3G/4G/4GX WiFi Router with SIM Card Slot (CM820Q-4)

DETAILS

→ 3G + 4G + 4GX Modem Router with 4 Ethernet Ports and WiFi

→ OpenWrt Fully Featured Linux OS

→ OpenVPN Server and Client

→ Band B28 700 MHz (Telstra 4GX and Optus 4G Plus)

→ LTE Advanced CAT4 with 150Mbps Download Speeds

→ Automatic failover between ADSL/NBN and 4G LTE

→ Supports Modbus TCP and Modbus RTU networks

→ Fully operational on telstra.corp APN

The Comset CM820Q-4 is an industrial grade 3G/4G/4GX LTE WiFi Modem Router built on the OpenWrt Linux operating system. With download speeds of up to 150 Mbps and upload speeds of up to 50 Mbps. The Comset CM820Q-4 is designed to suit Australian conditions and is one of the few routers on the Australian market that support band B28 (700 MHz).

SECURE CONNECTIVITY

The CM820Q-4 supports the latest LTE Advanced technology that performs fast and reliable data communication. It enables users to quickly create a secure and fast wireless network. It features a built-in WiFi N300 with speeds of up to 300 Mbps, one Ethernet WAN port for fixed internet connection and four Ethernet LAN ports.

Other features include VPN IPSEC, PPTP, L2TP and Open VPN to establish a secure connection over the 3G/4G network.

RUGGED DESIGN

The durable and rugged design makes the CM820Q-4 the router of choice for remote harsh environments. The compact design, easy integration and rich built-in features make it suitable for a wide range of industrial M2M applications, including industrial automation, building automation, smart metering, security, surveillance, transportation, health, mining and environmental monitoring.

HIGHLIGHTS

→ Built-in 4G industrial cellular module and SIM card slot

→ Auto-dial feature, keep alive link

→ NBN ready

→ IP Pass-through

→ Data limitation

→ Dual APN support

→ Two CM820 can backup each other if one unit fails

→ VPN Server/ Client (Open VPN, PPTP, L2TP, IPSec), SNMP

→ VLAN ID tagging

→ WiFi 802.11b/g/n 300Mbps

→ WiFi can be used as WiFi client

→ DTU (RS232 to Cellular Gateway)

→ SMS call to control router to be online, offline, reboot, status info, alarm, WiFi on, WiFi off

Features

BASIC FEATURES

→ Supports multi-band 4G, 4GX, DC-HSPA+, HSPA+, HSPA

→ SMA Standard antenna (4 magnetic base antennas included)

→ Optimised EMC design

→ Always on-line: On-line detection and automatic redial

→ Wide range power input (5-40 VDC)

→ Smart power management

→ Reliable, flexible, easy to use

→ User friendly set-up wizard for easy configuration and set-up

→ Network traffic real-time graphs

→ Network Diagnostic Tools (Ping, Traceroute and NSLookup)

→ RS-232 interface transparent communication (DTU modem function)

