Vigor 2927 series

The Ideal VPN Router for Small Business and Remote Working

Premium. Reliable. Affordable.

**Dray** Tek

Datasheet

### **Product Overview**

The DrayTek Vigor 2927 series Dual-WAN Load Balancing Firewall VPN routers allow you to make the most of FTTP Fibre Broadband with Gigabit WAN throughput, extensive Firewall, Content Filtering, VPN client/server and Quality of Service controls.

Along with model options for fast WiFi and integrated 4G/LTE modem to take advantage of mobile broadband, the Vigor 2927 series provides a reliable, flexible, and secure network solution, that's ideal for Small Business and Home Offices.

# **Key Features & Benefits**

## **Dual Gigabit WAN Load Balancer**

Make full use of Fibre Broadband with the Vigor 2927's Gigabit throughput per-WAN. Up to 1.8Gbps total combined throughput with Firewall, Content Filtering and Quality of Service.

Benefits: Unleash the full potential of Fibre broadband. High speed, Gigabit CPE with flexible application.

### **Dual-SIM 4G+ LTE Modem**

Provide ultra-reliable connectivity with an integrated 4G+/LTE modem on 'L' models. Get the best out of 4G Broadband with LTE Category 6. Handle Mobile network outages with Dual-SIM Failover.

Benefits: High speed Mobile Broadband. Ensure constant connectivity.

### Wi-Fi 6 - AX3000 Performance

Wi-Fi 6 wireless provides gigabit Wi-Fi with reliable throughput. Ideal for time-sensitive video conferencing, low latency gaming and handling 4K Ultra-HD streaming without buffering.

Benefits: Improved wireless performance. Built with the latest technologies.

## **Ideal VPN Router for SMB**

Provide fast and secure VPN access, with up to 50 VPN tunnels. Enabling remote workers to access network resources and connecting remote sites. With DrayTek SSL VPN and OpenVPN support.

Benefits: Provide secure, encrypted network access for remote workers.

## 5+1 Gigabit LAN Ports

Attach Computers, Servers and Network Attached Storage directly, with up to 6 Gigabit LAN ports. Use VLANs to supply Broadband & VPN connectivity to as many as 8 separate networks.

Benefits: Improve quality of service for private and guest data traffic. Mix fixed and virtual configurations.

## VigorACS SD-WAN Central Management

Manage the Vigor 2927 remotely and utilise DrayTek's powerful SDWAN features with the VigorACS 3 management platform. Centrally manage & provision whole networks across 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**

- Dual-WAN Gigabit Ethernet WAN Router with Load Balancing & Failover
- Up to 950Mbps Throughput per WAN interface, 1800Mbps in total
- Up to 300Mbps IPsec VPN Throughput
- 50 LAN-to-LAN & Remote Teleworker VPN Tunnels
- 25 DrayTek SSL VPN or OpenVPN Tunnels
- 4G/LTE with dual-SIMs for second backup telco ('L' models)
- AC1300 11ac 'Wave 2' Dual Band Wireless ('ac' models)
- AX3000 Wi-Fi 6 Dual Band Wireless ('ax' 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**

- WAN Ports: 1x Gigabit Ethernet (1G/100M/10M), RJ-45 LAN Ports: 5x Gigabit Ethernet (1G/100M/10M), RJ-45

- WAN/LAN Switchable Port: 1x 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**

- NAT Performance:
  - 950 Mb/s NAT Throughput for Single WAN with Hardware Acceleration
  - 1.8Gb/s Total NAT Throughput for Dual WAN with Hardware Acceleration
  - 800 Mb/s NAT Throughput per WAN
  - 60,000 NAT Sessions
- VPN Performance:

  - 300 Mb/s IPsec (AES256) VPN Performance 800 Mb/s Hardware Accelerated IPsec VPN Performance (requires f/w 4.2.1)
  - 120 Mb/s SSL VPN Performance

