

## 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

# 3G/4G/4GX WiFi Router with SIM Card Slot (CM820V-4)

The Comset CM820V-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 CM820V-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 CM820V-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 N150 with speeds of up to 150 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 CM820V-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.



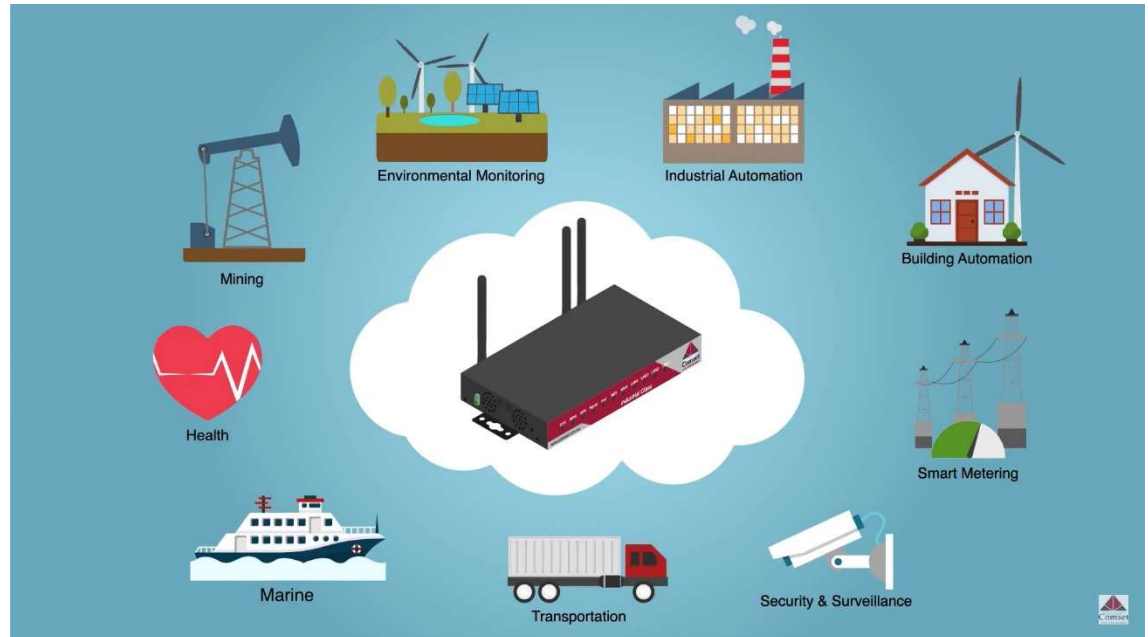
## HIGHLIGHTS

- 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 150Mbps
- 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, UMTS, GSM, GPRS, EDGE
- SMA Standard antenna (3 magnetic base antennas included)
- Optimized 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+)
- GSM EDGE
- GSM GPRS

### 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+ 850/900/1900/2100 MHz
- Quad-band EGSM 850/900/1800/1900 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
- WCDMA/UMTS
- Downlink 384Kbps - Uplink 384Kbps
- EDGE
- Downlink 236Kbps - Uplink 118Kbps
- GPRS
- Downlink 85.6Kbps - Uplink 42.8Kbps

### WiFi

- 802.11b/g/n; 150Mbps

### 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 1, internal x 1)
- 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

### DC Jack

- Two types of power input - 2.5 mm DC jack \* 1
- Terminal block \* 1

## POWER

### Power supply

- DC 5 V -40 V, typical DC 9 V 1 A or 12 V 1 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, - Internet Explorer 6 or later
  - Vista, Windows XP - Mozilla Firefox
  - SP2, Windows 2000 - CD-ROM Drive
  - SP4 or Mac OS - Network Interface Card
  - X(v10.4/v10.3), Linux

## 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      • Power Adapter
- CAT5 Ethernet Cable      • 3 x Antennas
- Serial Cable