→ 4 Ethernet LAN RJ45 ports & 1 Ethernet WAN RJ45 port

→ WiFi 802.11b/g/n
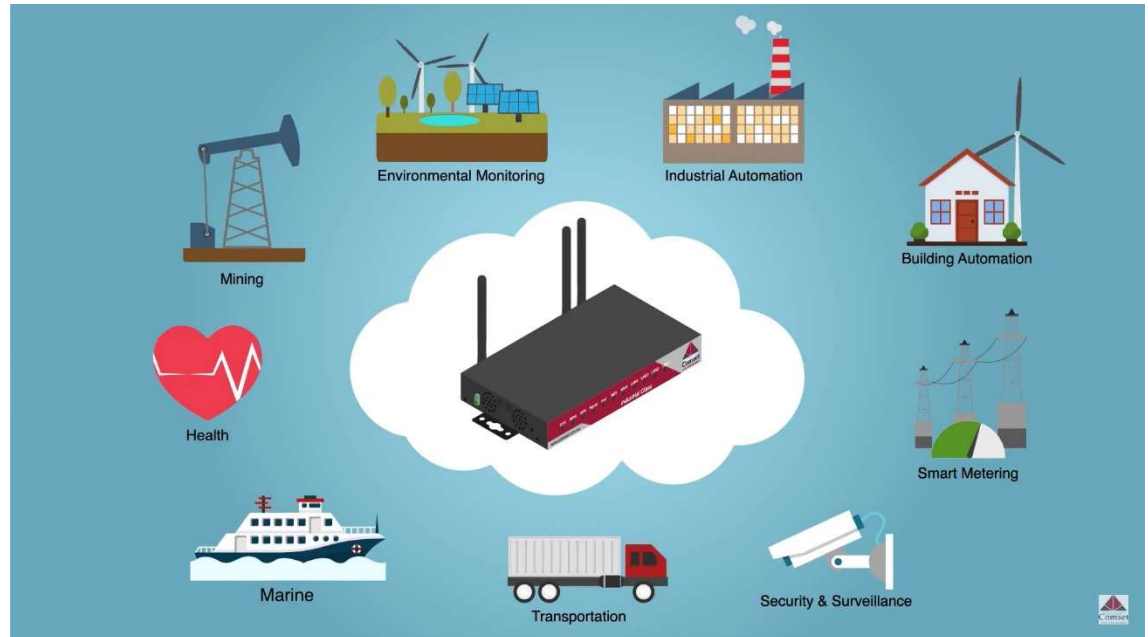
ADVANCED FEATURES

→ Real-time clock

→ VPN Server/Client (Open VPN, PPTP, L2TP, IPSec), and VPN pass-through

→ Built-in DHCP server

→ Supports DHCP Relay

→ Supports NAT and DMZ host

→ Supports DNS proxy and Dynamic DNS (DDNS)

→ Supports Static routing table

→ Supports packet filtering

→ Built-in multi-routing backup (Ethernet and dialup network)

→ System and network monitoring

→ WAN interface traffic statistics

→ Supports multiple protocol conversion

→ Transparent data transmission (DTU feature)

→ WEB/Telnet/console management interface

→ Supports radio network data envelope counting

→ Self-diagnostic and alarm output

→ Local/remote profiles backup and retrieve

→ Local/remote firmware upgrade via the web

→ Remote web management

→ Urgent event alarm via SMS

→ Firewall, packet filtering

→ Supports data center communication

→ Supports NTP

→ Supports LED status indication

→ Supports VLAN ID tagging

→ Supports LCP, ICMP check

Specifications

WIRELESS

Compatible Mobile Networks
- 4G/ 4GX
- UMTS WCDMA (HSUPA/HSDPA/HSPA/ HSPA+/ DC-HSPA+)

Cellular Frequency
- 4G LTE FDD including B1 (2100), B2 (1900), B3 (1800), B4 (1700), B5 (850), B7 (2600), B8 (900), B28 (700)
- 4G LTE TDD band B40 2300Mhz
- UMTS/HSPA/HSUPA/HSPA/HSPA+/DC-HSPA+ 850/900/1700/1900/2100 MHz

Bandwidth
- 4G LTE/ 4GX LTE-A
- Downlink 150Mbps - Uplink 50Mbps
- DC HSPA+
- Downlink 21/42Mbps - Uplink 5.76Mbps
- HSPA
- Downlink 14.4Mbps - Uplink 5.76Mbps
- HSUPA
- Downlink 7.2Mbps - Uplink 5.76Mbps
- HSDPA
- Downlink 7.2Mbps - Uplink 384Kbps

WiFi
- 802.11b/g/n; 300Mbps

SMS
- SMS call to control router to be online, offline, reboot, status info, alarm, WiFi on, WiFi off

