

# N1627A Time Domain Reflectometer (TDR) Module for the Agilent Service Advisor







Agilent Technologies

# Service Advisor Time Domain Reflectometer (TDR) Module



# Increase Accuracy and Simplify TDR Measurements on Any Type of Metallic Cabling

Agilent's TDR module for the Service Advisor Tablet and Telecom Toolkit provides a wide range of easy-touse, accurate tools for locating faults or measuring span length for any type of metallic cabling, including copper twisted-pair, coaxial or Category 5/6 LAN wiring. The module's advanced, userfriendly software simplifies TDR testing, while advanced return pulse performance features allow measurements to 20 km.

# **Redefining TDR Technology**

Time Domain Reflectometers (TDRs) have traditionally allowed service technicians to perform basic length and fault measurements required for installation and maintenance.

Now, Agilent Technologies has reinvented the TDR to simplify use, expand the range and reach of applications, and increase portability. The TDR module can be used with the Service Advisor tablet or Telecom Toolkit undercradle. Both platforms provide one-touch software support, color graphs and plotting, and enhanced integration with related testing functions.

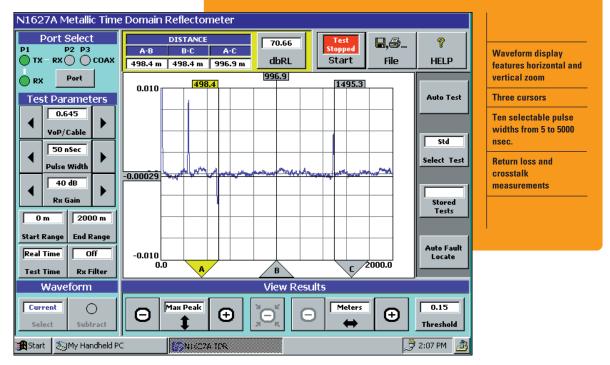
The TDR module provides improved performance with any type of metallic cabling, including traditional twisted pair, CATV coax and Cat 5/6 LAN wiring. Agilent's unique TDR technology provides service personnel with a significant distance measurement advantage.

## **Intelligent TDR Testing**

The Service Advisor Tablet and TDR plug-in module combination delivers a flexible, lightweight, battery-powered solution for cable testing. The Telecom Toolkit/TDR module configuration allows organizations to provide users of the Internet Advisor network analyzer with TDR testing capabilities, and extends module sharing and usage throughout installation and maintenance staffs.

Test selection and set-up is easy, thanks to the tablet's bright color touchscreen. Tests and results can be stored and recalled with a touch of an on-screen button, and high-resolution display capabilities simplify visual analysis of captured waveforms and comparison profiles.

The TDR module speeds tasks, from simple measurement of cable spans, detection of open and short circuits, and detection of impedance changes, to measurement of bridge taps for DSL line qualification.



## TDR TEST CONTROLS AND KEY MEASUREMENTS ON ONE SCREEN

Up to 50 waveforms can be stored and recalled for comparison to captured test profiles. This recall feature can also be used to evaluate performance changes or degradation in the same span over time. Starting and ending ranges can be selected independently, allowing specific cable sections to be progressively selected for fault isolation. The module's zoom feature permits users to select and magnify onscreen display of a specific segment of a captured waveform, to examine anomalies in detail. The TDR module's expanded granularity supports capture of up to 4,000 data points, providing a rich database for diagnosing potential cabling problems.

A built-in cable database allows the user to automatically enter the velocity of propagation (VoP) value appropriate for the cable being tested. This database may be edited or expanded to include specific types and brands of cabling.

Movable on-screen cursors can be placed at waveform peaks to precisely calculate absolute and relative distances between events, as well as time between events.

Finally, the TDR module also supports crosstalk measurements, return loss and reflection coefficients to assist telco and LAN technicians in evaluating potential service interference between cables bundled within binder groups.

# Better TDR Tools for Faster, More Accurate Results

The TDR module offers a costeffective solution for organizations equipping field personnel for this aspect of voice, data and cable service installations, extending the physical testing capabilities of the Service Advisor and Telecom Toolkit platforms to cabling.

# **Related Products**



All Agilent test modules, including the TDR Module, can be used interchangeably with both Agilent's Service Advisor portable test tablet and Internet Advisor PC platforms. Modules plug directly into the Service Advisor tablet or Agilent's Service Advisor Undercradle, which attaches to the Internet Advisor network analyzer.

#### N1610A Service Advisor Test Tablet

Agilent's Service Advisor Test Tablet is a lightweight, portable platform that supports a complete range of installation and maintenance testing requirements. The battery-powered tablet features a color touchscreen, and accepts all of the single and dual-slot application modules listed below.

#### N1700A Service Advisor Undercradle

The Service Advisor Undercradle attaches to Agilent's Internet Advisor network analyzer, allowing Internet Advisor users to share use of single and dual-slot plug-in testing modules. The undercradle allows field organizations to combine physical network and service deployment testing with the Internet Advisor's powerful, higher-layer protocol analysis capabilities.

# **Ordering Information**

N1627A Time Domain Reflectometer (TDR) Module

N1610A Service Advisor Portable Test Tablet opt 500: Remote Services

N1700A Service Advisor Undercradle

## N1660A Dual DS1/0 Test Module

Agilent's Dual DS1/0 Test Module for the Service Advisor platforms simplifies DS1 and DS0 testing by providing complete analysis of line conditions and status in both directions with the touch of a single button.

#### N1640A ATM Cell Processor Test Module

Combined with the SONET/SDH Test Module, the ATM module provides complete SONET/SDH ATM BER, QoS and VPI/VCI testing capabilities at up to 155 Mbp/s line rates.

### N1645A SONET/SDH Test Module

This line interface module provides connectivity and physical layer SONET and SDH testing for OC-1, OC-3c, STM-0 (optical) and STM-1(optical) lines.

#### N1625A/N1626A xDSL TIMS Test Module

The double-slot TIMS Test Module supports a complete range of Transmission Impairment Measurements (TIMS) related to line qualification and troubleshooting for a wide range of services from POTS to ADSL.

For more information about Agilent Technologies test and measurement products, applications, services, and for a current sales office listing, visit our web site: http://www.agilent.com/find/tmdir

You can also contact one of the following centers and ask for a test and measurement sales representative.

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#### Canada:

Agilent Technologies Canada Inc. 5150 Spectrum Way Mississauga, Ontario L4W 5G1 (tel) 1 877 894 4414

#### Europe:

Agilent Technologies Test & Measurement European Marketing Organisation P.O. Box 999 1180 AZ Amstelveen The Netherlands (tel) (31 20) 547 9999

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