

## DrayTek VigorBX 2000n IP PBX & DSL Firewall



Product Name: DrayTek VigorBX 2000n IP PBX & DSL Firewall

Manufacturer: -

Model Number: VBX2000N-K

Please Note: This product has been discontinued. Please see our range of Draytek Routers for an alternative here.

DrayTek VigorBX 2000n IP PBX & DSL Firewall

The DrayTek VigorBX 2000n is an IP PBX integrated with a VDSL firewall/router. The VigorBX 2000n offers a complete replacement to the traditional office phone system and analogue lines through an IP PBX, which uses your existing network, and the Internet, to provide company-wide telephony. This method can save on call and line rental costs, provides vast flexibility, and increases efficiency. DrayTek VigorBX 2000n Key Features

- 1/2 Voice-over-IP Hardware PBX
- 1/2 VDSL2/ADSL2+ Firewall/Router
- 1/2 6-Port Gigabit Ethernet LAN Switch
- 1/2 Up to 50 VoIP Extensions
- 1/2 2 x FXO Ports
- 1/2 FXS Analogue Phone Interface
- 1/2 Voicemail (with remote & email access)
- 1/2 Multi-Level IVR

**IVR Capabilities**The VigorBX 2000n features an auto-attendant who can answer your incoming calls and direct your caller to the correct department without any operator/receptionist intervention.

You can record your own messages and set up the destinations of each selection, whether it's a group, individual extension or even a remote user.

**Extensions and Groups**The VigorBX 2000n is recommended for up to 50 active/live extensions. Each extension will be used for an IP desk

phone, an analogue extension (either built into the IPPBX or another SIP compliant analogue

telephone adaptor) or other SIP-compatible VoIP devices.

**Compatible with IP Telephones**For each extension on your PBX, you can use an IP phone, either desktop or cordless. You can also use

softphones (software on a PC) or apps on mobile devices. The VigorBX2000n uses the industry

standard 'SIP' (Session Initiation Protocol) which is used by most SIP phones.

**Wireless LAN**The VigorBX 2000n includes wireless LAN so that your laptops, tablets and other wireless equipped

devices can have access to your LAN and the Internet, or register as an extension with the PBX

using a softphone (e.g. the DrayTek softphone for Windows).

DrayTek VigorBX 2000n - Technical Specifications

Physical Interfaces

Physical Interfaces

• 1/2 LAN Ports (Switch)

• 1/2 6 X Gigabit Ethernet (1000Mb/s) Ports

• 1/2 WAN Ports:

• 1/2 WAN1 : ADSL2+/VDSL2 RJ11, supports G.INP & Vectoring (UK Models)

• 1/2 WAN2 : Gigabit Ethernet (1000Mb/s) Ethernet for load balance and WAN failover

• 1/2 WAN3 : USB 2.0 Port for 3G / 4G / LTE Cellular Modem

• 1/2 WAN4 : USB 2.0 Port for 3G / 4G / LTE Cellular Modem

• 1/2 2 x USB 2.0 Port for 3G / 4G / LTE or Printer, USB Storage or USB Thermometer

## DrayTek VigorBX 2000n IP PBX & DSL Firewall

### VoIP Ports:

- 1 X FXS Analogue Telephone Port
- 2 X FXO Analogue Line Port

### IP PBX Features

- IPPBX Setup Wizard
- 50 Extension profiles (user/phone accounts)
- Extension privilege assignment
- PPTP VPN Dial-In per extension (supported by DrayTek Softphone)

- 50 simultaneous registered extensions - local or remote
- Up to 20 simultaneous calls
- Trunks:

- 12 SIP Trunks with 50 SIP alias numbers

- Selective CLI for outgoing calls
- Time budget per trunk, per day
- Direct Inward Dialling (DID)

- 2 x FXO Ports (analogue line interface) fully integrated with PBX

- PIN code control
- 8 Custom Trunks

### Dial Plan (Phone Book):

- 60 Digit Map entries (Configurable dialling rules, with wildcards)
- 100 Speed Dial entries
- 20 Call Barring entries (blacklist/whitelist with wildcard, block anonymous)

