Vigor 2865 Series

The Ideal DSL Router with VPN for Small Business and Remote Working

Premium. Reliable. Affordable.

DrayTek

Product Overview

DrayTek's Vigor 2865 series Multi-WAN Firewall VPN routers are ideal for Superfast VDSL Broadband and Ethernet-based FTTP Fibre Broadband. With Gigabit throughput, Quality of Service, VPN client/server, comprehensive Firewall and Content Filtering controls.

Wi-Fi is available on 'ac' models and the integrated 4G+ LTE modem on 'Lac' models takes full advantage of mobile broadband. The Vigor 2865 series provides a reliable, flexible, and secure networking solution, ideal for Home Offices, Small Business and Satellite Offices.

Key Features & Benefits

VDSL and Ethernet Load Balancer

Connect the Vigor 2865 to Superfast Fibre with the integrated VDSL modem. Use the Ethernet WAN with Cable and Ultrafast FTTP. Load Balance multiple connections to boost performance.

Benefits: Fully utilise Fibre Broadband. High performance DSL & Gigabit CPE with flexible application.
.

Robust SMB VPN Router

Quickly and securely connect remote sites with up to 32 VPN tunnels. Enable remote workers to access resources with DrayTek SSL VPN and OpenVPN support.

Benefits: Securely encrypt network access for remote workers and working from home.

Dual-SIM 4G+ LTE Modem

Ensure ultra-reliable connectivity with integrated high-performance 4G+/LTE Category 6 modem on 'L' models. Handle Mobile network outages with Dual-SIM Failover.

Benefits: Fast and Convenient Mobile Broadband. Provide constant connectivity.

5+1 Gigabit LAN Ports

Link Server, Computers, and Network Attached Storage directly, with up to 6 Gigabit LAN ports. VLANs allow for as many as 8 separate networks, with options for Hotspot Captive Portal.

Benefits: Improve quality of service for private and guest data traffic. Connect more devices.

Packed With Features

Take advantage of DrayTek's rich feature set and useful functionality such as Quality of Service, Route Policy, Hotspot Web Portal, VPN Matcher, DrayDDNS and more.

Benefits: Advanced DrayTek router functionality solves many complex networking issues.

VigorACS Central Management

The Vigor 2865 can be fully managed and configured remotely with the VigorACS central management platform. Manage DrayTek networks spanning multiple sites.

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

Compatible with VigorACS Centralised Management Platform

Key Specification

- VDSL2 (Superfast Fibre) and Gigabit Ethernet WAN Router
- Multi-WAN Gigabit Performance Router with Load-Balancing & Failover
- Up to 950Mbps Firewall Throughput for Ethernet WAN
- 5+1 Gigabit RJ-45 LAN Ports
- Up to 800Mbps VPN Throughput with IPsec acceleration
- 32 LAN-to-LAN & Remote Teleworker VPN Tunnels
- 16 DrayTek SSL VPN or OpenVPN Tunnels
- 4G/LTE with dual-SIMs for second backup telco ('L' models)
- AC1300 - 11ac 'Wave 2' Dual Band Wireless with Mesh ('ac' models)
- 8 LAN Subnets with VLANs (Port-based / 802.1q)
- SPI Firewall and Content Filtering
- Optional VigorCare Available
- Compatible with VigorACS central management platform

Technical Specification (UK Hardware Spec.)

Physical Interfaces
- WAN1: VDSL2 / VDSL2 35b / ADSL2+, RJ-11
- WAN2/LAN Switchable Port: 1x Gigabit Ethernet (1G/100M/10M), RJ-45
- LAN Ports: 5x Gigabit Ethernet (1G/100M/10M), RJ-45
- 2x USB 2.0 Ports for 3G/4G Modem, thermometer or Printer
- or 1x USB 2.0 Port ('L' models)
- 2x Removable Wireless antennas (wireless models)
- 2x Removable 4G/LTE Wireless antennas ('L' models)
- Wireless On / Off / WPS button
- Recessed Factory Reset button