VLAN
- ID tagging supported

Fail Over Redundancy (network backup feature)
- Auto-dial feature, keep alive link
- Cellular (2G/3G/4G), RJ45 WAN (xDSL, DHCP, Fixed IP), WiFi client

DTU
- DTU feature, serial RS232 to Cellular Gateway

VPN
- OpenVPN, IPSec, L2TP, PPTP
- Server and Client supported

Firmware upgrade
- Supported locally and remotely

Protocol support
- TCP, UDP, SMTP, POP, ICMP, FTP, PPP, PPPoE, DHCP, DDNS, DNS, SNMP, WPS, DMZ, Syslog (local and remote), NAT, xDSL, NTP, QoS, SNMP
- Dynamic routing (OSPF, OSPF6, RIP, RIPng, BGP)
- Support firmware update locally and remotely

Security
- Supports 64/128 bits WEP, 802.1x, WPA and WPA2
- Supports WDS
- TKIP, AES encryption
- Supports WPA1/2- 802.1x
- Supports EAP- TLS, TTLS, LEAP, PEAP
- Supports access with username and password
- Supports access control base WAN/LAN interface
- Supports access control base source IP address
- Defence DOS attack, supports SYN flooding, IP surfing, ping of death, fragile, teardrop, land
- Supports PAP and CHAP
- Supports IP filtering

Advanced Firewall Features
- Network Address Translation (NAT)
- Stateful Packet Inspection (SPI)
- VPN Pass-through

Media Access Control
- CSMA/CA with ACK

Certifications
- Radius Client

INTERFACES

LAN
- 4 x 10/100M LAN port (RJ45 interface)
- 1 x 10/100M LAN/WAN port (RJ45 interface)

Antennas
- 2 x antennas for WiFi (detachable SMA interface x 2)
- 2 x antennas for Cellular (detachable SMA interface x 2, cellular supports diversity receiving MIMO)

LED
- SYS*1   •   CELL*1   •   LAN*4
- VPN*1   •   WAN*1   •   WiFi*1
- SIGNAL*1

Serial port
- RS232 DB9 port

AT command
- Supported

UIM/SIM Card Slot
- Supports 1.8/3 V UIM/SIM cards
- One sim card slot standard mini size

power source
- Three types of power input
  - 2.5 mm DC jack * 1
  - Terminal block * 1
  - PoE 12VDC or 24VDC

POWER

Power supply
- DC 5 V -40 V, typical 12 V 1.5 A
- 12 V car use supported

Power consumption
- Current
  - Idle 122 mA@12 VDC
  - Max 208 mA@12 VDC
  - Average 167 mA@12VDC
- Power
  - Idle 1.2 W@12 VDC
  - Max 2.5 W@12 VDC
  - Average 2 W@12 VDC

SOFTWARE

Device Management
- WEB interface (Internet Explorer v6 or later, Mozilla Firefox v1.5 or later, Chrome, Opera, Safari or other Java-enabled browsers)

Minimum System Requirements
- Mobile Internet Access Subscription and Internet PC Adapter
- Computer with:
  - Windows 7, 8, 10, Vista, Windows XP SP2, Windows 2000 SP4 or Mac OS X(v10.4/v10.3), Linux
  - Internet Explorer 6 or Mozilla Firefox
  - CD-ROM Drive
  - Network Interface Card

PHYSICAL

Operating Temperature
- Storage: -40°C to 85°C
- Working: -30°C to 75°C

Humidity
- 95% Maximum (non-condensing)

Dimensions
- 168 mm x 104 mm x 25 mm

Weight
- 455 g (not including antennas)
- 550 g (including antennas)
- 850 g (including all accessories)

OTHER

Warranty
- 1 Year

Regulatory Compliance
- RCM, CE, RoHS

Package Contents
- CM820 Router
- CAT5 Ethernet Cable
- Serial Cable
- Power Adapter
- 4 x Antennas