



## QUARTZ-GOLD-LTE4 (EU)

### 4G Dual LAN Small Footprint Gigabit Ethernet Industrial Router



#### Key Features

- European 4G / LTE bands
- ARM Cortex A7 900MHz
- 2 x Gigabit Ethernet ports (100/1000Mb)
- Strong resistance to electromagnetic interference
- Built-in watch dog, multi-link detection
- Small footprint industrial design
- Excellent temperature endurance -30 to +75 deg C
- VPN: OpenVPN, PPTP, L2TP, GRE, IPSec
- WAN failover network redundancy
- WiFi: 2.4GHz and 5GHz
- Shock and vibration resistance
- 2 x LAN, 1 x WAN / 1 x LAN

#### General Description

Siretta's QUARTZ-GOLD router is a high performance industrial router designed for transferring large amounts of data via the European LTE Cat 4 cellular network, with dual built in Gigabit Ethernet ports. The QUARTZ-GOLD's fast data transfer capability reaches up to 150Mbps download and up to 50Mbps upload speed. It also has fall-back to 3G/UMTS communication, should 4G/LTE be unavailable. It is well suited for IoT/mobile broadband applications, offering reliable, secure wireless connectivity.

The QUARTZ-GOLD router has a robust design, encased in a small sized, metal enclosure, making it ideal for deployment in industrial embedded applications. The QUARTZ-GOLD software supports VPN security allowing the router to be used in commercial as

well as industrial applications. The QUARTZ-GOLD router meets many of the needs for management of remote communication and therefore has applications in renewable energy, security, digital signage, transport, street furniture, traffic control, parking systems, environmental monitoring, and many other IoT/mobile broadband applications.

The QUARTZ-GOLD router comes as standard with a single SIM slot, dual port gigabit ethernet capability and optional GNSS capability, which means the router is ideal for asset tracking or access management applications.

Gigabit WAN failover is supported to provide network redundancy for your connected gigabit LAN using the fast LTE Cat 4 cellular network.

#### Additional Features

- » Supports DHCP server
- » Supports DNS proxy and Dynamic DNS (DNSS)
- » Supports timing operation
- » Supports LED status indication
- » Supports APN
- » Supports 802.11 a/b/g/n/ac Wifi
- » Optional GNSS
- » Local and remote management
- » SNMP network management, NTP support
- » WAN supports PPPoE
- » Static DHCP



## QUARTZ-GOLD-LTE4 (EU)

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#### Cellular

- » 2G frequency bands:  
B3 (1800MHz), B8 (900MHz)
- » 3G frequency bands:  
B1 (2100MHz), B8 (900MHz)
- » 4G frequency bands:  
B1 (2100MHz), B3 (1800MHz)  
B7 (2600MHz), B8 (900MHz)  
B20 (800MHz), B28A (700MHz)  
B38 (2600MHz), B40 (2300MHz)  
B41 (2500MHz)

#### Interfaces

- » 2 x Gigabit Ethernet - configurable  
(1 x LAN, 1 x LAN/ 1 x WAN)
- » 2 x LTE SMA female antenna interface
- » 1 x standard SIM/R-UIM interface
- » 1 x standard DC power interface
- » 1 x 5 pin terminal block connector
- » 1 x DC power (anti reverse)
- » 1 x RS232 serial interface
- » 2 x RP SMA WiFi interface

#### Optional Interfaces

- » 1 x GNSS antenna interface
- » 1 x RS485 serial interface

#### Environmental

- » Dimensions: 103mm x 73.5mm x 23.5mm  
(without antenna)
- » Weight: 320g  
(without accessories)
- » Operating Temperature Range: -30 to +75 deg C
- » Storage Temperature Range: -40 to +85 deg C
- » Relative Humidity: <95% Non-condensing

#### Approvals and Compliance

- » CE
- » RoHS
- » CCC

#### Power

- » Idle: 165mA @ +12VDC
- » Power supply: 7.5 - 32VDC
- » Online without WiFi: 195mA @ +12VDC
- » Online with WiFi: 235mA @ +12VDC

#### Network

##### Network Protocol

- » IPv4
- » PPPoE
- » UDP/TCP/ICMP/NTP/DHCP
- » HTTP/HTTPS
- » UPNP / NAT-PMP
- » SNMP

##### Network Features

- » LTE/LAN/WLAN failover
- » VLAN (Up to 16)
- » Bandwidth management
- » Static NAT/DMZ
- » IP passthrough/port redirection
- » Static/dynamic routing (OSPF / RIP)

##### Network Monitoring/Control

- » ICMP check
- » Traffic check
- » Traceroute
- » Packet capture compatible with Wireshark
- » Real-time bandwidth graph
- » Real-time data traffic graph
- » LinkCONNECT serial gateway
- » Syslog service
- » Remote web access



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#### Router Settings

##### Device Management

- » Local or remote GUI
- » CLI/Telnet command
- » M2M management platform (optional)
- » SSH management

##### Firewall and Filter

- » IP/URL filtering
- » Domain/MAC filtering
- » Keyword filtering
- » Access filtering

##### LED Instruction

- » Cellular
- » LAN
- » LAN/WAN
- » WLAN

##### WLAN Mode

- » Access Point
- » Wireless Client
- » Wireless Ethernet Bridge

##### VPN

- » GRE (up to 8 tunnels)
- » OpenVPN Client (up to 2 clients)
- » PPTP/L2TP Client (up to 2 clients)
- » IPSec (up to 2 clients)

##### WiFi (Optional)

- » Supports 802.11 a/b/g/n/ac Wifi

##### GNSS Tracking (Optional)

- » Sensitivity
  - » Cold Start: -146dBm
  - » Reacquisition: -157dBm
  - » Tracking: -157dBm
- » Accuracy: 2.5 CEP
- » Update rate: 1Hz @ 5GHz
- » Time to first fix: (with open skies)
  - » Cold: 18secs (typ.)
  - » Warm: 2.2 secs
  - » Hot: 1.8 secs
- » Protocol: NMEA-0183.2.3V
- » Support: Beidou, GPS, GLONASS, Galileo, QZSS

##### WAN Failover Support

- » 1 x Gigabit Ethernet WAN internet interface
- » 1 x Gigabit Ethernet LAN network interface
- » Configurable keep alive update rate
- » Specify customer DNS server/IP address
- » Specify WLAN/LTE fallback

#### Accessories

If the router is ordered with accessories, you will receive the following:

- » Power supply with multi-region adapters
- » Power interface cable
- » LAN cable
- » Cellular antennas
- » WiFi antennas
- » GPS/GNSS antenna (only with GPS/GNSS router option)

#### Models Available

##### Dual WiFi & GNSS Industrial LTE Gigabit Ethernet Router

QUARTZ-GOLD-GW21-LTE4 (EU) + Accessories Stock Code 61134  
QUARTZ-GOLD-GW21-LTE4 (EU) - Stock code 61162

##### Dual WiFi Industrial LTE Gigabit Ethernet Router

QUARTZ-GOLD-W21-LTE4 (EU) + Accessories - Stock code 61132  
QUARTZ-GOLD-W21-LTE4 (EU) - Stock code 61133