

CM685P/ CM685P-W 3G WiFi Router Datasheet



>>| Product Introduction

The Comset CM685P-W Router is a new generation 3G HSPA+ WiFi Modem Router with download speeds of up to 21 Mbps. The CM685P-W is designed to suit Australian conditions. It performs fast and reliable data communication for a wide range of Machine-to-Machine (M2M) applications.

The CM685P-W 3G HSPA+ WiFi Router enables users to quickly create a secure wireless network. It provides access to the Internet using the 3G cellular network.

The durable and rugged design makes the CM685P-W the router of choice for remote harsh environments. The compact design, easy integration and rich built-in features make the Comset CM685P-W suitable for a wide range of industrial M2M applications, including industrial automation, building automation, smart metering, security, surveillance, health, mining and environmental monitoring.

>>| Hot Spot

- Built-in 3G HSPA+ industrial cellular module and SIM card slot
- Auto-dial feature, keep alive link
- Built-in watch dog
- 1 x WAN RJ45 port + 1 x LAN RJ45 port
- 3G failover for fixed line broadband connections
- Two CM685 can backup each other if one unit fails
- Supports two LAN IP addresses
- Rapid service deployment applications
- VPN (PPTP,L2TP, IPSec, GRE, Tunnel), SNMP
- WiFi 802.11b/g/n 150Mbps (CM685P-W model)
- WiFi can be used as WiFi client
- GPS (optional CM685P-G model)

Comset

133 Rowell Av, Camberwell Vic 3124, Australia

Tel: +61 3 9001 9720 Fax: +61 3 9078 0055 www.comset.com.au

- DTU (RS232 to Cellular Gateway)
- Two digital I/O's (optional)
- SMS call to control router to be online, offline, reboot, status info, alarm

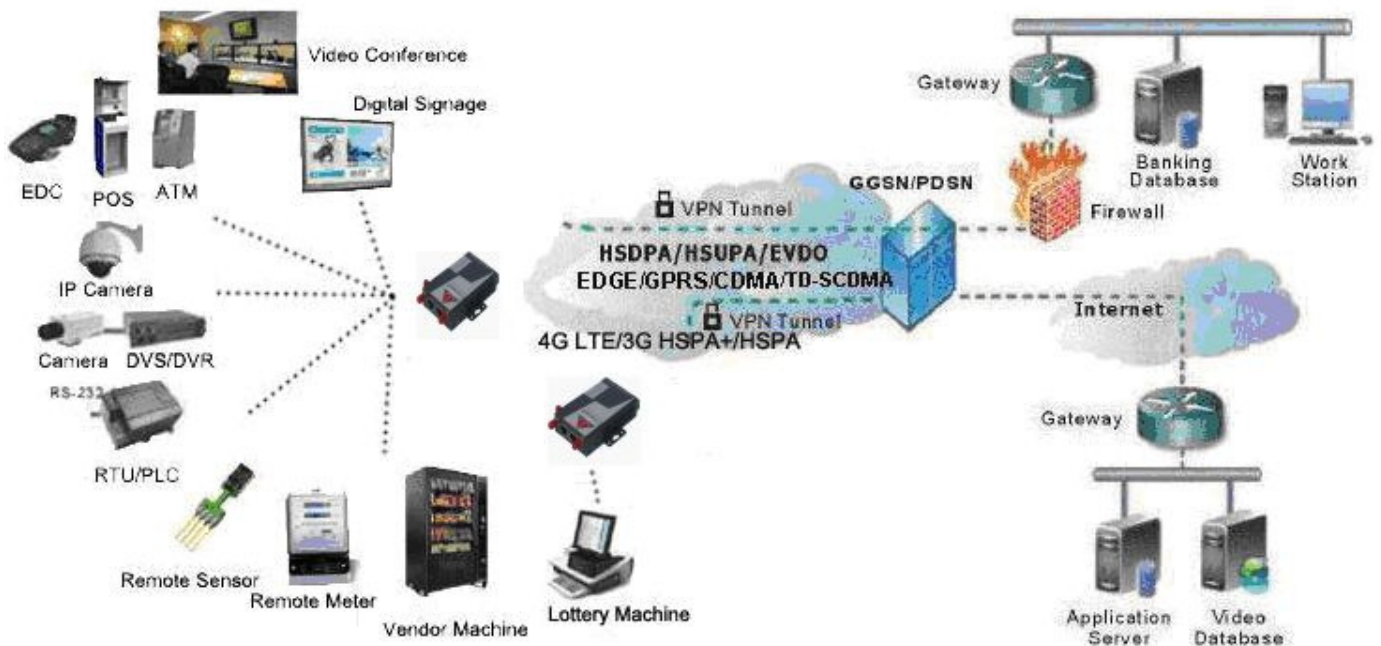
>>| Brief

Broadband M2M Communications

The product line provides a cost-effective broadband Machine-to-Machine (M2M) solution and supports the following radio access technologies: 3G HSDPA, HSUPA HSPA+ UMTS, EDGE, GPRS GSM.

