

G.SHDSL DIGITAL MODEMS UP TO 2 MB/S



GENERAL DESCRIPTION

DAVANTEL **DM** family of DSL modems complies with the latest digital transmission technology over copper pairs: TC-PAM (Trellis Code-Pulse Amplitude Modulation according to ITU-T G.SHDSL standard, Rec G.991.2 and 2B1Q according to ETSI TS 101 135).

DM family of products is presented in standalone and 19" rack format. The three available versions are:

- ❑ **DM-2-B:** PAM modulation; speeds from 192 to 2320 kb/s over 2 wires; Ethernet 10/100BaseT interface with support of VLAN tagging according to IEEE 802.1q
- ❑ **DM-4-B:** PAM modulation; speeds from 192 to 2320 kb/s over 2 or 4 wires, up to 4640 kb/s over 4 wires; Ethernet 10/100BaseT interface with support of VLAN tagging according to IEEE 802.1q
- ❑ **DM-2-GV:** PAM modulation; speeds from 192 to 2320 kb/s over 2 or 4 wires; G.703 and nx64 (V.35, V.36 and X.21) interfaces

The range of products **DM** also incorporates advanced features, such as:

- Multirate: manual or automatic selection of line speed from 192 kb/s up to 2,3 Mb/s depending on the length and quality of the copper pairs

- Local and remote loops
- Console local port for device management (configuration, statistics, etc.). Remote management via Telnet in versions with Ethernet interface.
- Possibility of regeneration of DSL signal through repeaters for long distances

Those versions with 10/100BaseT interface incorporate a bridge in LAN interface and support VLAN traffic according to IEEE 802.1q. Likewise, the devices use protocols for Ethernet transmission over DSL reaching effective speeds around 10-15% higher than other solutions in the market with Ethernet over ATM over DSL encapsulation.

The versions with G.703/G.704 interface incorporate complete statistics according to ITU-T G.826.

Asimismo, los modelos con interfaz G.703/G.704 incorporan completas estadísticas según ITU-T G.826.

SPECIFICATIONS

DSL line (TC-PAM):

Modulation: TC-PAM (Trellis Code-Pulse Amplitude Modulation) according to ITU-T G.SHDSL, Rec G.991.2

Impedance: 135 ohm
Transmission power: 13.5 dBm
Line speed: 192 kb/s to 2064 kb/s

DSL line (2B1Q):

Modulation: 2B1Q (according to ETSI TS 101 135)
Transmission power: 7.8 to -14.8 dBm
Line speeds: 192 kb/s to 2320 kb/s
Transmission spectrum: from 0 to 96 kHz (192 kb/s);
from 0 to 1160 KHz (2320 kb/s)
Impedance: 135 ohm

Ethernet interface:

Standard: IEEE 802.3, IEEE 802.1q (VLAN tagging support), Full/Half Duplex
Speed: 10/100BaseT
Connector: RJ-45

E1 interface:

Standard: G.703 and G.704
Jitter: G.823
Line code: HDB3
Speed: 2048 kb/s ± 50 ppm
Connector: Coaxial or DB-15 female (different versions)
Impedance: 75 ohm or 120 ohm (different versions)

nx64 DCE interface:

Speeds: 2048 kb/s ± 50 ppm and nx64 kb/s
Circuits: 103,104,105,106,107,108,109,113,114 and 115
Connector: DB-25 female
Cable adapters to:

- V.35: Winchester according to ISO 2593
- X.21: DB-15 male according to ISO 4903
- V.26/RS449: DB-37 male according to ISO 4902

Maintenance:

RS-232 configuration port with console interface (9600,8N1). DB-9 male connector.
Telnet server (only for those version with Ethernet interface)

Monitoring of:

- DSL line: TX and RX packets, TX and RX bytes, signal level, line speed and noise level
- Alarms (contact relays)
- Versions with Ethernet interface
 - Ethernet interface: TX and RX packets, discard packets
 - MAC addresses in bridging table
- Versions with G.703 and nx64 interface
 - Statistics according to ITU G.826

Power supply:

220 VAC and/or -48 VDC

Dimensions (versions GV):

230 (W) x 160 (D) x 46 (H) mm
weight: 700 g

Temperature of service:

-5 ° to 45 °C

VERSIONS

- | | |
|-------------------|---|
| DM-4-G75V | 2 and 4 wires. V.35 and G.703 interfaces. 75 ohms, 2 x coax |
| DM-4-G120V | 2 and 4 wires. V.35 and G.703 interfaces. 120 ohms, 1 x DB15 female |
| DM-2-B | 2 wires. 10/100BaseT interface. Bridge and VLAN tagging support |
| DM-4-B | 2 and 4 wires. 10/100BaseT interface. Bridge and VLAN tagging support |