GW2304W Series PoE+ LTE Industrial Router

Applications:

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

Router Features:

- High performance device with 4 ARM core CPUs
- 1 LTE category 4 cellular radio module
- 2.4 and 5GHz concurrent WiFi radios
- PoE+ support
- Built-in GPS receiver
- Dual SIMs
- RJ45 ports configurable as RS232 or RS485
- Digital I/O
- Rugged aluminium enclosure with DIN mounting kit

Overview

The Virtual Access GW2304W Series router has been designed for remote access applications in the harshest of environments, such as unmanned roadside cabinets, railway trackside and pole-top smart grid applications over 4G. The PoE+ capability supplies up to 60W of power across the 4 Ethernet ports to power cameras with PTZ or other PoE devices. Serial ports and digital I/O options make this a very versatile device for many industrial applications. Dual 2.4 and 5Ghz WiFi support is built in as standard where an access point or client connectivity is required.

GbE Ethernet Ports

The GW2304W 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 GW2304W Series supports up to four PoE ports with a total budget of 60W. The power management can allocate all the power to 2 ports for POE+ applications or spread the available power across all 4 ports depending on the power class of the connected device.

GPS Receiver

The GW2304W Series router includes a GPS receiver for positioning information, such as vehicle position in open cast mines or other application where knowing the position of the router is important. The GPS socket has a DC voltage to power an active GPS antenna.

SMS Management

The GW2304W Series router also supports SMS, so if the packet switched side of the network is down, commands can be sent to the router to perform diagnostics or even a reboot.

Ingress Protection

The GW2304W has been designed with rubber seals around each connector, providing an IP40 ingress protection rating.

Automatic Failover

The GW2304W can be configured to use any interface as a WAN connection. The management of the GW2304W is able to fall backwards and forwards between media interface depending on the availability.

Dual Band WiFi

The GW2304W Series router has two 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. The WiFi channels can be separated for application purposes, for example, 2.4GHz for management access and 5Ghz for public access to the internet via the LTE interface.

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 GW2304W 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
- PFS
- SCEP
- DH_8192

Hardware Features

Ethernet Interfaces
- Four GbE Ethernet ports
- PoE+ on up to four Ethernet ports is available
- Ethernet ports can be configured for WAN use

WiFi
- 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
- 2 x relay contact outputs: 30V DC 1A normally open

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

SIMs
- 2 x micro SIM card sockets

Antennas
- 2 or 4 cellular antenna SMA sockets
- MIMO support in LTE versions
- 2 x SMA Reverse Polarity 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
- WiFi
- Configuration complete

Cellular Technologies
- LTE category 4
- LTE FDD Bands:
    - B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/ B19/B20/B26/B28
- LTE TDD Bands:
    - B38/B39/B40/B41
- WCDMA Bands:
    - B1/B2/B4/B5/B8/B6/B19
- GSM Bands:
    - B2/B3/B5/B8

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
- 20-60V DC isolated input
- PoE support with input voltage over 44V
- PoE+ support with input voltage over 50V
- The maximum power for GW2304W routers using a standard 120W AC adapter is:
    - Devices without PoE: 15W
    - 2 x PoE configured devices: 45W
    - 4 x PoE configured devices: 75W
    - 2 x PoE+ configured devices: 75W

Physical and Environment
- Unit size: 170W 50H 125D (mm)
- Unit weight: 500g
- Ingress protection rating: IP40

Operating temperature:
- -20°C to +65°C
- Storage temperature: -30°C to +70°C

GW2304W Series							
Article No.	Model	Power Input Voltage	Isolated Power Input	Ethernet Ports	Serial Ports	SCADA	RTU	POE
3490-0300	GW2304W-2S-PE4-2DIDO-WF-QFR-DC48	20-60V DC	Yes	4	2	Yes	Yes	4

The GW2304W Series routers support a wide variety of options not shown in this data sheet; including specialist WiFi and cellular connectivity bands (450 & 410 Mhz). Please contact Westermo for further details.