

### **Product Overview**

The Vigor 2766 series is DrayTek's G.Fast / VDSL and Ethernet router that is ideal for Small Office and Home Office networks. Featuring powerful Firewall and Content Filtering, configurable Quality of Service and an array of VPN capabilities, with the performance to make full use of FTTP Fibre Broadband.

Incorporating Wireless and VoIP features in '2766ac' and '2766Vac' models, the Vigor 2766 series provide a reliable, highly integrated and reliable network solution for SoHo environments.

# **Key Features & Benefits**

# **G.Fast, VDSL and Ethernet Router**

Connect the Vigor 2766 to Ultrafast G.Fast and Superfast VDSL2 FTTC with integrated DSL modem. Or connect to VirginMedia Cable and Ultrafast FTTP with Ethernet WAN.

Benefits: Future Proof G.Fast Router. High speed DSL & Gigabit CPE with flexible application.

# **AC1300 Wireless with Mesh**

Connect DrayTek VigorAP Access Points to the router in a wireless Mesh. DrayTek's Self-Optimising Mesh ensures access points are always connecting through best path to your Router.

Benefits: Easily expand wireless coverage. Reduces the need for cable installation.

### **Packed With Features**

Configure DrayTek's rich feature set to fit your network with Route Policy, Quality of Service, VPN Matcher, DrayDDNS and more.

Benefits: Convenient and powerful DrayTek router features for hasslefree networking.

### **Powerful SoHo VPN Router**

Connect remote locations with 2 VPN tunnels for Remote Dial-In User Teleworker and Dial-Out LAN to LAN VPN. Up to 200Mbps IPsec performance, with SSL and OpenVPN support.

Benefits: Securely access resources remotely. Connect to VPN services for secure browsing.

# **Integrated VoIP Telephone Ports**

Connect 2 analogue phones to VoIP with the 'Vac' model. Great VoIP features such as auto VoIP QoS and configurable SIP ALG improve the reliability and quality of VoIP calls.

Benefits: All in one solution for Internet and Phone service. Great VoIP features.

# **VigorACS Central Management**

Use the VigorACS central management platform to manage, monitor and configure the Vigor 2766 series routers remotely across multiple locations.

Benefits: Save time and money. Easily provision, monitor and manage remote sites without on-site IT or dedicated staff.





# **Key Specification**

- G.Fast (Ultrafast Fibre), VDSL2 (Superfast Fibre), ADSL and Ethernet Router with Failover
- Up to 950Mbps Firewall Throughput for Ethernet WAN
- 4 Gigabit LAN Ports
- AC1300 11ac 'Wave 2' Dual Band Wireless ('ac' models)
- 2 PSTN Telephone (FXS) VoIP SIP ATA ports ('Vac' model)
- 4 LAN Subnets with VLANs (Port-based / 802.1g)
- SPI Firewall and Content Filtering
- Up to 200Mbps IPsec VPN Throughput
- 2 Dial-Out LAN-to-LAN or Remote Teleworker VPN Tunnels
- DrayTek SSL VPN and OpenVPN support
- Optional VigorCare Available



# **Technical Specification (UK Hardware Spec.)**

#### **Physical Interfaces**

- WAN1: G.Fast / VDSL2 / VDSL2 35b / ADSL2+, RJ-11
- WAN2/LAN Switchable Port: 1x Gigabit Ethernet (1G/100M/10M), RJ-45
- WAN3: USB 2.0 Port for 3G/4G Modem (not included)
- LAN Ports: 4x Gigabit Ethernet (1G/100M/10M), RJ-45 (3x with WAN2 enabled)
- 2x PSTN RJ-11 Telephone Ports ('Vac' model)
- 2x USB 2.0 Port for USB storage, thermometer or Printer
- 2x Removable Wireless antennas (wireless models)
- Wireless On / Off / WPS button
- Recessed Factory Reset button

### **Performance**

- Router Performance:
  - 1.3Gb/s Max Sync Rate with G.Fast (dependent on ISP & Exchange equipment)
  - 100 Mb/s Max Sync Rate with VDSL2
  - 300 Mb/s Max Sync Rate with VDSL2 35b
  - 950 Mb/s NAT Throughput for Ethernet WAN with Hardware Acceleration
  - 700 Mb/s NAT Throughput per WAN without Hardware Acceleration
  - 50.000 NAT Sessions
- VPN Performance:
  - 200 Mb/s IPsec (AES256) VPN Throughput
  - 80 Mb/s SSL VPN Throughput
  - Max. 2 Concurrent VPN Tunnels

