





Product Name: Draytek Vigor 2927Lac Dual-WAN Firewall VPN Router and 4G/LTE modem

Manufacturer: Draytek

Model Number: V2927LAC-K

Draytek Vigor 2927Lac 1 Gb Ethernet Dual-WAN Firewall VPN Router with 11ac AC1300 wireless and integrated 4G/LTE modem

The Draytek Vigor 2927Lac is a Dual-Ethernet WAN router featuring VPN, advanced routing features, firewall, content filtering, bandwidth management and more. It offers high throughput with Load Balancing and Failover connectivity, suitable for handling Fibre to the Premises (FTTP) and Gigabit Internet connections. The Vigor 2927Lac offers up to 950Mbps per-WAN of Hardware Accelerated throughput while retaining its full feature set.

Draytek Vigor 2927Lac Key Features

าั¿½ Up to 950Mbps Throughput per WAN interface, 1800Mbps in total

ï¿1/2 Up to 300Mbps IPsec VPN Throughput

تزير 50 LAN-to-LAN & Teleworker VPN Tunnels

� 25 DrayTek SSL VPN Tunnels

� 5+1 Gigabit RJ-45 LAN Ports

าั¿½ 4G/LTE with dual-SIMs for second backup telco

ï¿1/2 AC1300 - 11ac 'Wave 2' Dual Band Wireless

آذِ لا 8 LAN Subnets with VLANs (Port-based / 802.1q)

17.1/2 SPI Firewall and Content Filtering

With 802.11ac Dual-Band wireless, the Vigor 2927Lac provides fast wireless coverage to your network's computers and devices. In addition, the router can connect to Wireless networks for Internet access, allowing it to make use of Mobile Hotspot wireless connections and nearby wireless networks, where for instance a neighbour's wireless network could provide an emergency backup connection.

The integrated 4G/LTE modem provides fast 4G+ Mobile Broadband with Carrier Aggregation to get the best performance out of 4G Broadband, for use as a backup connection or primary Internet connection.

Dual Gigabit WAN Load BalancerMake full use of Fibre Broadband with the Vigor 2927Lac'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 ModemProvide ultra-reliable connectivity with an integrated 4G+/LTE modem. Get the best our of 4G Broadband with LTE Category 6. Handle Mobile network outages wiht Dual SIM Failover.Benefits: Ensure constant connectivity with high speed Mobile Broadband failover. Ideal VPN Router for Small to Medium BusinessesProvide fast and secure VPN access, with up to 50 VPN tunnels, enabling remote workers to access network resources and connect with remote sites with DrayTek SSL VPN and Open VPN 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 and VPN connectivity to as many as 8 separate networks. Benefits: Improve quality of service for private and guest data traffic. Designed for Centralised Management Configure and manage the Vigor 2927 series remotely through the VigorACS central management platform. Benefits: Save time and money. Easily provision, monitor and manage remote sites without on-site IT or dedicated staff.

Draytek Vigor 2927Lac - Technical Specifications

Physical Interfaces

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

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



i¿½ LAN Ports: 5x Gigabit Ethernet (1G/100M/10M), RJ-45

� 2x Removable Wireless antennas

� 2x Removable 4G/LTE Wireless antennas

าั¿½ USB 2.0 Port for 3G/4G Modem, thermometer or Printer

 $\ddot{\imath}$ ۈ½ Wireless On / Off / WPS button

� Recessed Factory Reset button

Performance:

� NAT Performance:

าั¿½ 950 Mb/s NAT Throughput for Single WAN with Hardware Acceleration

រ៉េះ/៉ូ 1.8Gb/s Total NAT Throughput for Dual WAN with Hardware Acceleration

ï¿1/2 800 Mb/s NAT Throughput per WAN

ï¿1/2 60,000 NAT Sessions

تزير 8000 Hardware Accelerated NAT Sessions

آزار VPN Performance:

ï¿1/2 300 Mb/s IPsec (AES256) VPN Performance

าั¿1/2 800 Mb/s Hardware Accelerated IPsec VPN Performance - (requires f/w 4.2.1)

ï¿1/2 120 Mb/s SSL VPN Performance

ï¿1/2 Max. 50 Concurrent VPN Tunnels

� Max. 25 Concurrent SSL VPN / OpenVPN Tunnels

WAN Interface

� WAN1: Gigabit Ethernet

� WAN2: Gigabit Ethernet

ï¿⅓ WAN3: 2.4GHz Wireless WAN

ï¿⅓ WAN4: 5GHz Wireless WAN

ï¿1/2 WAN5: Integrated 4G/LTE Category 6 Modem

آذًا WAN6: 4G/LTE USB Modem (not included, see supported 4G/LTE modem list)

Internet Connection

า๊¿½ Load Balancing: IP-based, Session-based

ï¿⅓ Hardware Acceleration

ï¿⅓ 802.1p/q Multi-VLAN Tagging

آزٰ½ Multi-VLAN/PVC

تزرير 2.4GHz & Simultaneous Wireless WAN

าั¿½ WAN Active on Demand: Link Failure, Traffic Threshold

 $\ddot{i}_{\dot{c}}$ Connection Detection: PPP, ARP Detect, Ping Detect

ï¿⅓ WAN Data Budget

� Dynamic DNS

آذًا DrayDDNS – with automated LetsEncrypt Certificates

آزا Full Feature-set Hardware Acceleration (requires f/w 4.2.1):



