

GW2300 Series VDSL, ADSL2+, PoE+ LTE Industrial Router



Applications:

- CCTV
- M2M
- IoT
- Outdoor cabinets
- Devices exposed to vibration

Router Features:

- High performance device with 4 ARM core CPUs
- 1 LTE cellular radio module
- 2.4 and 5GHz concurrent WiFi radios
- PoE+ supported on 1 or 2GbE ports
- Built-in GPS receiver
- Dual SIMs
- 1 or 2 RS232/RS485 serial ports
- Digital IO
- Optional VDSL
- Rugged aluminium enclosure with DIN mounting kit

Overview

Based on the very latest VDSL, ADSL and LTE technology, the Virtual Access GW2300 Series router is an industrial router designed for harsh environments such as roadside cabinets and other remote monitoring and control sites. PoE+ capability supplies up to 30W per Ethernet port to power cameras and other PoE devices. Serial ports and digital IO options make this a very versatile device for many industrial applications. Support for cellular radio modules provides very high availability for critical communications solutions. Dual band WiFi support is optional.

GbE Ethernet Ports

The GW2300 Series router supports up to four 10/100/1000Mbps Ethernet interfaces. They can be configured as a single interface with Ethernet switching between them or as separate router interfaces.

PoE+

The GW2300 Series can be ordered with support for up to four PoE+ ports. 30 Watts is provided per port.

GPS Receiver

The GW2300 Series router includes a GPS receiver that can be used for positioning. The GPS socket has a DC voltage to power an active GPS antenna.

SMS Management

The GW2300 Series router also supports SMS, so if the packet switched side of the network is down, you can send commands to the router to perform diagnostics or even a reboot.

Ingress Protection

The GW2300 has been designed with rubber seals around each connector, providing an IP54 ingress protection rating.

Automatic Failover

The GW2300 provides optional automatic failover from fixed to wireless circuits ensuring business connectivity through network or last mile circuit outages, whilst email alerting and auto-failback confirm primary circuit restoration.

Dual Band WiFi

The GW2300 Series router has two optional WiFi radios for concurrent support of 2.4GHz and 5GHz WiFi radio bands. An internal diplexer enables both radios to share a single pair of WiFi antenna on SMA connectors. It is capable of supporting both Access Point mode and Station mode concurrently if required.

DIN Rail Mounting

A DIN rail clip is included, which enables simple mounting for industrial applications. Optional rubber feet can be supplied for table mounting.

Centralised Management and Monitoring

The GW2300 Series router benefits from Activator, Virtual Access' centralised configuration management and monitoring system. Activator simplifies and automates deployment, management and support tasks in managed network environments.

Software Features

Management

- Automatic configuration using Activator server
- HTTP/HTTPS browser access
- Command Line Interface via SSH
- TFTP client download/upload
- SNMP agent
- SMS management support enables SMS control including reboot

Fault Investigation and Reporting

- Event logging
- Syslog support
- Packet tracing

Routing Features

- IPv4 and IPv6
- DHCP server & client
- DynDNS
- NAT
- NAT Traversal
- NTP Client
- VLAN support
- Packet filtering
- Firewall
- Port forwarding
- BGPv4, OSPF and RIP
- IPSec/L2TPv2/L2TPv3/GRE
- DMVPN
- SNMP v1/v2/v3
- TLS 1.2
- 802.1x authentication
- IEC 104
- QoS
- VRRP
- VRF
- Open VPN

IPSec VPN Options

- IKE version 2
- X.509 certificates
- Elliptic Curve Cryptography (ECC)
- SHA2_512 support

- AES_CBC (256), 3DES and DES
- PFS
- SCEP
- DH_8192

Hardware Features

Ethernet Interfaces

- Two GbE Ethernet ports with option for four
- PoE+ on up to four Ethernet ports is available optionally
- Ethernet ports can be configured for WAN use

DSL Interface

- Intel/Lantq VRX220 family chipset. Conforms to the following ITU standards:
- ITU-T, G.992.1 G.dmt Asymmetric Digital Subscriber Line (ADSL) Transceivers
- ITU-T, G.992.3 Asymmetric Digital Subscriber Line (ADSL) Transceiver - 2 (ADSL2)
- ITU-T, G.992.5 Asymmetric Digital Subscriber Line (ADSL) Transceiver - Extended Bandwidth ADSL2 (ADSL2+)
- ITU-T, G.993.2 Very High Speed Digital Subscriber Line

Cellular Interfaces

- Wireless WAN with 3G options

WiFi Option

- Concurrent dual band (2.4GHz & 5GHz) 802.11 a/b/g/n/ac
- Concurrent Access Point and Station mode
- Internal diplexer shares two antennas with both radios
- 2 x 2 MIMO

Digital Inputs

- 2 x digital inputs for detecting remote contact open/close
- Software configurable as wet or dry inputs
- Scripts define action to be taken on input events

Digital Outputs

- Relay contact outputs: 30V DC 1A normally open

Serial Options

- 1 or 2 RJ45 ports configurable as RS232 or RS485
- Terminal Server application or optional SCADA protocol support

SIMs

- 2 x SIM card socket with cover

Antennas

- 2 or 4 cellular antenna SMA sockets
- MIMO support in LTE versions
- 2 x SMA female WiFi antenna sockets
- 1 x GPS SMA female antenna connector with 3.3 Volt DC power feed for active antenna

LEDs

- Power indicator
- Signal strength indicators
- Ethernet activity
- Active SIM
- DSL data and synchronisation
- WiFi
- Configuration complete

Approvals and CE Certificates

- CE RED
- EN 60950 safety approval
- EN 55022 and EN 55024 EMC
- EN 300 328 V1.9.1
- Freefall drop test to EN60068-2-32:2008
- Bump test to EN60068-2-27:2009
- Random vibration test to EN60068-2-64:2008
- Mechanical shock test to EN60068-2-27:2009

Power

- 52-57V DC isolated input default. See ordering codes for other options

Physical and Environment

- Unit size: 170W 50H 125D (mm)
- Unit weight: 500g
- Ingress protection rating: IP54
- Operating temperature: -30°C to +70°C
- Storage temperature: -30°C to +70°C

GW2300 Series Router Models

Model	Description
GW2302	GW2300 Series router with 2 Ethernet ports
GW2304	GW2300 Series router with 4 Ethernet ports

GW2300 Series Router Ordering Codes

Option	Code	Option	Code
One RS232/RS485 serial port	-1S	Two RS232/RS485 serial ports	-2S
WiFi	-WF	2 x digital input + 2 x output	-2DI20
PoE+ on x ports (up to 4)	-PEx	VDSL	-V
9-36V DC isolated	-DC12	18-72V DC isolated	-DC48

RF Band Options

RF Band	Region	2G Bands	3G Bands	LTE Bands	LTE Category	GPS	Order Code
QFC		-	B1/B2/B19/B8/B4/B5/B6/B9	B1/B2/B3/B4/B7/B8/B9/B12/B13/B18/B19/B20/B5/B26/B28/B41/B30/B66/B32/B46	12	Yes	QFC
RFW	EMEA, Korea, Thailand, India	3(900)/8(1800)	B1/B8	FDD: B1/B3/B7/B8. TDD: B38/B40/B34/B39/B41	3	Yes	RFW
RFX	Australia	-	B1/B5	B1/B3/B5/B7/B28	4	Yes	RFX

Example part number	Description
GW2304-V-PE4-2S-RFW	GW2300 router with VDSL, 4 Ethernet ports, 4 x PoE+, 2 x serial ports and a single category 4 LTE module.