QUARTZ Series
3G & 4G Dual LAN Industrial Router Range

Key Features

- Global 3G / UMTS bands
- European 4G / LTE bands
- 1 x linkCONNECT (RS232 to TCP/IP)
- 3 x Digital I/O
- High speed data via UMTS & LTE network
- Strong resistance to electromagnetic interference
- Built-in watch dog, multi-link detection
- Industrial, robust design with metal housing
- Dual SIM for failover / backup between network
- WAN supports PPOE, Static IP, DHCP Client

Additional Features

- Supports DHCP server
- Supports DNS proxy and Dynamic DNS (DNSS)
- Supports timing operation
- Supports LED status indication
- Supports APN and VDPN wireless private network access
- Supports 802.11b/g/n WiFi, 150Mbps data rate
- Local and remote management
- SNMP network management, NTP support

General Description

The Siretta QUARTZ router series is an internet of things enabled mobile broadband and machine to machine (M2M) industrial cellular router. The router works with the UMTS 3G and 4G LTE cellular networks to provide reliable, secure and high speed wireless connectivity.

The QUARTZ router series is a powerful and programmable range designed for use in industrial environments with high performance and a robust hard enclosure as standard. The QUARTZ router series have been designed for remote management, telemetry, condition monitoring, CCTV, ATMs, vending machine and other M2M applications.

The QUARTZ router series is an ideal wireless data transfer device for high speed data applications transferring large amounts of data. The series include fast transfer speeds using the UMTS / 3G and 4G LTE networks, reaching up to 21Mbps download and up to 5.76Mbps upload for 3G and 50Mbps upload and 100M download for 4G. In addition the QUARTZ router series is supplied with integrated digital I/O and support for industrial VPN. The industrial grade VPN features can be configured in the router which allows you to utilize virtual private network service through the 3G / 4G connection and directly access the industrial server environment.

Incorporating dual SIM functionality as standard, the QUARTZ router series allows you to setup a backup cellular network between two different SIM cards to ensure a permanent reliable connection regardless of individual network availability.

The QUARTZ router series has an optional GPS engine which provides position and location based service capability, this makes the QUARTZ router series ideal for fleet tracking and device access management. With dual port Ethernet capability, RJ45 serial RS232 linkCONNECT port and 3 digital I/O the QUARTZ router family offers a comprehensive array of features to empower your application.
### Specifications - Environmental

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature range</td>
<td>-30 to 70°C</td>
</tr>
<tr>
<td>Storage temperature range</td>
<td>-40 to 85°C</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>&lt;95% (non-condensing)</td>
</tr>
</tbody>
</table>

### Specifications - Mechanical

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>102 x 100 x 42mm (not including antenna)</td>
</tr>
<tr>
<td>Weight</td>
<td>300g</td>
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</tbody>
</table>

### Specifications - Wireless & Electrical

#### Networks
- **UMTS (Global)**
  - 800/850, 900, 1900, 2100MHz
- **LTE (European)**
  - 800, 900, 1800, 1900, 2100, 2600MHz

#### Interface
- **2 x 10/100Mb LAN (2 x LAN)**
- **1 x RS232 linkCONNECT port (RJ45)**
- **3 x I/O (Input/Output - user defined)**
- **1 x 3G/4G SMA female antenna interface**
- **2 x standard SIM/R-UIM interface**
- **1 x standard DC power interface**
- **Optional interfaces**
  - **1 x 10/100Mb LAN, 1 x WAN**
  - **1 x GPS SMA female antenna interface**
  - **1 x WiFi SMA female antenna interface**

#### Route Protocol
- **Static route**
- **RIPv2/OSPF dynamic route**

### Device Management
- Local or remote web browser (IE v8 or above)
- CLI/Telnet command
- M2M management platform (optional)
- SSH management (optional)

### Firewall and Filter
- IP packet/Domain/MAC filter
- NAT
- DMZ

### Power and Consumption
- **Idle:** 80mA @ +12VDC
- **Single module comms:** 320mA @ +12VDC
- **Dual module comms:** 600mA @ +12VDC
- **Power supply:** 7.5 - 26VDC

### LED Instruction
- **System**
- **Power**
- **WLAN**
- **WAN**
- **LAN (LAN1 - LAN2)**

### WiFi
- **Standard:** IEEE 802.11b/g/n
- **WEP, WPA and WPA2 encryption**
- **Standard 150Mbps, 300Mbps optional (with additional antenna)**

### VPN
- **IPSec**
- **PPTP/L2TP client**
- **GRE/IPIP**

### Approval
- **CE**
- **RoHS**
- **CCC**
## Ordering Information

<table>
<thead>
<tr>
<th>QUARTZ XX X X XXXX</th>
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<tbody>
<tr>
<td><strong>Range Identifier</strong></td>
</tr>
<tr>
<td>QUARTZ = Industrial Router Range</td>
</tr>
<tr>
<td><strong>Optional Antenna Interfaces</strong></td>
</tr>
<tr>
<td>G = GPS</td>
</tr>
<tr>
<td>W = WiFi</td>
</tr>
<tr>
<td><strong>Number of Ethernet Ports</strong></td>
</tr>
<tr>
<td>1 = 1 x Ethernet LAN Port, 1 x Ethernet WAN Port</td>
</tr>
<tr>
<td>2 = 2 x Ethernet LAN Ports</td>
</tr>
<tr>
<td><strong>Number of SIM Ports</strong></td>
</tr>
<tr>
<td>1 = 1 x SIM Port</td>
</tr>
<tr>
<td>2 = 2 x SIM Ports</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
</tr>
<tr>
<td>UMTS = Global 3G</td>
</tr>
<tr>
<td>LTE = European 4G</td>
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</tbody>
</table>

### Part Numbering Examples

- QUARTZ-12-UMTS = Global UMTS Industrial Router with 1 x Ethernet LAN, 1 x Ethernet WAN and, 2 x SIM Port Interfaces
- QUARTZ-GW22-LTE = European LTE Industrial Router with 2 x Ethernet LAN and 2 x SIM Port Interfaces, with GPS and WiFi

*If you do not require an additional antenna interface, leave this blank.*