

Discus™ DSBG xDSL Series

 **access**



The Discus™ DSBG product line comprises a range of modular multi-service access routers for the SoHo and Small Business professional segments. With remote manageability and provisioning as a common trademark, product versions range from pure data access routers to mixed PSTN and ISDN VoIP IADs.

- **ADSL 2/2+ (Wan Ethernet option)**
- **Annex A/B**
- **Annex M option**
- **USB 2.0**
- **4 Ethernet 10/100**
- **Up to 8 voice simultaneous channels**
- **Wireless 802.11n***
- **Up to 2 ISDN BRI Interfaces**
- **FAX Support (T.38)**
- **Advanced QoS**
- **IPSEC VPN (HW encryption)**
- **IP-PBX**
- **Advanced Services**

The DSBG product family is a modular Access Gateway platform for the professional segment, ideally suited to SoHo and Small Business users. From data access routers with hardware encryption to VoIP Integrated Access Devices (IAD) with up to 8 channels, the DSBG family, based on an ADSL 2/2+ integrated interface, can be easily configured for a wide range of feature combinations.

With the ability to support both PSTN and ISDN mixed interfaces, the DSBG voice gateway is an ideal device for small- to medium-sized businesses needing a cost-effective, integrated voice and data service bundle.

As an Integrated Access Device, the DSBG series builds on extensive field experience of interoperability with leading VoIP carrier platforms. The VoIP software offers flexible voice routing features including various numbering plans, insert/remove call number digits and apply differentiated voice processing codes.

Call routing on local ports for voice backup or for dial-in calls from the PSTN network is also possible.

The available ISDN BRI interfaces allow the use of existing ISDN terminals (phones, G4 faxes and Videophones) and can additionally serve as WAN back-up interfaces.

The DSBG family is based on a field proven software platform, and offers Pirelli's experience in remote management with the support of TR-069 standard-based device provisioning.

In addition to advanced security features such as firewalls, VPN and optional smart-card reader, the DSBG series also enables extended value-added applications to the end-user through a service delivery web portal, including:

- Web content filtering
- E-mail filtering
- remote file access
- personal domain name
- anti virus
- video surveillance
- IP-PBX
- web server

Features subject to change - not contractually valid unless specifically authorized by Pirelli

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SOLUTIONS**

Discus™ DSBG xDSL Series



PRODUCT MODELS

| DSBG Model | FXS | ISDN BRI | IP-PBX | HW Encr. |
|------------|-----|----------|--------|----------|
| AE400 | 0 | 0 | - | yes |
| AE 420B | 2 | 0 | Opt. | - |
| AE 420 | 2 | 0 | Opt. | yes |
| AE 440 | 4 | 0 | Opt. | yes |
| AE 480 | 8 | 0 | Opt. | yes |
| AE 421 | 2 | 1 | Opt. | yes |
| AE 402 | 0 | 2 | Opt. | yes |
| AE 442 | 4 | 2 | Opt. | yes |

PRODUCT ARCHITECTURE

ADSL2/2+ Uplink

- ADSL: G.DMT Annex A (ADSL over POTS), G.DMT, Annex B (ADSL over ISDN, U-R2 compatible)
- ADSL2 (G992.3) / ADSL2+ (G.992.5) / RE-ADSL (Reach-Extended ADSL, G992.3 annex L, Annex M)
- RJ-11 Interface/RJ-45 (Ethernet option)

LAN

- Ethernet Switch (4 ports) with Automatic crossover
- 10/100 Mbps, half/full duplex with autosensing
- Link status and activity LEDs
- 2 USB 2.0 host interfaces/ 1 USB 1.1 device

Console Port

- RS-232/RJ-45 connector

Wireless LAN (Optional)

- IEEE 802.11b/g/n*
- Encryption: WEP (key length: 64, 128 bits), TKIP –
- WPA 1.2 and 2.0 (802.11i) WPA-PSK and 802.1X (EAP, EAP-TLS, Authentication via RADIUS servers)

VoIP

Basic Voice configuration: 0/2/4 FXS, 0/2/ BRI ports - (Factory mounted)

PSTN

- Loop start
- On-hook voltage: 35 V RMS
- Support of caller-id (DTMF and FSK)

ISDN

- CTR3/Euro-ISDN/Euro-numeric compliant, S0 and T0, NT or TE mode
- Point-to-point and multipoint
- Power source type 1 (2W / port)
- Fax/modem/unrestricted BC detection and transport

Optional Daughter Board: additional 4 FXS ports

Signaling protocols

- SIP
- H.323*
- MGCP
- DTMF: in band (RFC2833) or out-of-band (H.245 alphanumeric mode)

Voice Call Routing

- IP-PBX*: voice mail, auto attendant services, Hunt groups, dial plan
- Insertion/suppression of digits
- Local port switching
- Selection of voice processing

Fax and Modem over IP

- Fax: V.27ter, G3, Super G3, G4, V.29
- T.38 fax relay
- Modem detection and transport in clear channel mode

Voice Processing

- Echo cancellation: G.165/168 compliant, non-linear processing
- Voice compression: G.711 (a/μ law), G.726*, G.729a*, configurable packet length
- DTMF detection and generation
- Country-specific tone generation and customization
- Silence suppression and comfort noise generation
- Adaptive jitter buffer

IP Addressing & Routing

- Network address translation: static/dynamic NAT, NAT, selective NAT, twice NAT
- DHCP client, server, relay
- IP address helpers
- DNS proxy
- Routing protocols: RIP v1/v2, OSPF v2, BGP v4
- Policy-Based Routing
- DNS server update protocol: DynDNS

IP Quality of Service

- ATM QoS: UBR, VBR-nrt, VBR-rt, CBR.
- 802.1P/Q prioritization
- Diffserv (RFC2474, RFC2475) marking and queuing according to connection type, network interface, MAC, IP,
- hostname, DSCP/ToS value, port number and application
- Port based QoS

Security

Firewall

- Standard and extended access lists
- Stateful packet inspection
- Configurable timers per port and application
- All firewall log messages can be buffered, viewed or sent to a syslog server

VLAN

- Supports multiple VLAN ID per ports
- 802.1p/q

VPN

- IPSec
- PPTP client/server
- L2TP client/server
- SSL

Management

- TR069
- Industry standard Command Line Interface (CLI)
- Web-based configurator for LAN and WLAN settings by end-users (can be turned off)
- SNMP V1/V2C/V3
- Support of user privilege
- Upload/download of configuration and binaries via

FTP/TFTP

- Traceroute, ping, extended ping
- User authentication via RADIUS
- RADIUS accounting
- Global statistics screens (console, web-based)
- Event and trace buffering
- Syslog client
- Flow capture and decoding

ATM

- Up to 8 PVC
- OAM-F5 (send/receive): loopback, continuity check (segment and end to end)
- Shaping: UBR, VBR-NRT, VBR-RT, CBR
- Encapsulation (LLC or Mux): IPoE (bridge), PPPoA, PPPoE

PPP

- PPPoA, PPPoEoA
- MLPPP fragmentation and interleaving
- PAP/CHAP authentication

Technology

Dimension W x H x D (cm):
20 x 25 x 8,5,
Weight: 1,3 Kg

*ask Pirelli for details.

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