

## Draytek Vigor 2860n VDSL/ADSL Router/Firewalls & 6-port Gigabit switch with WiFi



Product Name: Draytek Vigor 2860n VDSL/ADSL Router/Firewalls & 6-port Gigabit switch with WiFi

Manufacturer: -

Model Number: V2860N-K

Please Note: This product has been discontinued. We recommend the DrayTek Vigor 2862n Router with 802.11n Wireless as an alternative.

Draytek Vigor 2860n VDSL/ADSL Router/Firewalls & 6-port Gigabit switch

The Vigor 2860n (including the Vigor 2860n and Vigor 2860Vn) is our new router/firewall which can support either ADSL or VDSL (BT Infinity®/FTTC). This makes the Vigor 2860 ideal for users with ADSL now who might upgrade to VDSL later. Alternative WAN ports can instead provide connectivity to Ethernet feeds, secondary xDSL modems or a 3G cellular service using a USB adaptor. This latest router series includes support for professional features such as VLAN tagging, Gigabit Ethernet built-in WiFi ('n' models).

Draytek Vigor 2860n Key Features

- Supports VDSL, ADSL, 3G and Ethernet-based Broadband
- Supports either VDSL or ADSL, ideal if you have ADSL now and might get VDSL later
- VDSL with compatible BT Infinity®;
- 3-WAN Simultaneous : VDSL/ADSL, Ethernet and 3G(USB)
- IPv6 Ready - See below for feature support
- High performance - up to 200Mb/s firewall throughput
- 802.11n Wireless LAN (Vigor2860n)
- DrayTek Firewall with huge flexibility
- 6-Port Gigabit Ethernet LAN Switch
- Temperature Monitoring (optional Thermometer)
- Wireless Guest Portal
- Multiple Private LAN Subnets
- SMS (Text Message) Alert
- VLANs (Port or 802.1q based)
- IGMP v3 MultiCast
- Includes SmartMonitor software
- Content Filtering (by keyword, data type or category)
- Ethernet and WiFi VLANs (common/distinct groups)
- LDAP Integration for VPN and user access
- QoS (Layer 2&3, 802.1p & TOS/DCSP)
- Up to 32 VPN tunnels for LAN-to-LAN or teleworkers
- VPN Trunk/Backup to remote sites
- SSL VPN - Tunnel or Proxy (5 users)
- USB Port for Printer, Logs or 3G Modem
- Optional VigorCare Available

Vigor 2860n ADSL/VDSL Series - Technical Specification

Physical Interfaces:

- LAN Ports (Switch)
- 6 X Gigabit Ethernet (1000Mb/s) Ports
- Port-Based VLAN (Inclusive/Exclusive Groups)
- 802.1q VLAN Tagging

## Draytek Vigor 2860n VDSL/ADSL Router/Firewalls & 6-port Gigabit switch with WiFi

### WAN Ports:

- 1 WAN1 : ADSL/VDSL, RJ11
- 1 WAN2 : Gigabit Ethernet (1000Mb/s) Ethernet for load balance and WAN failover
- 1 WAN3 : USB Port for 3G Cellular Modem or Printer
- 1 Phone Ports : 2 x BT Type sockets. FXS type. V2860Vn only.
- 1 Line Port : For POTS/PSTN voice line connection (cable included). V2860Vn only.

### Performance:

- 1 Firewall: Up to 200Mb/s
- 1 IPSec VPN: Up to 50Mb/s

### ADSL Compatibility:

- 1 ANSI T1.413 Issue2
- 1 ITU-T G.992.1 G.dmt (ADSL)
- 1 ITU-T G.992.2 G.lite
- 1 ITU-T G.992.3 ADSL2
- 1 ITU-T G.992.5 ADSL2+
- 1 Annex L (READSL)
- 1 Annex A
- 1 Annex M
- 1 ANFP Issue 3 Compliant/Certified (for Annex A & Annex M)
- 1 DSL Forum : TR-048/67 & TR-100

### VDSL Compatibility:

- 1 BT Infinity Option 1 & Option 2 Compatible
- 1 ITU-T VDSL2 G.993.2
- 1 ITU-T G.993.1, G.997.1
- 1 Band Plan: G.998, G.997
- 1 Annex A, Annex B, Annex C
- 1 VDSL2 Profile: 8a, 8b, 8c, 8d, 12a, 12b, 17a, 30a
- 1 OLR, UPBO, DPBO Supported
- 1 US0 Supported
- 1 Loop Diagnostic Mode
- 1 Configurable SNR, INP, Rate Limit
- 1 DSL Forum WT-114

### Load Balance/Failover Features:

- 1 Outbound Policy-Based Load-Balance
- 1 WAN Connection Fail-over
- 1 BoD (Bandwidth on Demand)
- 1 Vigor 2860 ATM Protocols (DSL):
- 1 RFC-2684/RFC-1483 Multiple Protocol over AAL5
- 1 RFC-2516 PPP over Ethernet
- 1 RFC-2364 PPP over AAL5
- 1 PPPoE pass through LAN/WLAN
- 1 PPPoE/PPPoA Relay
- 1 Transparent bridge for MPoA
- 1 Multiple PVC support for Triple Play Applications (up to 8 simultaneous)