Performance
- Router Performance:
  - 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
  - 1.3Gb/s Total Mult-WAN NAT Throughput
  - 800 Mb/s NAT Throughput per WAN without Hardware Acceleration
  - 60,000 NAT Sessions
- VPN Performance:
  - 300 Mb/s IPsec (AES256) VPN Performance
  - 800 Mb/s Hardware Accelerated IPsec VPN Performance
  - 130 Mb/s SSL VPN Performance
  - Max. 32 Concurrent VPN Tunnels
  - Max. 16 Concurrent SSL VPN / OpenVPN Tunnels

WAN Interfaces
- WAN1: VDSL2 / VDSL2 35b / ADSL2+,
- WAN2: Gigabit Ethernet
- WAN3: 2.4GHz Wireless WAN ('ac' models)
- WAN4: 5GHz Wireless WAN ('ac' models)
- WAN5: 4G/LTE USB Modem (not included)
- or Integrated 4G/LTE Category 6 Modem ('L' models only)
- WAN6: 4G/LTE USB Modem (not included)

Internet Connection
- Load Balancing: IP-based, Session-based
- Hardware Acceleration
- 802.1p/q Multi-VLAN Tagging
- Multi-VLAN/PVC
- 2.4GHz & 5GHz Simultaneous Wireless WAN ('ac' models only)
- WAN Active on Demand: Link Failure, Traffic Threshold
- Connection Detection: PPP, ARP Detect, Ping Detect
- WAN Data Budget
- Dynamic DNS
- DrayDDNS – with automated LetsEncrypt Certificates – **New!**
- 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, DHCP, Static IP, PPTP/L2TP
- IPv6 Connection Types:
- DSL & Ethernet: PPP, DHCPv6, Static IPv6, TSPC, AICCU, 6rd, 6in4 Static Tunnel
- 4G/LTE Modem & USB 4G/LTE Modem: TSPC, AICCU

VDSL & ADSL Features
- BT Infinity Option 1 & Option 2 Compatible
- Compliant with Openreach SIN 498

- Auto Detection of VDSL and ADSL line modes
- Support for G.INP & Vectoring
- **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
  - US0 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+
- **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

Integrated 4G LTE Modem Features ('L' models)
- Dual-SIM Failover
- 4G LTE Category 6 Modem with fallback to 3G / GPRS
- Unlocked to any network (BT, EE, 3, O2, Vodafone, Eircom)
- 4G LTE Max Data Rates:
  - 300Mbps Downlink (Category 6)
  - 50Mbps Uplink (Category 6)
- 4G LTE (FDD) Bands: 1, 3, 5, 7, 8, 20, 28, 32
- 4G LTE (TDD) Bands: 38, 40, 41
- 3G (WCDMA/HSPA+/UMTS) Bands: 1, 3, 5, 8
- 2x LTE Antennas included with 1m extension cables
- Per-SIM-Card WAN Data Budget
- 2x Standard-Size SIM-Card Slots
- Removable SIM slot cover
- SMS Inbox - Send & Receive SMS text messages
- SMS Router Commands - Status Report, Reboot via text message
- LTE Bridge – **New!**

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 DrayTek VigorAP Mesh Nodes – New! (requires f/w 4.3.0)
- 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

DrayTek

Technical Specification (UK Hardware Spec.)

- 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!** (requires f/w 4.3.0)
  - Pre-Shared Key authentication
  - Enterprise 802.1x authentication
  - WEP/WPA for Legacy Clients
  - Access Control – Blacklist / Whitelist client MAC addresses per SSID

Firewall & Content Filtering
- IP-based or User-based Firewall Policy
- User-based Time Quota
- DoS Attack Defence
- Spoofing Defence
- Content Filtering:
  - Application Content Filter
  - URL Content Filter
  - DNS Keyword Filter
  - Web Features
  - Web Category Filter (requires GlobalView subscription)