17.1/2 Hardware Accelerated Quality of Service

� Multi-WAN Data Budget

� Traffic Graph & Data Flow Monitor

� Bandwidth Limit

าั¿½ IPv4 Connection Types: PPPoE, DHCP, Static IP, PPTP/L2TP

ï¿1/2 IPv6 Connection Types:

آذِنا Ethernet: PPP, DHCPv6, Static IPv6, TSPC, AICCU, 6rd, 6in4 Static Tunnel

آذِرًا 4G/LTE Modem & amp; USB 4G/LTE Modem: TSPC, AICCU

Integrated 4G LTE Modem Features

� Dual-SIM Failover

i¿½ 4G LTE Category 6 Modem with fallback to 3G / GPRS

تزارط Unlocked to any network (BT, EE, 3, O2, Vodafone, Eircom)

ï¿1/2 4G LTE Max Data Rates:

i¿½ 300Mbps Downlink (Category 6)

� 50Mbps Uplink (Category 6)

� 4G LTE (FDD) Bands: 1, 3, 5, 7, 8, 20, 28, 32

ï¿1/2 4G LTE (TDD) Bands: 38, 40, 41

� 3G (WCDMA/HSPA+/UMTS) Bands: 1, 3, 5, 8

า๊¿½ 2x LTE Antennas included with 1m extension cables

� Per-SIM-Card WAN Data Budget

� 2x Standard-Size SIM-Card Slots

ï¿1/2 Removable SIM slot cover

ī¿1/2 SMS Inbox - Send & Receive SMS text messages

ī¿½ SMS Router Commands - Status Report, Reboot via text message

ï¿⅓ LTE Bridge Mode

Wireless Features

AC1300 - 11ac 'Wave 2' Dual Band Wireless:

ï¿1/2 802.11ac 2x2 wireless access point

ï¿1/2 Compatible with 802.11a/b/g/n wireless

� Dual-band (2.4/5Ghz) simultaneous wireless

� Up to 866Mbps PHY rate at 80MHz with 5GHz

آزا Up to 400Mbps PHY rate at 40MHz with 2.4GHz (256-QAM)

آزا 20/40MHz for 2.4GHz, 20/40/80MHz for 5GHz

ï¿⅓ MU-MIMO

� Tx Beamforming

� Mesh Root support with DrayTek VigorAP Mesh Nodes (requires f/w 4.3.0, available in Q4



2020)

- � Up to 4 SSIDs per radio band
- ï¿1/2 Extended 5Ghz Band Channels 36-48, 52-64, 100-140
- آذِيًّ Wireless Optimisation: Airtime Fairness, AP-Assisted Mobility, Band Steering
- آذِاً Bandwidth Management (Per Station / Per SSID)
- � WMM (Wireless MultiMedia)
- ï¿1/2 WPS WiFi Protected Setup
- ī¿½ Station Control Time limited wireless connectivity per Station (e.g. 1 hour)
- าั¿½ EAPOL Key Retry Disable EAPOL Key Retry to protect unpatched WLAN clients from KRACK
- ï¿1/₂ Wireless Security:
- ï¿⅓ WPA2
- ï¿1/2 WPA3 (requires f/w 4.2.2)
- � Pre-Shared Key authentication
- � Enterprise 802.1x authentication
- ï¿1/2 WEP/WPA for Legacy Clients
- آذًا Access Control Blacklist / Whitelist client MAC addresses per SSID

Firewall and Content Filtering

- � IP-based or User-based Firewall Policy
- ï¿1/2 User-based Time Quota
- � DoS Attack Defence
- ï¿1/2 Spoofing Defence
- � Content Filtering:
- ï¿⅓ Application Content Filter
- ï¿⅓ URL Content Filter
- � DNS Keyword Filter
- ï¿⅓ Web Features
- า๊¿½ Web Category Filter (requires GlobalView subscription)

NAT Features

- � NAT Port Redirection
- ï¿⅓ Open Ports
- � Port Triggering
- تز½ DMZ Host
- � UPnP
- آذِر ALG (Application Layer Gateway): SIP, RTSP, FTP, H.323
- i¿½ VPN Pass-Through: PPTP, L2TP, IPsec

LAN Management

- ï¿1/2 802.1q Tag-based, Port-based VLAN
- ī¿1/2 Up to 8 LAN Subnets (NAT or Routing mode selectable per LAN interface)
- آزٰ½ Up to 16 VLANs



ï¿⅓ DMZ Port

ï¿⅓ DHCP Server:

- � Multiple IP Subnet
- � Custom DHCP Options
- � Bind-IP-to-MAC
- าั¿½ DHCP Pool Count up to 1022 addresses for LANs 1-3
- � DHCP Pool Count up to 253 addresses for LANs 4-8
- � DHCP Relay per LAN
- آزار LAN IP Alias
- ï¿1/2 Wired 802.1x Port Authentication
- آز½ Port Mirroring
- ï¿1/2 Local DNS Server
- � Conditional DNS Forwarding
- � Hotspot Web Portal
- آذِيًّا Hotspot Authentication: Click-Through, Social Login, SMS PIN, Voucher PIN, RADIUS,

External Portal Serve

Networking features

- آزار Policy-based Routing: Protocol, IP Address, Port, Domain/Hostname, Country
- تز½ High Availability: Active-Standby, Hot-Standby
- � DNS Security (DNSSEC)
- � Local RADIUS server
- تز½ SMB File Sharing (Requires external storage)
- آزا Multicast: IGMP Proxy, IGMP Snooping & East Leave, Bonjour
- ī¿½ Routing Features: IPv4 & IPv6 Static Routing, Inter-VLAN Routing, RIP v1/v2/ng, BGP

VPN Facilities

- � Up to 50 active VPN tunnels including up to 25 SSL VPN or OpenVPN Tunnels
- آزا Up to 16 Hardware Accelerated 800Mb/s IPsec tunnels (requires f/w 4.2.1)
- آزئ LAN-to-LAN Dial-In VPN Server & Dial-Out VPN Client
- าั¿½ Teleworker-to-LAN Dial-In VPN Server
- آذِرُ User Authentication: Local, RADIUS, LDAP, TACACS+, mOTP
- آذًا IKE Authentication: Pre-Shared Key and Digital Signature (X.509)
- � Encryption: MPPE, DES, 3DES, AES (128/192/256)
- ï¿1/2 Authentication: SHA-256, SHA-1
- آذِر VPN Trunk (Redundancy): Load Balancing, Failover
- � Dead Peer Detection (DPD)
- � IPsec NAT-Traversal (NAT-T)
- រ៉េ្ស Virtual IP Mapping Resolve VPN IP subnet/range conflicts
- ï¿⅓ DHCP over IPsec
- าั¿½ DrayTek VPN Matcher Connect to a VPN router that's behind NAT/CG-NAT
- آزار VPN Protocols:
- ï¿1/2 IPsec IKEv1, IKEv2, IKEv2 EAP
- ï¿1/2 IPsec-XAuth
- � DrayTek SSL VPN



ï¿1/2 OpenVPN (Remote Dial-In User only)

ï¿⅓ GRE over IPsec

PPTP ½٪

� L2TP, L2TP over IPsec

Bandwidth Management

� IP-based Bandwidth Limit

ï¿1/2 IP-based Session Limit

ï¿1/2 User-based Data Quota

Quality of Service (QoS)

آزر Classify via TOS, DSCP, 802.1p, IP Address, Service Type

آزٰ 4 Priority Queues

� App QoS

آذِ VoIP Prioritisation

ī¿1/2 Class-based Outbound Traffic Tagging: DSCP & DSCP & Precedence

Management

آذِر Local Service: HTTP, HTTPS, Telnet, SSH, FTP, TR-069

� Config File Export & Dort 12 Config File Export & Dort 12 Config File Export & Dort 2 Config File Export & Do

ï¿⅓ Import Config from Vigor 2926

ï¿1/2 Auto Backup Config to USB Storage

تز½ Firmware Upgrade via TFTP, HTTP, TR-069

� 2-Level Administration Privilege

ī¿½ Access Control Features: Access List, Brute Force Protection

تز½ Syslog

ï¿⅓ SMS, E-mail Notification Alert

ï¿⅓ SNMP: v1, v2c, v3

ï¿⅓ Managed by VigorACS

Router Central Management Features

า๊¿½ AP Management: Up to 20 VigorAP access points

าั¿½ Switch Management: Up to 10 VigorSwitch network switches

تز½ VPN Management: Up to 8 Vigor routers

าั¿½ DrayTek Mesh: Up to 7 VigorAP access points (requires f/w 4.3.0, available in Q4 2020)

Operating Requirements

าั¿½ Rack Mountable (Optional Vigor RM1 mounting bracket required)

� Wall Mountable

12.1/2 Temperature Operating: 0 °C ~ 45 °C

ï¿1/2 Storage: -25 °C ~ 70 °C

� Humidity 10% ~ 90% (non-condensing)

ī¿½ Power Consumption: Operating Power: DC 12V (via external PSU, supplied)



ï¿⅓ Warranty: Two (2) Years RTB

ï¿1/2 Power Requirements: 220-240VAC

� Dimensions:

� 241mm Width

� 165mm Depth

ï¿⅓ 44mm Height

Box Contents

ï¿1/2 Vigor 2927Lac router

� Quick Start Guide

ï¿1/2 Screws & amp; wall plugs for wall mounting

� 2m Cat-5e RJ-45 Network Cable

� 2x detachable wireless LAN antennas

� 2x detachable LTE antennas

� 2x 1m LTE extension base

ï¿1/2 DC 12V Power Supply with UK Plug

Price: £518.10