![Comset logo - your m2m specialist]

DETAILS

→ 3G + 4G + 4GX Modem Router (LTE CAT-1)

→ OpenWrt Fully Featured Linux OS

→ OpenVPN Server and Client

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

→ Ability to select and lock in frequency band

→ LTE CAT1 with 10Mbps Download Speeds

→ MIMO LTE Technology

→ Automatic failover between ADSL/NBN and 4G LTE

→ Supports Modbus TCP and Modbus RTU networks

→ Fully operational on telstra.corp APN

LTE CAT-1 WiFi Router with SIM Card Slot (CM685V-1)

The Comset CM685V-1 is a CAT-1 industrial grade 3G/4G/4GX WiFi Modem Router, based on the latest OpenWrt platform. This low-cost and low-power CAT-1 router is an ideal replacement to 3G devices. It allows a smooth migration from 3G to 4G LTE, with the benefits of a much better network coverage and a lower latency. With download speeds of up to 10Mbps and upload speeds of up to 5Mbps, it is suitable for low throughput applications where devices are idle most of the time. The Comset CM685V-1 is designed to suit Australian conditions and is one of the few routers on the Australian market that support band B28 (700MHz).

SECURE CONNECTIVITY

The Comset CM685V-1 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 one Ethernet LAN port. It also includes a GPIO with four digital output ports to control electrical devices via SMS, such as turning on a pump or opening a gate. These four DIO ports can also be used as digital input ports that can send an email or an SMS when triggered for alarm notification.

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 CM685V-1 the router of choice for Australia's harshest and most remote environments. The compact design, easy integration and advanced 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.

Features and Benefits

BASIC FEATURES

→ Supports multi-band 4G, 4GX, DC-HSPA+, HSPA+, HSPA, UMTS, GSM, GPRS, EDGE

→ SMA Standard antennas (Four magnetic base antennas included)

→ Optimized EMC design

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

→ Wide range power input (5-40VDC)

→ 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)

→ 1 x Ethernet LAN RJ45 port & 1 x Ethernet WAN RJ45 port

→ WiFi 802.11b/g/n N300
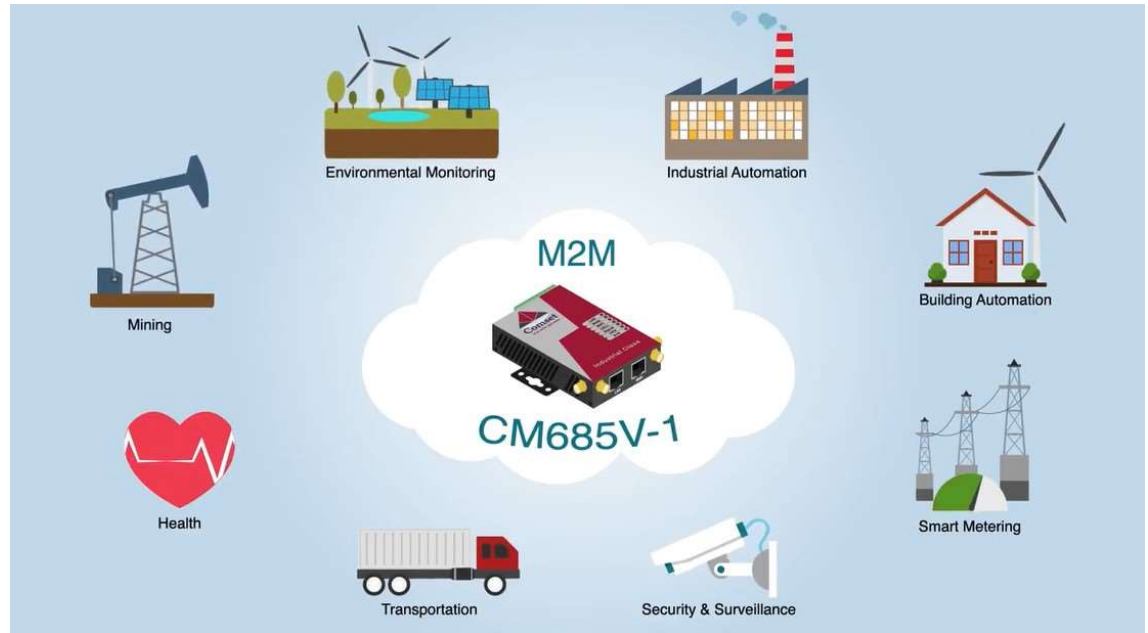
ENHANCED FEATURES

→ Real-time clock

→ VPN Server/Client (Open VPN, PPP, 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 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/ 2100Mhz
- Quad-band EGSM 850/ 900/ 1800/ 1900MHz

Bandwidth
- 4G LTE FDD/ 4GX LTE-A
- Downlink 10Mbps - Uplink 5Mbps
- 4G LTE TDD
- Downlink 8.96Mbps - Uplink 3.1Mbps
- 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 384 Kbps
- WCDMA/UMTS
- Downlink 384 Kbps - Uplink 384 Kbps
- EDGE
- Downlink 236 Kbps - Uplink 118 Kbps
- GPRS
- Downlink 85.6 Kbps - Uplink 42.8 Kbps

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
- 1 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*1
- VPN*1   • WAN*1   • WiFi*1
- SIGNAL*1

Serial port
- RS232 built-in terminal block interface

AT command
- Supported

UIM/SIM Card Slot
- Supports 1.8/3V UIM/SIM cards, one sim card slot

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

POWER

Power supply
- DC5V-40V, typical DC9V 1A or 12V 1A
- 12V car use supported

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

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
- Working -40°C to 85°C

Humidity
- 95% Maximum (non-condensing)

Dimensions
- With case 100mm x 60mm x 21mm

Weight
- 220g (not including antennas)
- 330g (including antennas)
- 650g (including all accessories)

OTHER

Warranty
- 1 Year

Regulatory Compliance
- RCM, CE, RoHS
- Modem is approved by Telstra

Package Contents
- CM685 Router
- CAT5 Ethernet Cable
- Serial Cable
- Power Adapter
- 4 x Antennas (2 x Cell, 2 x WiFi)