## **Internet Connection**

- Hardware Acceleration
- Failover / Backup WAN
- 802.1p/q Multi-VLAN Tagging
- Multi-VLAN/PVC
- Connection Detection: PPP, ARP Detect, Ping Detect
- WAN Data Budget
- **Dvnamic DNS**
- DrayDDNS with automated LetsEncrypt Certificates
- Full Feature-set Hardware Acceleration:

- Hardware Accelerated Quality of Service
- Multi-WAN Data Budget
- Traffic Graph & Data Flow Monitor
- Bandwidth Limit
- IPv4 Connection Types: PPPoE / PPPoA, MPoA, DHCP. Static IP, PPTP/L2TP (Ethernet WAN)
- IPv6 Connection Types:
  - DSL & Ethernet: PPP, DHCPv6, Static IPv6, TSPC, AICCU, 6rd, 6in4 Static Tunnel
  - USB 4G/LTE Modem: TSPC, AICCU

### G.Fast, VDSL & ADSL Features

- BT Infinity Option 1 & Option 2 Compatible
- Compliant with Openreach SIN 527 & SIN 498
- Auto Detection of G.Fast, VDSL and ADSL line modes
- Support for G.INP & Vectoring

# **G.Fast Standards:**

- ITU-T G.9700, G.9701 G.Fast
- Profile: 212MHz & 106MHz

### **VDSL Standards:**

- ITU-T G.993.1 VDSL
- ITU-T G.993.2, G.997.1 VDSL2
- Band Plan: G.998, G.997
- Annex A. Annex B. Annex C
- VDSL2 Profile: 8a, 8b, 8c, 8d, 12a, 12b, 17a, 35b
- OLR, UPBO, DPBO Supported
- USO Supported
- Loop Diagnostic Mode
- DSL Forum WT-114

### **ADSL Standards:**

- ANSI T1.413 Issue2
- ITU-T G.992.1 G.dmt (ADSL)
- ITU-T G.992.2 G.lite
- ITU-T G.992.3 ADSL2
- ITU-T G.992.5 ADSL2+



# **Technical Specification (UK Hardware Spec.)**

#### **ATM Protocols:**

- RFC-2684/RFC-1483 Multiple Protocol over AAL5
- RFC-2516 PPP over Ethernet
- RFC-2364 PPP over AAL5
- Support for RFC4638 for MTU up to 1500

### Wireless Features ('ac' models)

- AC1300 11ac 'Wave 2' Dual Band Wireless ('ac' models):
  - 802.11ac 2x2 wireless access point
  - 2.4GHz: 2x2 MIMO with 2 dBi Antenna Gain
  - 5GHz: 2x2 MU-MIMO with 4 dBI Antenna Gain
  - Backwards Compatible with 802.11a/b/g/n wireless
  - Dual-band (2.4/5Ghz) simultaneous wireless
  - Up to 866Mbps PHY rate at 80MHz with 5GHz
  - Up to 400Mbps PHY rate at 40MHz with 2.4GHz (256-QAM)
  - Channel Bandwidth: 20/40MHz for 2.4GHz, 20/40/80MHz for 5GHz
  - MU-MIMO
  - Tx Beamforming
- Mesh Root support with VigorAP Mesh Nodes New!
- Up to 4 SSIDs per radio band
- Extended 5Ghz Band Channels 36-48, 52-64, 100-140
- Wireless Optimisation: Airtime Fairness, AP-Assisted Mobility, Band Steering
- Bandwidth Management (Per Station / Per SSID)
- WMM (Wireless MultiMedia)
- WPS WiFi Protected Setup
- Station Control Time limited wireless connectivity per Station (e.g. 1 hour)
- EAPOL Key Retry Disable EAPOL Key Retry to protect unpatched WLAN clients from KRACK
- · Wireless Security:
  - WPA2
  - WPA3 New!
  - Pre-Shared Key authentication
  - WEP/WPA for Legacy Clients
  - Access Control Blacklist / Whitelist client MAC addresses per SSID

## **Firewall & Content Filtering**

- IP-based Firewall Policy
- DoS Attack Defence
- · Spoofing Defence
- · Content Filtering:
- Application Content Filter
- URL Content Filter
- DNS Keyword Filter
- Web Features
- Web Category Filter (requires GlobalView subscriptio

### **NAT Features**

- NAT Port Redirection
- Open Ports
- Port Triggering
- DMZ Host
- UPnP

- ALG (Application Layer Gateway): SIP (configurable), RTSP (configurable), FTP, H.323
- VPN Pass-Through: PPTP, L2TP, IPsec

# **LAN Management**

- 802.1q Tag-based, Port-based VLAN
- Up to 4 LAN Subnets New!
- Up to 8 VLANs
- DHCP Server:
- Multiple IP Subnet
- Custom DHCP Options
- Bind-IP-to-MAC
- DHCP Pool Count up to 253 addresses per subnet
- Wired 802.1x Port Authentication
- Port Mirroring
- Local DNS Server
- Conditional DNS Forwarding

