OMCI Management. In addition, the system allows full view and analysis of the Upper Layers, including Ethernet, IP, TCP, ATM, and the ability to export the data for further analysis. GPON Xpert simultaneously presents downstream and upstream data and the connection between the data transmitted by the OLT and ONT/ONUs. A user-friendly software-based analyzer controlled by a PC, GPON Xpert has a feature-rich GUI that presents multi-layer information in convenient displays, graphs and tables.

As the only developer of xDSL passive protocol analyzers, TraceSpan gained worldwide recognition as an industry leader whose products are sought after and used by all major Broadband Access Providers, equipment manufacturers and chipset vendors

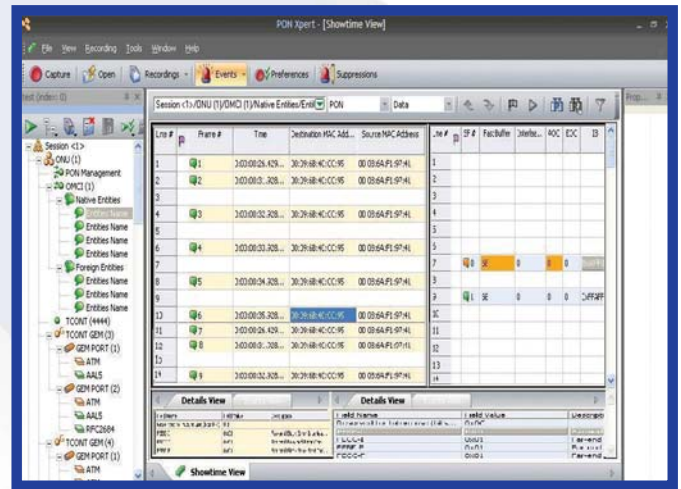
## Flexible Configuration Options



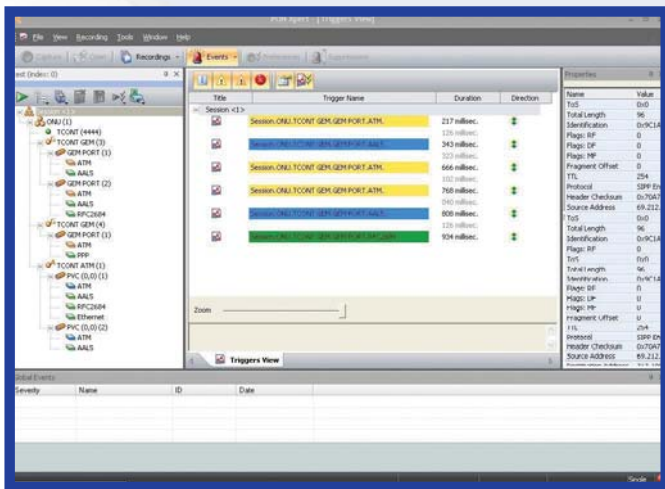
# GPON Xpert™ User Friendly Analyzer



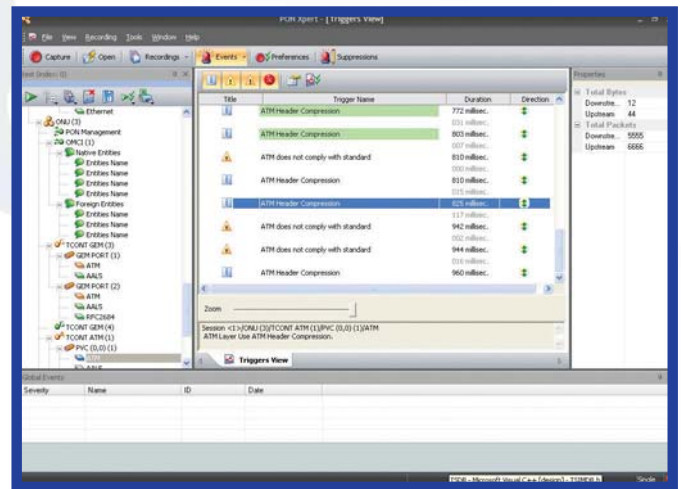
**Properties View**  
Total Packets, Downstream, and Upstream



**Showtime View**  
Data Link Layer, Messages and Events



**Trigger View**  
Sessions, Trigger Names, Duration Time



**Events View**  
Warnings, Errors, and Incompatibility Issues

## Advantages

- Complete testing of the GPON protocol
- Comprehensive Performance and Compliance Analyzer
- Independent Testing Tool - No GPON chipset
- Extensive Data Capturing Solution
- Multi-Layer Probing
- Unbiased Decision Making Tool for Managers
- Command Line Interface for Automatic Testing
- User-friendly GUI
- Accelerate Time to Market
- Quick Return on Investment

## Features and Benefits

Features	Benefits
Verification	Provides standard-compliance and performance-compliance verification
GPON Analysis	Offers analysis for the current GPON standard and future standard amendments
Simultaneous Data Extraction	Simultaneously displays upstream and downstream data and the link between the OLT and ONU/ONT modems.
Archive	Stores and plays back raw data and measurements in the form of samples and/or detected information
Alerts	Provides warnings regarding incompleteness of measurements or incompatibility within the GPON Standards
Comprehensive Reporting	Displays range of graphs, tables and reports relating to performance and errors. The Report Wizard allows automatic generation of exportable reports
Automatic Testing	Includes Command Line Interface (CLI), allowing integration with existing automated testing environment
Multi-layer Probing (Sniffing)	Tracks and displays events through the MAC and the Upper Layers, including signal, bit-pattern, sequence length, message structure and timing
Independent Testing	Detects and verifies problems without the need to rely on any GPON chipset
Exporting the Data	Allows users to extract the data to other tools such as Matlab® or exporting the data to Excel®
New Software Evaluation	Identifies problems before a new software version is released into the network
New Hardware QA	Checks performance and reliability before deploying new equipment

## Specifications

GPON ITU Standards Compatibility	G.984.2 – GPON PMD G.984.3 – GPON MAC G.984.4 – GPON Management Protocol
Dimensions	Height: 50mm (2 in.) Width: 275mm (10.8 in.) Depth: 375mm (14.7 in.)
Weight	3kg (6.6 lb.)
Power Supply	External Power Supply Voltage: 100-240VAC Frequency: 50/60 Hz Power: 20W
Safety Standard	CE
Certifications	FCC part 15
Operating Environment	Temperature: 0°- 40°C (32°- 104°F) Humidity: 10% to 90% non-condensing

### Corporate & International

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