

# the PrismLite Family of Protocol Analyzers

The whole spectrum of inter-network  
testing for convergence networks



Network Optimization  
Service Troubleshooting  
Network Maintenance

**RAD** COM

TEST-OF-THE-ART

# PrismLite Family

**Want to significantly reduce the time required for troubleshooting networks?**

**Need to verify network performance?**

RADCOM's Prism protocol analyzer family consists of the PrismLite, a powerful, portable WAN/LAN/ATM protocol analyzer, and the Prism UltraLite, a compact protocol analyzer for WAN/ Fast LAN networks. Lightweight and portable, they test a wide range of protocols. The analyzers support remote TCP/IP control and access with simultaneous multiple-channel operation, and are available with a range of specific add-on applications designed for monitoring, troubleshooting and maintaining today's modern multi-technology networks.

The Prism family provides an ideal test solution for network managers, service provider QA labs, and R&D and QA labs for both field service engineers and vendors.

## Highlights

- ▶ Available as either the PrismLite WAN/LAN/ATM protocol analyzer or the Prism UltraLite WAN/FastLAN protocol analyzer
- ▶ Multi-technology operation
- ▶ Remote operation
- ▶ True portability in terms of size and weight
- ▶ Easily customized
- ▶ Supports over 600 different protocols
- ▶ Scalable solution
- ▶ Plug-in interface modules for flexibility
- ▶ Simultaneous running of a number of applications
- ▶ Supports legacy datacom protocols as well as a wide range of cellular and VoIP protocols



*Prism UltraLite*



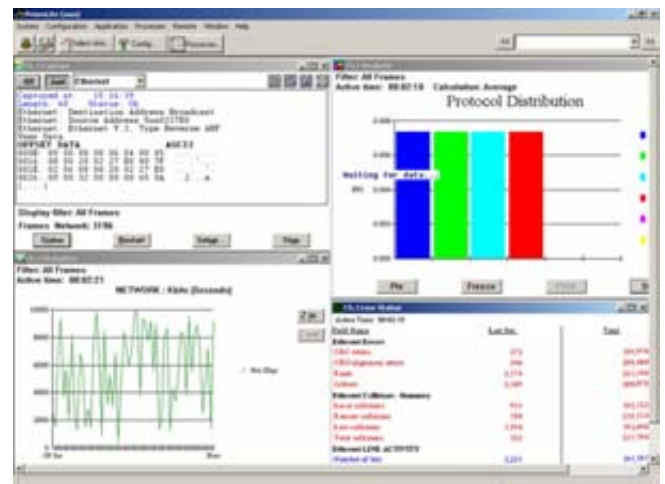
*PrismLite*

## Powerful Protocol Analyzer

The protocol analyzers provide comprehensive monitoring capabilities that enable users to capture data over the line and perform a sophisticated range of analyses and statistics. The monitoring and analysis processes can be performed both online and offline, with a wide range of user-defined displays, therefore allowing the user to capture data and process it at their convenience. A rich filter and trigger library allows users to pinpoint exactly the data required, defining what and when to capture. The Line Status process available for each interface provides an indication of possible problems on the Physical Layer.

## Simulation

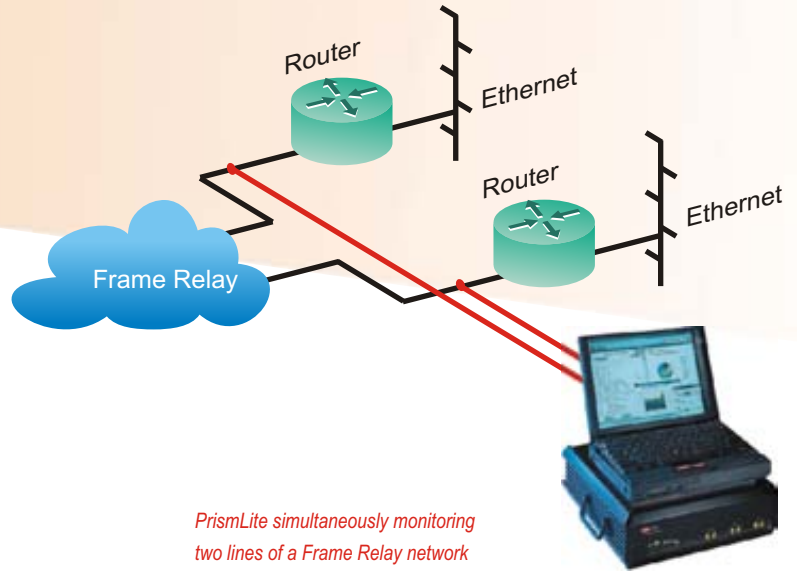
The analyzers provide a selection of different simulations that allow users to mimic a real network. By permitting users to determine the properties of the simulation, such as the frequency, size and contents of the transmitted frames, this mode of operation is useful for emulating real network behavior. Simulation is used both to check functionality and stress of a tested network. Any of the monitoring processes can be run during simulation, which allows users to view and analyze the data transmitted and received while the simulation is running.