### SIP Proxy:

- Music on Hold (up to 5 minutes)
- Waiting Music
- IP Whitelist for remote registration with brute force protection

### Customisable PBX Service Numbers:

- Day / Night mode
- Call Pickup
- Call Parking Server
- DnD enable/disable

## DrayTek VigorBX 2000n IP PBX & DSL Firewall

• Call Forward enable/disable

• 20 Hunt Groups:

• 20 Extensions per Hunt Group

• Hunt Rules (Simultaneously, Sequentially, Random)

• Overflow Rules

• Forward to Voicemail for Extension / Group

• Forward to Extension / Group

• Forward to Auto Attendant

• Call Queuing

• Voice Mail:

• Individual Voice Mail inboxes

• Shared Voice Mail via Hunt Group

• Individual Voice Mail greetings (Extension & Hunt Group)

• Save Voice Mail to USB disk (requires external USB stick, FAT32 formatted)

• Send Voice Mail by Email

• Office Hours:

• Answering Modes for Office Hours, Out-of-Office Hours and Holidays

• 16 Holiday profiles with individual prompts

• Auto Attendant:

• 20 Auto Attendant Menus

• Multi-Level via linked menus

• Custom prompts

• Customer Survey with custom prompts

• Call forwarding - to extensions or PSTN / SIP trunks

• Call pickup (Extension or Group)

• PBX Status:

• Session Monitor

• BLF (Busy-lamp Field) to indicate ringing or busy on VoIP handsets that support BLF

• MWI (Message Waiting Indication)

• Call Detail Records (via syslog, or 1000 stored locally, export to .csv)

• User-defined prompts

• SIP Trunk and Extension configuration backup

FXS Port Features

## DrayTek VigorBX 2000n IP PBX & DSL Firewall

- Call Hold/Retrieve
- Call Waiting with Caller ID
- Call Transfer
- Call Forwarding (Always, Busy, No Answer)
- Hotline
- PSTN Pass-through (FXO1) when power failure
- PSTN Pass-through when Internet connection dropped/Registry failure

### VoIP Protocols

- SIP, RTP/ RTCP
- G.168 line echo-cancellation
- Automatic gain control
- Jitter buffer (180ms)
- Voice codecs : G.711, G.723.1, G.726, G.729 A/B
- VAD/CNG
- DTMF tone : Inband / Outband (RFC-2833) / SIP Info
- FAX/Modem support : Tone detection / G.711 pass-through / T.38 for FAX (Redundancy & FEC Error Correction Modes)

### LAN Features:

- 6 X LAN Subnets, IP Routed Subnet & DMZ Subnet
- Port-Based or 802.1q VLAN Tag-Based VLAN
- LAN Port Mirror
- Wired 802.1x
- IPv6 Multi-Subnet LAN1-6 & DMZ Subnet
- Routing or NAT mode for LAN 2-6 & DMZ Subnet

### NAT and Routing Features

- Supports 50,000 sessions
- Load Balancing (Session or IP based)
- 50 Policy Route Rules
- WAN Failover
- WAN Budget
- Multi-NAT (32 per WAN1&WAN2)
- DMZ Host
- 40 Port-Redirection entries
- 40 Open Port entries (10 ranges per entry)
- IGMP Proxy V2/V3
- IGMP Snoop
- Static Routing
- RIPv2
- UPnP Support up to 30 sessions

### Firewall Features

- Object-based Firewall
- MAC Address Filtering
- SPI (Stateful Packet Inspection) (Flow Tracking)
- DoS/DDoS prevention
- IP Address Anti-Spoofing
- E-Mail alert and logging via syslog
- Time Schedule Control

## DrayTek VigorBX 2000n IP PBX & DSL Firewall

- Firewall v3
- Web Portal
- Supports SmartMonitor (up to 50 IPs)
- User Management
  
- Up to 200 Profiles
- Supports external authentication via LDAP or RADIUS
- Per User Bandwidth and Time Quota
- Schedule Control to delete or disable account automatically

