GW2300 Series LTE, POE+ Industrial Router

Applications:

• Telemetry

• SCADA

• IoT

• Outdoor cabinets

• Devices subjected to vibration

Router Features:

• High performance device with a 4 ARM core CPU

• LTE cellular radio module

• PoE+ support

• Built-in GPS receiver

• Dual SIMs

• Digital I/O

• Rugged aluminium enclosure with DIN mounting kit

Overview

The 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. Support for cellular radio modules provides very high availability for critical communications solutions.

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.

Digital I/O

Two digital inputs are provided that can be used to detect remote contact states for monitoring door open/close or PIR detectors or similar. Custom scripts can be written to determine the action to be taken on the detection of an input state change. Syslog events, SNMP traps or emails can be generated. There is also a relay contact output, which can be controlled by a script on detecting any event within the device, or it can be controlled remotely.

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. The router has an IP rating of IP41.

DIN Rail Mounting

A DIN rail clip is included, which enables simple mounting for industrial applications.

Centralised Management and Monitoring

The GW2300 Series router benefits from Activator, our 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
- 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

SCADA Protocol Conversion

- Protocol conversion including the following:
    - IEC 60870-5-104; IEC 60870-5-101; IEC 61850
    - Modbus RTU; Modbus TCP
    - Modbus RTU to TCP automatic conversion
    - DNP3

Ethernet Interfaces

- PoE+ on up to four Ethernet ports
- Ethernet ports can be configured for WAN use

Cellular Interfaces

- LTE Cat-4 radio module

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

SIMs

- 2 x SIM card socket with cover

Antennas

- 2 or 4 cellular antenna SMA sockets
- MIMO support in LTE versions
- 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
- 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

- 20-60V DC isolated input (default)
- PoE support with input voltage over 44V
- PoE+ support with input voltage over 50V

Physical and Environment

- Unit size: 50W 170H 125D (mm)
- Unit weight: 500g
- Operating temperature:
    - -40ºC to +70ºC
- Storage temperature: -40ºC to +70ºC
- IP rating IP41

GW2300 Series Models				
Model Code	Input Voltage	PoE+	Dual SIM	2 x Digital Inputs 2 x Digital Outputs
GW2304	20 to 60V DC	4	Yes	Yes

Order codes:
Append the relevant suffix to the base model number.
RF band: select from the list on the Radio Module datasheet.
Example:
GW2304-PE4-2DIDO-QFR: GW2304 with QFR radio module, 4 POE+ Ethernet ports, 2 Digital Inputs, 2 Digital Outputs with an isolated DC input voltage range of 20-60V DC