

Discus™ DSBG 420B

Embedded IP-PBX



The Discus™ DSBG product line comprises a range of modular multi-service access routers for the SoHo and Small Business professional segments. DSBG A420BG embedded IP-PBX makes the ISP able to provide a private telephone system allowing VoIP telephone 'extensions' to connect to each other as well as to the external world

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 4 channels, the DSBG family, based on an ADSL 2/2+ integrated interface, can be easily configured for a wide range of feature combinations.

DSBG A420BG makes End Users able to place calls using IP Network instead of a standard telephony infrastructure enjoying voice mail and auto attendant services fully programmable.

SIP VoIP terminals (IP Phone & Softclients) within PBX environment can freely communicate with each other in case of fault on ADSL wan connection as with legacy PABX.

- **ADSL 2/2+ (Wan Ethernet option)**
- **Annex A/B**
- **Annex M option**
- **USB 2.0**
- **4 Ethernet 10/100**
- **2 FXS ports (phone, fax, PoS)**
- **FAX Support**
- **Advanced QoS**
- **IP-PBX**
- **IPSEC VPN* (SW encryption)**

DSBG A420BG voice gateway is an ideal device for small sized businesses needing a cost-effective PABX services creating a FULL VoIP environment. In order to enable IP- PBX features, an external USB storage device (USB disk-on-key or hard disk) partitioned EXT2/3 formatted must be connected on DSBG A420BG Pirelli gateway USB host port.

DSBG A420BG 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. DSBG A420BG IP-PBX features are made available through an embedded SIP Proxy and a special software licensed by Pirelli. Main supported services are:

- Call Waiting, Call Forwarding, Caller ID
- 3-way calling
- Voice mail
- Auto attendant
- Incoming call handling
- Outgoing call dial plan
- Music on hold
- Hunt groups
- Call Park

Discus™ DSBG A420BG

MAIN FEATURES



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/V2/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

Physical Specifications

Dimension W x H x D: 170 x 200 x 55 mm
Weight: 1 Kg

Power Adapter

INPUT: 100-240Vac 50/60 Hz 0.51 A
OUTPUT: 15Vdc 1 A

LEDs

Power, Ethernet link, Wireless, USB link, Phones, ADSL line Activity, Internet Activity

Environmental Specifications

Temperature:
• Operating: 0 to 40 °C
• Non Operating: -20 to 65 °C
Relative Humidity:
• Operating: 10% to 90% non-condensing
• Non Operating: 5% to 95% non-condensing

Agency Approvals and Certifications

CE mark, WEEE, RoHS, Wi-Fi certification (by Wi-Fi alliance)

WAN interface	<ul style="list-style-type: none"> 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 interface	<ul style="list-style-type: none"> Ethernet Switch (4 ports) with Automatic crossover 10/100 Mbps, half/full duplex with autosensing Link status and activity LEDs 1 USB 2.0 host interfaces/ 1 USB 1.1 device
Wireless Interface (Optional)	<p>Wi-Fi access point compliant with:</p> <ul style="list-style-type: none"> IEEE 802.11 b/g 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	<p>Basic Voice configuration: 2 FXS, up to 8 VoIP extensions</p> <p><u>PSTN</u></p> <ul style="list-style-type: none"> Loop start On-hook voltage: 35 V RMS Support of caller-id (DTMF and FSK) <p><u>Signaling protocols</u></p> <ul style="list-style-type: none"> SIP H.323* MGCP* DTMF: in band (RFC2833) or out-of-band (H.245 alphanumeric mode) <p><u>Voice Call Routing</u></p> <ul style="list-style-type: none"> IP-PBX: voice mail, auto attendant services, Hunt groups, dial plan Insertion/suppression of digits Local port switching Selection of voice processing <p><u>Fax and Modem over IP:</u></p> <ul style="list-style-type: none"> Fax: V.27ter, G3, Super G3, G4, V.29 T.38* fax relay Modem detection and transport in clear channel mode <p><u>Voice Processing</u></p> <ul style="list-style-type: none"> Echo cancellation: G.165/168 compliant, non-linear processing Voice compression: G.711 (a/μ law), 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	<ul style="list-style-type: none"> Network address translation: static/dynamic NAT, NAPT, 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	<ul style="list-style-type: none"> 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	<p><u>Firewall</u></p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Supports multiple VLAN ID per ports 802.1p/q
VPN	<ul style="list-style-type: none"> IPSec PPTP client/server L2TP client/server SSL

(*): optional on request