



# **QUARTZ-GOLD-5G**

5G 2 x LAN, Single SIM, Low Latency Industrial Router



# **Key Features**

- 5G/4G/3G industrial router
- Supports 5G SA/NSA ultra speed network
- MIPS Dual-core 880 MHz
- 256 Mb Flash
- 2 Gb DDR3 RAM
- 2 x Gigabit Ethernet ports
- Resilient against strong magnetic interference
- Metal enclosure for tough industrial applications
- VPN: PPTP/L2TP/L2TP V3/GRE/IPSec/Open VPN
- Optional Wi-Fi
- 1 x DC Power Interface (7.5 to 32 V DC)



# **General Description**

The QUARTZ-GOLD-5G is powered with a Mediatek 880 MHz MIPS dual-core processor with 256 Mb flash and 2 Gb of DDR3 RAM which drives the Linux based operating system.

A Quectel RM-520N-GL module is driven by the Qualcomm Snapdragon X55 5G Modem which provides the cellular capabilities of the QUARTZ-GOLD-5G and is manufactured on a leading edge 7 nm semiconductor fabrication process.

With Two Gigabit Ethernet interfaces, the QUARTZ-GOLD-5G also offers a RS232 interface that may be used to connect serial ports on products such as door access control panels and alarm panels to the Internet.





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## **Additional Features**

- » Supports DHCP server
- » Supports DNS proxy and Dynamic DNS (DDNS)
- » LED status lights
- » Supports 802.11 a/b/g/n/ac wireless standards (Option)
- » Supports captive portal
- » Local and remote management
- » SNMP network management, NTP support
- » LCP/ICMP/flow/heartbeat check

#### Cellular

- » 5G:
  - n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/ n28/n29/n30/n38/ n40/n41/n66//n70/n71//n75/ n76/n77/n78/n79
- » LTE:
  - B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/ B18/B19/B20/B25/B26/B28/B29/B30/B32/ B34/ B38/B39/B40/B41/B42/B43/B46/B48/ B66/B71
- » WCDMA: B1/B2/B4/B5/B8/B19

## Interfaces

- » 2 x GbE- configurable (1 x LAN, 1 x LAN/ 1 x WAN)
- » 1 x RS232 (based on 2 wire interface)
- » Wi-Fi: 802.11 a/b/g/n/ac (With Wi-Fi option)
- » 1 x SIM Slot
- » 4 x SMA (Female) 5G Antenna Interface
- » 2 x SMA-RP Wi-Fi (If equipped with Wi-Fi)

## **Environmental**

- » Ruggedised industrial enclosure
- » Dimensions: 103 mm x 73.5 mm x 28 mm (without antenna)
- » Approx Weight: 320g (not including accessories and model dependent)
- » Operating Temperature Range: -30 to +75 °C
- » Storage Temperature Range: -40 to +85 °C
- » Relative Humidity: 0 95% Non-condensing

## **Router Settings**

#### **Network Protocols**

- » IPv4
- » PPPoF
- » UDP/TCP/ICMP/NTP/DHCP
- » Modbus/TCP
- » HTTP/HTTPS
- » SNMP

#### **Network Features**

- » Cellular/WAN failover
- » VLAN
- » Bandwidth management
- » NAT/DMZ
- » IP passthrough/port redirection
- » Static/dynamic routing

## VPN

- » PPTP/L2TP V3
- » GRE
- » IPSec
- » OpenVPN





# **QUARTZ-GOLD-5G**

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### Data Rates\*

#### 5G SA Mode

» Maximum downlink speed: 2.4 Gbps

» Maximum uplink speed: 900 Mbps

#### 5G NSA Mode

» Maximum downlink speed: 3.4 Gbps» Maximum uplink speed: 550 Mbps

#### LTE

» Maximum downlink speed: 1.6 Gbps

» Maximum uplink speed: 200 Mbps

### WCDMA (3G)

- » Maximum download speed: 42 Mbps (DC-HSDPA)
- » Maximum uplink speed: 5.76 Mbps (HSUPA)

# **Power Specifications**

- » Idle: 600 mA @ +12VDC
- » Communications: 850 mA @ +12VDC

### **Accessories**

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

- » Power supply with multi-region adapters
- » Power interface cable
- » LAN cable
- » Magnetic cellular antenna extenders
- » Cellular antennas
- » Wi-Fi antennas (only with Wi-Fi router option)

# **Approvals and Compliance**

- » CE
- » UKCA
- » FCC (TBC)
- » RoHS

# **Models Available**

#### **Industrial 5G GbE LAN Ethernet Router**

QUARTZ-GOLD-21-5G (GL) - Stock Code 61901 QUARTZ-GOLD-21-5G (GL) + ACCESSORIES - Stock Code 61902

#### Industrial 5G Wi-Fi GbE LAN Ethernet Router

QUARTZ-GOLD-W21-5G (GL) – Stock code 61867 QUARTZ-GOLD-W21-5G (GL) + ACCESSORIES - Stock Code 61896

<sup>\*</sup>Speeds will be dependent on network connection, base station Internet capability, signal strength, environmental conditions, etc.