NAT Features
- NAT Port Redirection
- Open Ports
- Port Triggering
- DMZ Host
- UPnP
- ALG (Application Layer Gateway): SIP, RTSP, FTP, H.323
- VPN Pass-Through: PPTP, L2TP, IPsec

LAN Management
- 802.1q Tag-based, Port-based VLAN
- Up to 8 LAN Subnets (NAT or Routing mode selectable per LAN interface)
- Up to 16 VLANs
- DMZ Port
- DHCP Server:
  - Multiple IP Subnet
  - Custom DHCP Options
  - Bind-IP-to-MAC
  - DHCP Pool Count up to 1022 addresses for LANs 1-3
  - DHCP Pool Count up to 253 addresses for LANs 4-8
  - LAN IP Alias
- Wired 802.1x Port Authentication
- Port Mirroring
- Local DNS Server
- Conditional DNS Forwarding
- Hotspot Web Portal
- Hotspot Authentication: Click-Through, Social Login, SMS PIN, Voucher PIN, RADIUS, External Portal Server

Networking Features
- Policy-based Routing: Protocol, IP Address, Port, Domain/Hostname, Country
- High Availability: Active-Standby, Hot-Standby
- DNS Security (DNSSEC)
- Local RADIUS server
- SMB File Sharing (Requires external storage)
- Multicast: IGMP Proxy, IGMP Snooping & Fast Leave, Bonjour
- Routing Features: IPv4 & IPv6 Static Routing, Inter-VLAN Routing, RIP v1/v2/ng, BGP

VPN Features
- Up to 32 active VPN tunnels - including up to 16 SSL VPN or OpenVPN Tunnels
- Up to 16 Hardware Accelerated 800Mb/s IPsec tunnels – **New!**
- LAN-to-LAN - Dial-In VPN Server & Dial-Out VPN Client
- Teleworker-to-LAN – Dial-In VPN Server

- User Authentication: Local, RADIUS, LDAP, TACACS+, mOTP
- IKE Authentication: Pre-Shared Key and Digital Signature (X.509)
- Encryption: MPPE, DES, 3DES, AES (128/192/256)
- Authentication: SHA-256, SHA-1
- VPN Trunk (Redundancy): Load Balancing, Failover
- 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
  - GRE over IPsec
  - PPTP
  - L2TP, L2TP over IPsec

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

Management
- Local Service: HTTP, HTTPS, Telnet, SSH, FTP, TR-069
- Config File Export & Import
- Import Config from Vigor 2862
- 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 20 VigorAP access points
  - Switch Management: Up to 10 VigorSwitch network switches
  - VPN Management: Up to 8 Vigor routers
  - DrayTek Mesh: Up to 7 VigorAP access points – **New!** (requires f/w 4.3.0)

Operating Requirements
- Rack Mountable (Optional Vigor RM1 mounting bracket required)
- Wall or Shelf Mountable with included fittings
- Temperature Operating: 0 °C ~ 45 °C
- Storage: -25 °C ~ 70 °C
- Humidity 10% ~ 90% (non-condensing)
- Power Consumption: 24 watts maximum ('ac' model)
- Weight: 620g ('ac' model)
- Dimensions:
  - 241mm Width
  - 165mm Depth
  - 44mm Height
- Operating Power: DC 12V (via external PSU, supplied)
- Warranty : Two (2) Years RTB
- Power Requirements : 220-240VAC

Box Contents
- Vigor 2865 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)
- 2x Detachable LTE Antennas ('L' models)
- 2x 1m LTE Extension Base ('L' models)
- DC 12V Power Supply with UK Plug

Vigor 2865 series Router Models

UK Product code	EAN	Product name	Product description
V2865-K	4710484741257	Vigor 2865 (UK/IE)	Vigor 2865 wired router
V2865AC-K	4710484741240	Vigor 2865ac (UK/IE)	Vigor 2865ac router with 11ac AC1300 wireless
V2865AC-K	4710484741233	Vigor 2865Lac (UK/IE)	Vigor 2865Lac router with 11ac AC1300 wireless and integrated 4G/LTE modem