### Content Security Management

- IM/P2P Application V3 (APP Enforcement)
- Web Content & URL Keyword Filtering via DNS proxy
- URL Content Filter : URL Keyword Blocking (White List and Black List) Java Applet, Cookies, Active X, Compressed, Executable, Multimedia File Blocking
- Supports Cyren WEB Content Filter

### Bandwidth Management Features

- Quality of Service:
  
- Guaranteed bandwidth for VoIP
  
- Class-based bandwidth guarantee by user-defined traffic categories
- Layer-3 (TOS/DSCP) QoS Mapping
- 4-level priority for each direction (Inbound/Outbound)
  
- Bandwidth borrowing
- Bandwidth/Session Limit
- Smart Bandwidth Limitation (Triggered by Traffic / Session)
- Automatic VoIP QoS (Reserved bandwidth 88Kbps per call)

### Network Features

- Multi Subnet DHCP Servers with DHCP Relay and custom DHCP Options
- Dynamic DNS
- NTP client
- RADIUS Client
- LDAP Client
- TACACS+ Client
- DNS Caching
- DNS transparent proxy
- LAN DNS

### VPN Features

- Up to 32 VPN Tunnels
- Protocol : PPTP, IPsec, L2TP, L2TP over IPsec
- Encryption : MPPE and hardware-based AES/DES/3DES
- Authentication : MD5, SHA-1

## DrayTek VigorBX 2000n IP PBX & DSL Firewall

- IKE Authentication : pre-shared key and digital signature (X.509)
- LAN-to-LAN, Teleworker-to-LAN
- DHCP over IPSec
- IPSec NAT-Traversal (NAT-T)
- Dead Peer Detection (DPD)
- VPN Pass-Through
- VPN Wizard
- mOTP
- SSL VPN: 16 Tunnels
- VPN Trunk (Load Balance/Backup)

### Wireless AP

- 802.11n Compliant
- 2.4GHz: 300Mb/s Total Wireless Capacity, 2 Spatial Streams (2x2)
- 4 SSIDs (Isolated / Common)
- Selectable 20/40 Mhz Channel Bandwidth
- Dynamic adjustment of channel bandwidth
- Optional Higher Gain or directional aerials available
- Active Client list in Web Interface
- Wireless LAN Isolation (from each other and/or wired LAN)
- WPA/WPA2 Encryption
- WEP Encryption
- Switchable Hidden SSID (per SSID)
- Restricted access list for clients (by MAC address)
- Time Scheduling (WLAN radios can be disabled at certain times of day)
- Access Point Discovery
- WDS (Wireless Distribution system) for Bridging and Repeating
- 802.1x Radius Authentication
- Wireless Rate-Control
- Automatic Power Management
- 802.11e WMM (Wi-Fi Multimedia)

### Management Features

- TR-069 & TR-104 management
- Two Level Management (Admin or User mode)
- Syslog via IP or USB
- Mail Alert
- Firmware Upgrade via TFTP, FTP, HTTP, TR-069
- Web Based User Interface via HTTP or HTTPS
- Quick Start Wizard
- PBX Dashboard
- CLI (Command Line Interface) via Telnet or SSH
- Administration access control via Remote IP or LAN Interface
- Configuration Backup / Restoration
- Configuration Import from Vigor IPPBX 2820
- SNMP V2, V2c, V3
- SMS Alerts via web SMS service
- DrayTek External Device detection

### Operating Requirements

- Rack Mountable (Optional RM1 mounting bracket required)
- Wall Mountable

## DrayTek VigorBX 2000n IP PBX & DSL Firewall

• Temperature Operating : 0°C ~ 45°C  
• Storage : -25°C ~ 70°C  
• Humidity 10% ~ 90% (non-condensing)  
• Weight : 1.2Kg  
• Power Consumption: 24 Watt Max.  
• Dimensions: L240.96 \* W165.07 \* H43.96 ( mm )  
• Operating Power: DC 15V (via external PSU, supplied). Max 21W.  
• Warranty : Two (2) Years RTB  
• Power Requirements : 220-240VAC

**Please Enquire**

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