## Draytek Vigor 2860n VDSL/ADSL Router/Firewalls & 6-port Gigabit switch with WiFi

### Wireless LAN Features ('n' Models Only):

- 802.11n
- Multiple SSID : Create up to 4 virtual wireless LANs (independent or joined)
- Packet Aggregation and Channel Bonding
- Optional Higher Gain or directional aerials available - [Click Here](#).
- Compatible with 802.11b and 802.11g Standards
- Active Client list in Web Interface
- Wireless LAN Isolation (from VLAN groups and wired Ethernet interfaces)
- 64/128-bit WEP Encryption
- WPA/WPA2 Encryption
- Switchable Hidden SSID
- Restricted access list for clients (by MAC address)
- Time Scheduling (WLAN can be disabled at certain times of day)
- Access Point Discovery
- WDS (Wireless Distribution system) for WLAN Bridging and Repeating
- 802.1x Radius Authentication
- Wireless VLAN
- Wireless Rate-Control
- Automatic Power Management
- 802.11e WMM (Wi-Fi Multimedia)

### VoIP Features (Vigor2860Vn only):

- Protocols: SIP, RTP / RTCP
- 12 SIP Registrar Accounts (for up to 12 VoIP providers)
- Line port for PSTN Passthrough (integrates POTS line)
- Auto-fallback to PSTN under power/Internet failure
- G.168 Line Echo-cancellation
- Automatic Gain Control
- Jitter Buffer ( 125ms )
- Voice Codecs:
  - G.711 A / &micro; Law
  - G.723.1
  - G.726
  - G.729 A / B
  - VAD / CNG
- Tone Generation: DTMF , Dial , Busy , Ring Back , Call Progress
- DTMF Transmission: In Band / Out Band ( RFC-2833 ) / SIP info
- FAX / Modem Support G.711 Pass-through
- T.38 for FAX
- Supplemental Services:
  - Caller ID
  - Call Hold / Retrieve
  - Call Waiting
  - Call Waiting with Caller ID
  - Call Transfer
  - Call Forwarding ( Always , On Busy and On No Answer )
  - DND (Do not Disturb)
  - Call Barring ( Incoming / Outgoing )
  - MWI ( Message Waiting Indicator ) ( RFC-3842 )
  - Hotline (Dial preset number when handset lifted)

## Draytek Vigor 2860n VDSL/ADSL Router/Firewalls & 6-port Gigabit switch with WiFi

### WAN Protocols (Ethernet):

- DHCP Client
- Static IP
- PPPoE
- PPTP
- L2TP \*
- BPA

### VoIP Features (Vigor2860Vn only):

- Protocols: SIP, RTP / RTCP
- 12 SIP Registrar Accounts (for up to 12 VoIP providers)
- Line port for PSTN Passthrough (integrates POTS line)
- Auto-fallback to PSTN under power/Internet failure
- G.168 Line Echo-cancellation
- Automatic Gain Control
- Jitter Buffer ( 125ms )
- Voice Codecs:
  - G.711 A / &micro; Law
  - G.723.1
  - G.726
  - G.729 A / B
- VAD / CNG
- Tone Generation: DTMF , Dial , Busy , Ring Back , Call Progress
- DTMF Transmission: In Band / Out Band ( RFC-2833 ) / SIP info
- FAX / Modem Support G.711 Pass-through
- T.38 for FAX
- Supplemental Services:
  - Caller ID
  - Call Hold / Retrieve
  - Call Waiting
  - Call Waiting with Caller ID
  - Call Transfer
  - Call Forwarding ( Always , On Busy and On No Answer )
  - DND (Do not Disturb)
  - Call Barring ( Incoming / Outgoing )
  - MWI ( Message Waiting Indicator ) ( RFC-3842 )
  - Hotline (Dial preset number when handset lifted)

### WAN Protocols (Ethernet):

- DHCP Client
- Static IP
- PPPoE
- PPTP
- L2TP \*
- BPA

### VoIP Features (Vigor2860Vn only):

## Draytek Vigor 2860n VDSL/ADSL Router/Firewalls & 6-port Gigabit switch with WiFi

• Protocols: SIP, RTP / RTCP  
• 12 SIP Registrar Accounts (for up to 12 VoIP providers)  
• Line port for PSTN Passthrough (integrates POTS line)  
• Auto-fallback to PSTN under power/Internet failure  
• G.168 Line Echo-cancellation  
• Automatic Gain Control  
• Jitter Buffer ( 125ms )  
• Voice Codecs:  
• G.711 A / &micro; Law  
• G.723.1  
• G.726  
• G.729 A / B  
• VAD / CNG  
• Tone Generation: DTMF , Dial , Busy , Ring Back , Call Progress  
• DTMF Transmission: In Band / Out Band ( RFC-2833 ) / SIP info  
• FAX / Modem Support G.711 Pass-through  
• T.38 for FAX  
• Supplemental Services:  
• Caller ID  
• Call Hold / Retrieve  
• Call Waiting  
• Call Waiting with Caller ID  
• Call Transfer  
• Call Forwarding ( Always , On Busy and On No Answer )  
• DND (Do not Disturb)  
• Call Barring ( Incoming / Outgoing )  
• MWI ( Message Waiting Indicator ) ( RFC-3842 )  
• Hotline (Dial preset number when handset lifted)

