

# Vigor 166

DrayTek

G.Fast & VDSL2 35b Modem

Premium. Reliable. Affordable.

Datasheet



## Product Overview

The Vigor 166 is a G.Fast and VDSL2 35b modem to Ethernet bridge, connecting G.Fast or VDSL to your Ethernet-based Router or Firewall. It provides proven compatibility with UK G.Fast and VDSL2 technologies; extensively tested and tuned to provide a robust and reliable DSL connection.

## Key Features & Benefits

### G.Fast & VDSL2 35b Capable

Up to 330Mbps download and 50Mbps upload with G.Fast technology. Can be used with all the latest DSL standards, with Vectoring and 35b SuperVectoring.

**Benefits:** High performance and great compatibility.

### No Setup Needed

Works as a modem with most ISPs, straight out of the box. Pre-Configured to work with most UK ISPs. Just set the username and password on your router.

**Benefits:** Quick and easy to install.

### Two Gigabit LAN Ports

Connect two devices to the Vigor 166 with 2 Gigabit (10/100/1000Mbps) LAN ports. No need to disconnect Ethernet WAN to check connectivity.

**Benefits:** More convenient cabling for diagnostics.

### Full-Bridge Modem and More

Two operation modes for the Vigor 166 allow it to operate as a fully bridged DSL to Ethernet Modem, or as a mini Router with NAT DMZ Host.

**Benefits:** Extensively configurable to suit any application.

### Add DSL connectivity to any Router

Ideal Partner device for DrayTek dual-WAN products or any other vendor's Ethernet WAN firewall. Reports DSL Line Status on DrayTek Vigor routers.

**Benefits:** Connect any Router or Firewall to G.Fast.

### Wall or Shelf Mountable

Can be installed securely on a wall or shelf with screw fixings to hold it in place. Mounting kit included.

**Benefits:** Flexible and discrete installation.

UK Product Code	EAN	Product Name	Product Description
V166-K	4712909128230	Vigor 166 (UK/IE)	Vigor 166 G.Fast Modem

## Key Specification

- G.fast (Ultrafast Fibre) & VDSL2 (Superfast Fibre) to Ethernet Modem
- Bridges DSL to your Router or Firewall
- Pre-Configured to work with most ISPs
- IPv6 and IPv4 Compatible
- Compatible with IPTV and Video on Demand (YouView, Sky Q)
- 2 Gigabit LAN Ports
- Optional *VigorCare* Available



## Technical Specification (UK Hardware Spec.)

### Physical Interfaces

- 2 x Gigabit Ethernet (1000Mb/s) Ports
- WAN1: G.Fast/VDSL - RJ-11
- Recessed Factory Reset button

### Performance

- Max G.fast Sync Rate: 1.3Gb/s (dependant on ISP & Exchange equipment)
- Max VDSL2 35b Sync Rate: 300Mb/s
- Max VDSL2 17a Sync Rate: 100Mb/s
- Max ADSL2+ Sync Rate: 20Mb/s
- NAT Performance:
  - Firewall: Up to 700Mb/s (940Mb/s with Hardware Acceleration)
  - NAT Sessions: 10,000

### WAN Features

- Pre-Configured with OpenReach network VLAN tag 101
- WAN1 Service & Customer (double-tag) VLAN support
- Maximum MTU 1508

### G.Fast & DSL Compatibility

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

### G.Fast Standards

- ITU-T G.9700, G.9701 G.Fast
- Profile: 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, DPB0 Supported
- US0 Supported
- Loop Diagnostic Mode
- DSL Forum WT-114

### 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

### Network Features

- DSL Status Display with DrayTek Vigor routers

### Management Interfaces

- Web-Based User Interface (HTTP / HTTPS)
- CLI ( Command Line Interface ) via Web Console, Telnet or SSH
- Configuration Backup / Restore
- Firmware Upgrade via Web Interface, TFTP

### Router mode Firewall & NAT Features

- DMZ Host
- NAT Port Forwarding
- NAT Port Redirection
- ALG (Application Layer Gateway): SIP, RTSP, FTP, H.323
- VPN Pass-Through: PPTP, L2TP, IPsec
- Object-based IPv4 / IPv6 Firewall
- MAC Address Filter
- SPI ( Stateful Packet Inspection ) with FlowTrack Mechanism
- DoS / DDoS Protection
- IP Address Anti-spoofing
- Bind IP to MAC Address
- DHCP Server
- Static Route & IP Routed Subnet
- URL Keyword Filtering
- Dynamic DNS
- IGMP Proxy

### Router mode WAN Protocols

- DHCP Client
- Static IP
- PPPoE / PPPoA
- IPv6: PPP, DHCPv6, Static IPv6, TSPC, AICCU, 6rd, 6in4 Static Tunnel
- Multi-PVC/VLAN virtual WAN interfaces for Management / IPTV services

### Router mode Management Features

- Syslog
- SNMP v2 & v3
- VigorACS Management
- TR-069
- TR-104
- NTP Client
- Built-in Diagnostic Function (ping, traceroute)

### Operating Requirements

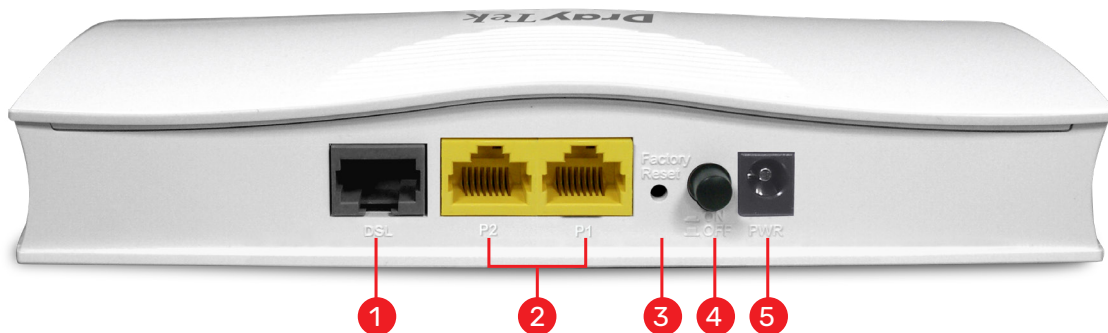
- Wall Mountable
- Operating Temperature : 0 °C ~ 45 °C
- Storage Temperature : -25 °C ~ 70 °C
- Humidity 10% ~ 90% (non-condensing)
- Power Consumption: 6.6 Watt Max.
- Dimensions:
  - Length: 181mm
  - Width: 125mm
  - Height: 40mm
- Weight: 280g
- Operating Power: DC 12V 1A (via external PSU, supplied)
- Power Requirements : 220-240VAC

### Box Contents

- Vigor 166 Modem
- Quick Start Guide
- RJ-11 DSL Cable
- Cat-5e RJ-45 Cable
- Screws & wall plugs for wall mounting
- DC 12V PSU

### ROHS & CE Compliant

Warranty: 2 Year Manufacturer's RTB



- 1 1x RJ-11 for G.fast/VDSL2 35b/ADSL2+
- 2 LAN Port: 2x GbE RJ-45
- 3 Reset Button
- 4 Power On/Off Switch
- 5 Power Input