### **Networking Features**

- Policy-based Routing: Protocol, IP Address, Port, Domain/Hostname, Country
- DNS Security (DNSSEC)
- Local RADIUS server
- SMB File Sharing (Requires external USB storage)
- Multicast: IGMP Proxy, IGMP Snooping & Fast Leave, Bonjour
- Compatible with IPTV and ISP Video on Demand services (YouView, Sky Q)
- Routing Features: IPv4 & IPv6 Static Routing, Inter-VLAN Routing

### **VPN Features**

- 2 Concurrent active VPN Tunnels
- LAN-to-LAN Dial-Out VPN Client
- Teleworker-to-LAN Dial-In VPN Server
- User Authentication: Local, mOTP
- IKE Authentication: Pre-Shared Key and Digital Signature (X.509)
- Encryption: MPPE, DES, 3DES, AES (128/192/256)
- Authentication: SHA-256, SHA-1
- Dead Peer Detection (DPD)
- IPsec NAT-Traversal (NAT-T)
- Virtual IP Mapping Resolve VPN IP subnet/range conflicts
- DHCP over IPsec
- DrayTek VPN Matcher Connect to a VPN router that's behind NAT/CG-NAT – New!
- VPN Protocols:
- IPsec IKEv1, IKEv2, IKEv2 EAP
- IPsec-XAuth
- DrayTek SSL VPN
- OpenVPN
- PPTP for legacy applications
- L2TP, L2TP over IPsec

### **Bandwidth Management**



# **Technical Specification (UK Hardware Spec.)**

- IP-based Bandwidth Limit
- IP-based Session Limit
- · QoS (Quality of Service):
- Classify via TOS, DSCP, 802.1p, IP Address, Service Type
- 4 Priority Queues
- App QoS
- VoIP Prioritization

### VoIP Features ('Vac' model)

- 2x RJ-11 PSTN Telephone Ports (FXS)
- Integrated VoIP SIP ATA (Analogue Telephone Adapter)
- 6 SIP Accounts with VoIP Setup Wizard
- Protocols: SIP, RTP / RTCP
- G.168 Line Echo-cancellation
- Dial Plan: Phone Book, Digit Map, Call Barring
- Voice Codecs: G.711 A / 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 with G.711 Pass-through and T.38
- Supplemental Services: Caller ID, Call Hold/Retrieve, Waiting, Transfer, Forwarding, Barring
- DND (Do not Disturb)
- MWI (Message Waiting Indicator) (RFC-3842)
- Hotline (Dial preset number when handset lifted)

### **Management**

- Local Service: HTTP, HTTPS, Telnet, SSH, FTP, TR-069
- Config File Export & Import
- Import Config from Vigor 2762 and Vigor 2765
- Auto Backup Config to USB Storage New!
- Firmware Upgrade via TFTP, HTTP, TR-069
- 2-Level Administration Privilege
- Access Control Features: Access List, Brute Force Protection
- Syslog
- SMS, E-mail Notification Alert
- SNMP: v1, v2c, v3

- Managed by VigorACS
- Router Central Management Features:
  - AP Management: Up to 2 VigorAP access points
  - DrayTek Mesh: Up to 7 VigorAP access points New!

## **Operating Requirements**

- Wall or Shelf Mountable
- Temperature Operating: 0 °C ~ 45 °C
- Storage: -25 °C ~ 70 °C
- Humidity 10% ~ 90% (non-condensing)
- Power Consumption: 24 Watts maximum (Vac model)
- Dimensions:
  - 207mm Width
  - 131mm Depth
  - · 39mm Height
- Operating Power: DC 12V (via external PSU, supplied)
- Warranty: Two (2) Years RTB
- Power Requirements: 220-240VAC

### **Box Contents**

- Vigor 2766 series router
- Quick Start Guide
- Screws & wall plugs for wall mounting
- 2m Cat-5e RJ-45 Network Cable
- 2x Detachable Wireless LAN Antennas ('ac' models)
- DC 12V Power Supply with UK Plug

UK Product code	EAN	Product name	Product description
V2766-K	4710484743527	Vigor 2766 (UK/IE)	Vigor 2766 wired G.Fast/DSL & Router
V2766AC-K	4710484743794	Vigor 2766ac (UK/IE)	Vigor 2766ac G.Fast/DSL & Router with Wi-Fi 5 AC1300 Wireless
V2766VAC-K	4710484743510	Vigor 2766Vac (UK/IE)	Vigor 2766Vac G.Fast/DSL & Router with Wi-Fi 5 AC1300 Wireless and VoIP