DA-3200 Data Network Analyzer
Realtime monitoring and testing across frame-based networks

Key Features

- **Quick identification of problems in frame-based networks**
- **Realtime and post-capture expert event analysis**
- **End-to-end VoIP call quality analysis**
- **One-touch capture filter and 7-layer decode support**
- **Frame relay traffic generation and emulation**

Frame-based data networks are fundamental for data/IP delivery to small to medium-sized business and remote office applications throughout the world. Because of the wide acceptance of this technology, it is essential for technicians to be able to identify network problems quickly and effectively.

A member of the JDSU DA-3000 Data Network Analyzer family, the DA-3200 enables data service turn-up, data service troubleshooting, and as-needed baseline testing for frame-based networks. Developed for use by both senior network engineers and field support technicians, the DA-3200 provides unprecedented visibility into network performance and troubles.

Powerful realtime and historical analysis

– from the physical layer through to the applications layer enable both developing and past problems to be seen. The protocol processing architecture and intuitive GUI of the DA-3200 mean that technicians are no longer solely reliant on complex data capture and decode to solve problems

– an approach that requires highly trained and experienced technicians. The DA-3200 offers simplified, remote visibility for today's most popular services.

The DA-3200 offers the user flexible modes of operation in a highly portable test solution with exceptional remote analysis capability. Technicians may carry it to local test sites or deploy it in the field to meet on-going monitoring needs.

WEBSITE: www.jdsu.com

figure 1

figure 2

Quick identification of problems in frame-based networks

To simplify the cause and effect analysis across layers, the DA-3200 provides realtime visibility at all layers (figure 1), allowing quick identification of problems on a wide range of frame-based networks including frame relay, CiscoSLE, HDLC and PPP. To identify problems that occur intermittently, historical trending of IP conversations for up to 30 days allows technicians to identify the problems that occurred while they were performing other duties.

Realtime and post-capture expert event analysis

The DA-3200 provides a realtime expert system (figure 2) to highlight network problems and offers assistance for those problems. The award winning, post-capture expert system, Mentor is included with DA-3200 software. Mentor saves time and money by scanning the network for problems and then offering possible solutions. It adjusts the priorities of events dynamically to help technicians target those problems. Mentor can display various levels of information to accommodate troubleshooters' needs and expertise – all with easy-to-interpret screens.

End-to-end VoIP call quality analysis

The ability to transmit high-quality voice traffic is now essential for business networks. With voice traffic migrating to wide area networks, the ability to monitor quality of service is now mandatory. Because VoIP has many different factors that determine voice quality, a network analysis tool must support a wide range of testing functions. The DA-3200, equipped with VoIP analysis software, meets this need by giving the user visibility into throughput, delay, jitter, and packet loss measurements per call, per DLCI or for the total link.

One-touch capture filter and 7-layer decode support

The DA-3200's one-touch capture allows users to click on any chart or table to apply a capture filter for just the data of interest, saving significant time in the setup process. The DA-3200 includes the industry-leading JDSU Examine decode engine, which supports over 1400 protocols.

Frame relay traffic generation and emulation

During provisioning of new circuits, or as a last resort while troubleshooting, the ability of generating frame relay traffic can help verify or identify problems with data networks. To allow emulation of CPE equipment, the DA-3200 can also maintain link management while generating test traffic.
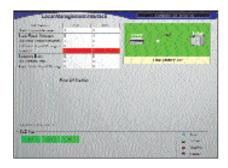
figure 3

figure 4

Applications

Data service troubleshooting

When circuits go down, every minute counts. The DA-3200 provides analysis of the data link and performs realtime, IP conversation analysis to solve bandwidth issues and other intricate problems that a traditional EMS is not equipped to handle. Combined with an intuitive user interface and native remote support, the DA-3200 provides a simple approach to identifying and solving problems quickly, reducing mean-time-to-repair (MTTR) and increasing customer satisfaction.

Frame relay service turn-up

Today's high-revenue services come with high customer expectations for reliable, error-free service. The DA-3200 offers link management interface emulation and traffic generation for turn-up applications. The LMI view (figure 3) give the user a unique realtime view into the frame relay service, the DLCIs, and the status of the link as a whole. BERT capabilities allow technicians to validate the physical layer properties of the network under test. The simplified interface removes the guesswork from test setup, and analysis and report generation capabilities give customers peace of mind.

VoIP troubleshooting

Since costs associated with VoIP installations and service expectations are both high, the ability to resolve problems efficiently is crucial. The VoIP Analysis Software Option (figure 4) provides RTP and RTCP stream analysis to resolve call quality issues affecting users quickly. With visibility into speech path delay, codec choice, packet loss and jitter, VoIP problems can be solved independently of signaling and codec types. With VoIP Analysis Software, the DA-3200 enables VoIP maintenance costs to be reduced through quick, flexible troubleshooting ensuring the viability of the installation.

Technical specifications

Physical characteristics

Overall dimensions (w x l x d)	9.5 x 12 x 2 in (24.2 x 30.5 x 5 cm)
Weight	4.5 lb (2 kg)
Rack mount height	2U

Environment

Ambient temperature range	+5℃ to +40℃
Storage and transport	−20℃ to +60℃

Electrical

Power supply	100-240 VAC, 50/60 Hz
Power consumption	40 W

Safety

UL1950, CAN/CSA C22.2 No. 950, EN60950, EN55022, EN55024

Panels

Front panel connectors	RJ-45 10/100 Ethernet
Front panel indicators	Physical, link, error
Front panel LCD	Test device configuration
Front panel controls	setup keypad, Ethernet crossover switch
Front Panel slot	Cardbus slot
Rear panel connectors	RJ-48c (8-pin modular) – T1, E1
	50-pin Subminiature D – RS-232,
	V.35, RS-449, RS-530, X.21
	RJ-48 (8-pin modular) – DDS 12 VDC inlet
Side panel	On/off rocker switch, COM1 for External Modem
Capture buffer	15 MB

System requirements

Windows® 98SE, Windows 2000, Windows NT 4.0 (SP6a)

333 MHz processor (minimum)

128 MB RAM – 256 Recommended

200 MB disk space

Supported data link services

Frame Relay

Cisco HDLC/SLE

Generic HDLC/PPP

Ordering information

Description	Part number
DA-3200 Data Network Analyzer for T1	DA3200-T1
DA-3200 Data Network Analyzer for E1	DA3200-E1
VoIP Analysis Software	DA3200S-VoIP

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