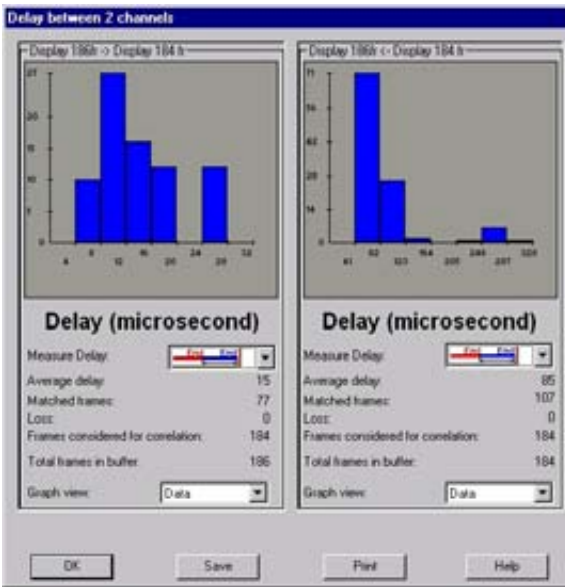
*Capture, analysis, statistics and line status screen*

## WAN Testing Solution

The PrismLite family provides solutions for testing various WAN networks, including applications for Frame Relay, ISDN and X.25. In Frame Relay testing, main features include Expert Troubleshooter, a Frame Relay fault finder application; DLCI activity analysis and load, an application that shows the active DLCIs and their current status; user and network analysis and 7-layer protocol decoding; CIR violation testing and monitoring; and User and Network Simulation. For ISDN, RADCOM offers both Analysis and Simulation, providing a comprehensive solution for development, installation and maintenance of devices and networks that implement ISDN. In addition, the ISDN Consultant learns, summarizes, displays and reports line usage, billing information, performance parameters and protocol errors regarding ISDN circuits. RADCOM's X.25 solution provides both monitoring and simulation of X.25 networks. The Prism also provides comprehensive support of other WAN protocols such as PPP, HDLC, Asyn PPP, SS7 and others. These are only a sample of the range of applications available for WAN networks.



*PrismLite simultaneously monitoring two lines of a Frame Relay network*



*Loss and latency*

## ATM Testing Solutions

The PrismLite enables capture and analysis of ATM cells at rates from E1/T1 to OC 12. The application reassembles ATM cells online and then displays and analyzes the contents of the cells. The PrismLite can analyze all protocols according to the 7-layer model. Analysis of the line is carried out from the most basic physical layer up to the application layer. In addition, a number of specific applications exist, such as ATM Signaling Simulation which simulates an ATM network. By simulating both users and networks (switches) and generating many calls per second, this package enables users to check the functionality of communications equipment and their ability to meet performance requirements. ATM is a Quality of Service (QoS) application which provides a detailed log of QoS events for subsequent inspection, enabling the validation of QoS-sensitive services on ATM links. Using the ATM Statistics and Policing application, ATM network specialists can obtain essential information about ATM line traffic, including non-conforming cell rate, quantity and rate of tagged cells and rate distribution over time. Moreover, the application allows drilling down into each VCC (Virtual Circuit Connection) to obtain statistics regarding specific connections. A number of other ATM applications complement RADCOM's ATM Testing Solution.



