# **DominoWAN® ISDN Internetwork Analyzer**



DominoWAN ISDN provides a full range of features for monitoring, analyzing and troubleshooting data and voice over Basic and Primary Rate ISDN. Its rich feature set and portable design make it an ideal solution for ISDN networks analysis, including remote access, ISP, PBX, router backup and VoIP gateways.

# Troubleshooting

DominoWAN ISDN provides full decodes for more than 15 different Q.931 signaling variants. X.25 packet switched data analysis is supported on both the D channel and B channel, allowing users to quickly identify problems on both circuit switched and packet switched connections.

B channel traffic can be displayed using the Domino<sup>®</sup> analyzer's powerful and flexible protocol decode engine. The decode engine provides details through all seven layers of the protocol stack and supports all common WAN encapsulation methods. Voice traffic can be monitored for quality with a handset connected to the built-in PCM decoder.

The Basic Rate interface module provides analysis of 128 Kbit/s dual B channel connections. These can be in the form of MultiLink PPP or dual B channel IDSL circuits.

# AutoTrack

To facilitate B channel monitoring the AutoTrack option provides a unique timesaving capability. Users can quickly configure the DominoWAN ISDN to monitor the D channel for specific criteria such as the called and calling party number. When a setup message containing the matching parameters is detected the DominoWAN ISDN identifies the B channel that will be used for the call, and begins monitoring. This eliminates making arrangements for the call to come in on a specific B channel.

# **Cost Control**

Tracking utilization and identifying proper ISDN network operation can help contain costs. The DominoWAN ISDN Cost Control feature provides a history of connection information. Data collected for up to 60 days can be saved and exported into a spreadsheet. This information can then be used to assess optimization settings such as spoofing and broadcast traffic control.

Additionally, the Cost Control feature can help ensure that new applications operate in an efficient manner. By monitoring the duration of connections, the Cost Control feature can quickly identify applications that maintain connections for extended periods of time.

- Support for 15 Signaling protocols
- ISP and corporate access analysis
- Network optimization
- Multilink PPP and IDSL support
- Usage and network loading statistics and history
- Simulation of NT and TE
- Detailed analysis of B and D channel protocols
- Automatic tracking of B channel for monitoring



# **Data Traffic Monitor**

DominoWAN ISDN provides detailed statistics and information on network traffic, protocols and stations. Beginning with general bit and frame statistics, the monitor function also lets users select specific details about encapsulated protocols. By looking at the protocols encapsulated within the WAN frames the DominoWAN ISDN provides detailed information on protocols such as IP and IPX, as well as station specific details.

## Simulation

Simulation allows the user to emulate either the TE or the NT equipment for testing the ISDN network or the customer

# Specifications

### **Basic Rate Interface Module**

ISDN DBA Line Interface Module					
Handset:RJ-11					
Connector:					
Impedance: high impedance, $100\Omega$					
Electrical Characteristics: to ITU-T Rec. I.430,					

#### ISDN PRA Line Interface Module (30B+D) 2 Mbit/s ETSI

(502.2) =			
Electrical Characteristics: to ITU-T Rec. I.431/			
G.703/G.704, ETS 300.011,			
PCM31, PCM31-CRC			
Impedance: high impedance, $75\Omega$ or $120\Omega$			
Connectors:			
Handset:			

#### ISDN PRA Line Interface Module (23B+D) 1.544 Mbit/s T1

Electrical Characteristics: to ITU-T Rec. I.431/
G.703/G.704, SF, ESF, AMI, B8Z
Impedance: $1000\Omega$ bridged, $110\Omega$ or $100\Omega$
Connectors: 2 x RJ48-C, 4 x Bantum
Handset:

#### **D** Channel Protocols

ITR6, Lucent (AT&T), CorNet, CorNet NQ, Nortel DMS, DREX, EDSS-1, INS-NET, National 1, National 2, QSIG, TN1R6, RPH, VN4, TR303, X.25

### **B** Channel Protocols and Encapsulation

PPP, MLP, V.120, X.25, Frame Relay, HDLC, SDLC, 128 Kbps IDSL, A-Law and Mu-Law

#### U Interface (IUM-10 monitor as option)

Protocol Analysis mode only, requires $S_0/T_0$ basic rate access module		
Connector:		
Handset:		
Layer 1 Specifications: to ANSI T1.601,		
Code:		

#### Safety

Safety: . . UL 3111; CAN/CSA, C.22.2 No. 1010.1, ..... EN-61010-1, IEC-1010-1



# terminal equipment. User defined parameters can be selected for the connection definition. Selection of bearer capabilities allows both speech and data calls to be defined.

#### Interfaces

Primary Rate ISDN uses the DominoWAN E1 (30B+D) and T1 (23B+D) plug-in interface modules. Support for Basic Rate ISDN (2B+D) is provided through a separate S/T plug-in interface module. The optional IUM-10 U interface monitor, which works in conjunction with the Basic Rate interface module, allows monitoring of 2B1Q U interface Basic Rate ISDN.

# Ordering Information

## Hardware

Hardware ISDN BRA 2B+D Basic Package * includes BRA LIM, BRA 2B+D Generic Softw	BN 7514/40 pare and handset		
ISDN Line InterfaceModule PRA (30B+D) 2 Mbit/s E1	BN 9314/90.11		
ISDN Line Interface Module PRA (23B+D) 1.544 Mbit/s T1	BN 9314/90.12		
DominoWAN 1.544 Mbit/s T1 Interface (Japan)	BN 9314/90.17		
ISDN U-Interface Monitor (WWG IUM-10) analysis only, requires BRA interface module	BN 7534/10		
Handset	BN 7510/90.11		
<b>Software</b> ISDN BRA 2B+D Generic Software	BN 7514/91.19		
ISDN PRA 23B+D and 30B+D Generic Software	BN 7515/91.19		
ISDN BRA 2B+D Full Option Package*	BN 7514/92.18		
ISDN PRA 23B+D and 30B+D Full Option Package* *Includes Simulation, Cost Control and AutoTra	BN 7515/92.18 ck software		

#### **Minimum PC Requirements:**

For minimum PC requirements, visit our website: http://www.wwgsolutions.com/ products/domino/pc\_specs.html

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