



3M™ Dynatel™ All-in-one Modem Module VDSL2

Summary

The All-in-one Modem Module VDSL2 is a self-contained unit that attaches to the 3M™ Dynatel™ Advanced Modular System 965AMS at the module position on the back of the unit. Power is supplied by the 965AMS. This module is designed to provide testing of xDSL services. It allows the technician to attach to the copper service pair bearing a DSL circuit via 965AMS the red and black test leads. The technician can then connect to the DSLAM at the CO or field cabinet, measure and display connect statistics, link to the server, ping through the server to an IP destination, or browse the Internet.

Functionality

The modem module supports the following DSL service types:

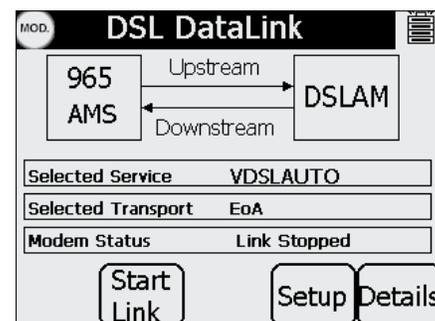
- ANSI T1.413 Issue 2
- ADSL G.dmt G.992.1/2 Annex A
- ADSL2 G.992.3/4 Annex A
- ADSL2+ G.992.5 Annex A, B, L and M
- VDSL1 G.993.1
- VDSL2 G.993.2 plan 997, 998 supports all eight profiles: 8a, 8b, 8c, 8d, 12a, 12b, 17a and 30a

The modem module supports the following WAN internetworking protocols:

- Point-to-point protocol over Ethernet
- Point-to-point protocol over ATM
- Bridge mode RFC1483
- Dynamic host configuration protocol (DHCP) client

The modem module supports the following functions:

- Connect with a DSLAM
- Link with the server
- Ping to/through the server to an IP destination
- Internet browsing
- Substitute as a CPE DSL modem by operating in a 'thru-mode' from the DSL port to the module Ethernet port
- Support DSL data transport services such as web browsing or ftp transfers
- Support ADSL2+ non-zero INP settings at full data rate
- Validate Ethernet port connectivity and data rate



VDSLAUTO mode automatically connects at the the highest possible connect rate/service type (i.e. VDSL2, VDSL, ADSL2+)



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Connect Statistics

The 3M™ Dynatel™ All-in-one Modem Module VDSL2 provides the following parametric data to the 3M™ Dynatel™ Advanced Modular System 965AMS application:

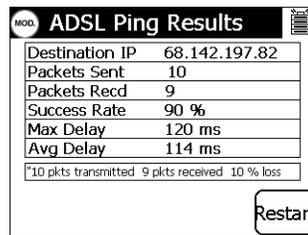
- Modem status (Showtime, initialization)
- Transmission system (e.g. G.992.5)
- Vendor ID information
- Downstream and Upstream maximum attainable rates
- Downstream and Upstream noise margin
- Downstream and Upstream total aggregate transmit power
- Downstream and Upstream capacity
- Bits per tone for each subcarrier
- SNR per tone for each subcarrier
- Forward Error Correction Count (FEC)
- Cyclic Redundancy Check (CRC) error count
- Header Error Control (HEC) violation
- Loss of Signal (LOS)
- Loss of Frame (LOF)
- Loss of Power (LPR)
- Downstream and Upstream transmit power
- Downstream and Upstream line attenuation
- Downstream and Upstream actual data rate
- Downstream and Upstream interleaving delay
- Downstream and Upstream interleaving depth

Ethernet Functions

- 10 Base T/100 Base T Selectable
- Browse via Ethernet
- Browse via Customer Premise xDSL Connection
- Ping via Ethernet
- Ping via Customer Premise xDSL Connection



Browse



Ping

Specifications	
Size	6.0" H x 5.5" W x 1.5" D
Weight	0.86 lb.
Operating Temperatures	-20°C to +60°C (operational time is limited at higher temperatures)
Storage Temperature	-40°C to +85°C
Humidity	0 to 90% non-condensing
Rain & Dust	IP64 (attached to 965AMS)
Drop Test	Survives 3 ft. (1 m) drop onto concrete, (survives 5 ft. drop onto concrete with soft case) using ASTM D4169 assurance level I method 5276
FCC	CFR 47 Part 15 Class A
CE	EN 55022 Class A, EN61000-4-2, EN1000-4-3

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