  - Max. 50 Concurrent VPN Tunnels Max. 25 Concurrent SSL VPN / OpenVPN Tunnels

#### **WAN Interfaces**

- WAN1: Gigabit Ethernet
- WAN2: Gigabit Ethernet
- WAN3: 2.4GHz Wireless WAN ('ac' & 'ax' models)

- WAN4: 5GHz Wireless WAN ('ac' & 'ax' 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
- 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 (requires f/w 4.2.1):

  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:

  Ethernet: PPP, DHCPv6, Static IPv6, TSPC, AICCU, 6rd, 6in4 Static Tunnel
  - 4G/LTE Modem & USB 4G/LTE Modem: TSPC, AICCU

# 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, 02, 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' & 'ax' models)

- AX3000 Wi-Fi 6 wireless ('ax' models):

  802.11ax 2x2 wireless access point

  Compatible with 802.11a/b/g/n/ac wireless

  Dual-band (2.4/5Ghz) simultaneous wireless

  Up to 2400Mbps PHY rate at 160MHz with 5GHz
  - Up to 574Mbps PHY rate at 40MHz with 2.4GHz
  - Channel Bandwidth: 20/40MHz for 2.4GHz,
  - 20/40/80/160MHz for 5GHz
  - **OFDMA**
  - MU-MIMO
  - Tx Beamforming
  - 1024-QAM
- Mesh Root support with DrayTek VigorAP Mesh Nodes New! (requires f/w 4.2.2) 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

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

#### Wireless Features ('ac' models) (cont.)

- Wireless Security:
  - WPA2

  - WPA3 **New!** (requires f/w 4.2.2) Pre-Shared Key authentication Enterprise 802.1x authentication

  - WEP/WPA for Legacy Clients Access Control Blacklist / Whitelist client MAC addresses per SSID

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

#### **NAT Features**

- Auto Configuration
- 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

- 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,

- 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,

- Up to 50 active VPN tunnels including up to 25 SSL VPN or OpenVPN Tunnels
- Up to 16 Hardware Accelerated 800Mb/s IPsec tunnels **New!** (requires f/w 4.2.1) 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
- USER Authentication: Local, RADIOS, LDAP, IACACS+, 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
- 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
  - VolP Prioritization

#### Management

- Local Service: HTTP, HTTPS, Telnet, SSH, FTP, TR-069 Config File Export & Import Import Config from Vigor 2926 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!

### **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 (Watts, maximum): 28.2W ('ax' model)
  Operating Power: DC 12V (via external PSU, supplied)
- Dimensions:
- 241mm Width
   165mm Depth
   44mm Height
   Weight: 780g ('ax' model)
  Warranty: Two (2) Years RTB
  Power Requirements: 220-240VAC

#### **Box Contents**

- Vigor 2927 series router Quick Start Guide

- Screws & wall plugs for wall mounting 2m Cat-5e RJ-45 Network Cable
- 2x Detachable Wireless LAN Antennas ('ac' & 'ax' models)
- 2x Detachable LTE Antennas ('L' models) 2x 1m LTE Extension Base ('L' models DC 12V Power Supply with UK Plug



## Vigor 2927 series Router Models

UK Product code	EAN	Product name	Product description
V2927-K	4710484741288	Vigor 2927 UK/IE	Vigor 2927 wired router
V2927AC-K	4710484741486	Vigor 2927ac UK/IE	Vigor 2927ac router with 11ac AC1300 wireless
V2927AX-K	4710484743879	Vigor 2927ax (UK/IE)	Vigor 2927ax router with Wi-Fi 6 AX3000 wireless
V2927LAC-K	4710484742018	Vigor 2927Lac UK/IE	Vigor 2927Lac router with 11ac AC1300 wireless and integrated 4G/LTE modem



- 1 LED Status Indicators
- 2 USB 2.0 Ports
- 3 1GbE RJ-45 WAN Port
- 4 1GbE RJ-45 LAN/WAN Port
- 5 5x 1GbE RJ-45 LAN Ports
- 6 Dual Sim Slot & 2x LTE Antenna ('L' models)
- 7 2x Wireless Antenna ('ac' models)



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