*ATM statistics and policing*

## LAN/Fast LAN Testing

The PrismLite family supports the testing of LAN and Fast LAN networks. Among the dedicated applications available are the LAN Pro and the Loss and Latency measurement application. In addition, the PrismLite family decodes many of the protocols that commonly run on LANs. The LAN Pro is an online tool that solves common local area network problems. It quickly finds network anomalies, gives detailed information about the exact nature of the problem and suggests solutions. The Loss and Latency Measurement application measures the characteristics of internetworking devices such as a VoIP gateways, firewalls and routers. By matching real-life data captured using a PrismLite analyzer on two different links, the application calculates the inter-segment latency as well as the data loss incurred while passing through the device under test.

# PrismLite Family

## Specifications

### Basic System

#### PrismLite

CPU Boards:  
One or Two i960 RISC  
Memory Boards: 32/64 MB  
Slots: 3

#### Prism UltraLite

CPU Boards: One i960 RISC  
Memory Boards: 32/64 MB Fast LAN on board  
2 Channels (simultaneous operation)

Remote Operation: Based on TCP/IP

Local Operation: Ethernet or parallel port connection to the PC

Disk Buffer: Hard-disk free space

Data Processing: Online and offline

Filters & Analysis: online and offline

Statistics: Online and offline

Filters: All protocol layers – 7 layers live TM

User Interface: MS-Windows, mouse or keyboard control, complete context-sensitive help, remote control option available

#### PrismLite only:

Front-end Processors (FEPs):

WAN: 2 ports

LAN: 2 ports

Fast LAN (10/100): 2 ports

Gigabit Ethernet: 2 ports

ATM Combo -packet and cell level: 2 ports

ATM Cell .cell level: 2 ports

Line-Interface Modules (LIMs): Up to 6; 2 for each slot, depending on technology

### Line Interface Module (LIM) Types

WAN: V-Series: V.35, V.24/RS-232, RS-449, RS-530, X.21N.11

ISDN/BRI (srr)

ISDN BRI (U)

E1/FE1, Abis & ISDN/PRI

T1/FT1, Abis & ISDN/PRI

LAN: Ethernet 10 Base-2 (BNC); 10 Base-T; 10 Base-5 (AUI)

Fast LAN 10/100 BaseT 2xRJ-45 ports

#### PrismLite only:

ATM: OC-12c/STM-4, OC-3c/STM-1 multi-mode, single-mode, UTP-5; DS-3; DS-1; E3; E1; 25 Mbps

### Compatibility

Compatible with other applications, including export to Excel, Word, Sniffer file format, BMP and WMF formats.

### Timestamp

#### PrismLite

100 nanoSecond resolution;  
synchronized for all channels

#### Prism UltraLite

WAN: 10 uSec resolution  
Fast LAN Ethernet: 1uSec resolution

### PC Requirements

Pentium PC 266 MHz or higher; 64 MB RAM or more;

150 MB disk space

### Operating Systems

Operates under Windows 95/98/2000/NT/XP

### Physical Characteristics

	PrismLite	Prism UltraLite
Dimensions (d x w x h)	35.0 x 32.5 x 10.7 cm (13.8 x 12.8 x 4.2 in)	21.6 x 27.8 x 2.5 cm (8.5 x 11 x 1 in)
Weight	7.0 kg (15.4 lb).	1.5 kg (3.3 lb)
Power	90-240 VAC (auto switching), 50/60 Hz	5 V, 3.5 Amp/12 V, 1 Amp (power supply included) 90-240 V/50-60 Hz

### Applications

#### PrismLite only:

ATM: ATM Policing, Signalling Simulation, BERT; Error Injection, Physical Line Status, ATM Consultant, Quality of Service (QoS), IP Traffic Generator

LAN: Ethernet Simulation, Physical Layer Statistics, Top Talkers, Protocol Distribution, Error Injection, LAN Pro™ Expert analysis system

WAN: Frame Relay Simulation, ISDN Simulation, X.25 Simulation, Frame Relay Troubleshooter, ISDN Consultant, BERT, V-series and E1/T1 Physical Layer Statistics

General: User Programming Library, Report Generator, Capture, Statistics, Analysis, Traffic Generator, Latency and Loss Measurement, Jitter Analysis, VoIP Expert, MasterScript, Background Record, Line Status

### Safety Standards

CE Mark, UL, CUL.

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