### WAN Protocols (Ethernet):

• DHCP Client  
• Static IP  
• PPPoE  
• PPTP  
• L2TP \*  
• BPA

### Firewall & Security Features:

• CSM (Content Security Management):  
• URL Keyword Filtering - Whitelist or Blacklist specific sites or keywords in URLs  
• Block Web sites by category (e.g. Adult, Gambling etc. Subject to subscription)  
• Prevent accessing of web sites by using their direct IP address (thus URLs only)  
• Blocking automatic download of Java applets and ActiveX controls  
• Blocking of web site cookies  
• Block http downloads of file types :  
• Binary Executable : .EXE / .COM / .BAT / .SCR / .PIF  
• Compressed : .ZIP / .SIT / .ARC / .CAB/ .ARJ / .RAR  
• Multimedia : .MOV / .MP3 / .MPEG / .MPG / .WMV / .WAV / .RAM / .RA / .RM / .AVI / .AU  
• Time Schedules for enabling/disabling the restrictions  
• Block P2P (Peer-to-Peer) file sharing programs (e.g. Kazza, WinMX etc. )  
• Block Instant Messaging programs (e.g. IRC, MSN/Yahoo Messenger etc.)

## Draytek Vigor 2860n VDSL/ADSL Router/Firewalls & 6-port Gigabit switch with WiFi

- Multi-NAT, DMZ Host
- Port Redirection and Open Port Configuration
- Policy-Based Firewall
- MAC Address Filter
- SPI ( Stateful Packet Inspection ) with new FlowTrack Mechanism
- DoS / DDoS Protection
- IP Address Anti-spoofing
- E-Mail Alert and Logging via Syslog
- Bind IP to MAC Address

### Bandwidth Management:

- QoS
- Guaranteed Bandwidth for VoIP
- Class-based Bandwidth Guarantee by User-Defined Traffic Categories
- Layer 2&3 (802.1p & TOS/DCSP)
- DiffServ Code Point Classifying
- 4-level Priority for each Direction (Inbound / Outbound)
- Bandwidth Borrowed
- Temporary (5 minute) Quick Blocking of any LAN Client
- Bandwidth / Session Limitation

### Network/Router Management:

- Web-Based User Interface (HTTP / HTTPS)
- CLI ( Command Line Interface ) / Telnet / SSH
- Administration Access Control
- Configuration Backup / Restore
- Built-in Diagnostic Function
- Firmware Upgrade via TFTP / FTP
- Logging via Syslog
- SNMP v3 Management with MIB-II
- TR-069
- TR-104

### VPN Facilities:

- Up to 32 Concurrent VPN Tunnels (incoming or outgoing)
- Tunnelling Protocols: PPTP, IPSec, L2TP, L2TP over IPSec
- IPSec Main and Aggressive modes
- Encryption : MPPE and Hardware-Based AES / DES / 3DES
- Authentication : Hardware-Based MD5 and SHA-1
- IKE Authentication : Pre-shared Key or X.509 Digital Signature
- SSL VPN for teleworkers - Up to 5 simultaneous users. Proxy or tunnel
- LAN-to-LAN & Teleworker-to-LAN connectivity
- DHCP over IPSec
- NAT-Traversal (NAT-T)
- Dead Peer Detection (DPD)
- VPN Pass-Through
- MOTP (Mobile One Time Password)

### Routing Protocols::

## Draytek Vigor 2860n VDSL/ADSL Router/Firewalls & 6-port Gigabit switch with WiFi

- Static Routing
- RIP V2

### Bandwidth Management:

- QoS
- Guaranteed Bandwidth for VoIP
- Class-based Bandwidth Guarantee by User-Defined Traffic Categories
- Layer 2 & 3 (802.1p & TOS/DCSP)
- DiffServ Code Point Classifying
- 4-level Priority for each Direction (Inbound / Outbound)
- Bandwidth Borrowed
- Temporary (5 minute) Quick Blocking of any LAN Client
- Bandwidth / Session Limitation

### Operating Requirements:

- Rack Mountable (Optional Vigor RM1 mounting bracket required)
- Wall Mountable
- Temperature Operating : 0°C ~ 45°C
- Storage : -25°C ~ 70°C
- Humidity 10% ~ 90% (non-condensing)
- Power Consumption: 18 Watt Max.
- Dimensions: L240.96 \* W165.07 \* H43.96 ( mm )
- Operating Power: DC 15V (via external PSU, supplied)
- Warranty : Two (2) Years RTB
- Power Requirements : 220-240VAC

**Please Enquire**