The compact and rugged structure makes it a suitable product for deployments in M2M applications such as CCTV, ATM, telemetry, SCADA, retail (POS), digital signage, and intelligent traffic systems.

>>| Typical Topology



>>| Industrial Application

- Remote Data Monitor and Control

- CCTV, security surveillance
- Water, gas and oil flow metering and schedule
- AMR (Automatic Meter Reading)
- Power station monitoring and control
- Remote POS (Point of Sale) terminals, ATM
- Traffic signals monitor and control, Traffic info guidance
- Oil field, weather forecast, environmental protection, street lamp monitoring and control
- Early Warning of Mountain Torrent
- Fleet management
- Power distribution network supervision
- Central heating system supervision
- Weather station data transmission
- Hydrologic data acquisition
- Vending machine
- Telemetry, SCADA
- Vehicle logistics and diagnostics controlling
- Parking meter and Taxi Monitor
- Telecom equipment supervision (Mobile base station, microwave or optical relay station)

>>| Basic Features

- Supports multi-band DC-HSPA+, HSPA+, HSPA, UMTS, GSM, GPRS, EDGE
- SMA Standard antenna
- Optimized EMC design
- Always on line: On-line detection, automatic redial and keep-alive
- Wide range power input
- Smart power management
- Reliable, flexible, easy to use and management
- RS-232 interface transparent communication (DTU modem function)
- 1 LAN RJ45 port for Ethernet interface & 1 WAN RJ45 port
- WiFi 802.11b/g/n (CM685P-W model)

>>| Enhanced Features

- Real-time clock
- VPN (PPTP, L2TP, IPSec, GRE, Tunnel), and VPN pass-through
- Built-in DHCP server
- Supports NAT and DMZ host
- Supports DNS proxy and Dynamic DNS (DDNS)
- Supports Static routing table
- Supports packet filter
- Built-in multi-routing backup (Ethernet and dialup network)

- System and network monitoring
- WAN interface traffic statistics
- Support multiple protocol conversion
- Transparent data transmission (DTU feature)
- WEB/Telnet/console management interface
- Support radio network data envelope counting
- Self-diagnostic and alarm output
- Local/remote profiles backup and retrieve
- Local/remote firmware upgrade via web
- Remote web management
- Urgent event alarm via SMS
- Firewall, packet filtering
- Support data center communication
- Support NTP
- Support LED status indication
- Support VLAN
- Support LCP, ICMP check

>>| Specification

Wireless	
Compatible Mobile Networks	<ul style="list-style-type: none"> • UMTS WCDMA (HSUPA/HSDPA/HSPA/HSPA+) • GSM EDGE • GSM GPRS
Cellular Frequency	<ul style="list-style-type: none"> • UMTS/HSPA/HSUPA/HSPA/HSPA+ (WCDMA/FDD) 850/900/1900/2100Mhz • Quad-band EGSM 850/900/1800/1900
Bandwidth	<ul style="list-style-type: none"> • HSPA+ Downlink 21/42Mbps Uplink 5.76Mbps • HSPA Downlink 14.4Mbps

	<ul style="list-style-type: none"> • HSPA Uplink 5.76Mbps Downlink 7.2Mbps Uplink 5.76Mbps • HSDPA Downlink 7.2 Mbps Uplink 384k bps • WCDMA/UMTS Downlink/Uplink 384 kbps • EDGE Downlink 236,8 kbps Uplink 118 kbps • GPRS Downlink 85.6 kbps Uplink 42.8 kbps
Wi-Fi	<ul style="list-style-type: none"> • 802.11b/g/n; 150Mbps (CM685P-W model)
SMS	SMS call to control router to be online, offline, reboot, status info, alarm
GPS	<ul style="list-style-type: none"> • Optional (CM685P-G model)
VLAN	Supports two LAN IP addresses
Fail Over Redundancy (network Backup feature)	<ul style="list-style-type: none"> • Auto-dial feature, keep alive link • Built-in watch dog • Cellular (2G/3G), RJ45 WAN (xDSL, DHCP, Fixed IP), WiFi client (CM685P-W model)
DTU	With DTU feature, serial RS232 to Cellular Gateway
VPN	VPN, IPSec, L2TP, PPTP, GRE (IPSec can be server and client, PPTP L2TP, GRE can be client)
Firmware upgrade	Supported locally and remotely
Protocol	
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, RIP, support firmware update locally or remotely
Security	

Security	<ul style="list-style-type: none"> • Supports 64/128 bits WEP, 802.1x, WPA, and WPA2 • Supports WDS • Supports WPA1/2 – PSK • TKIP, AES encryption • Supports WPA1/2 – 802.1x • Supports EAP – TLS, TTLS, LEAP, PEAP • Supports access with user name & password. • Supports access control base WAN/LAN interface • Supports access control base source IP address • Defense DOS attack, supports SYN flooding, IP surfing, ping of Death, fragile, teardrop, land etc. • Supports PAP & CHAP • Supports IP filtering
Advanced Firewall Features	<ul style="list-style-type: none"> • Network Address Translation (NAT) • Stateful Packet Inspection (SPI) • VPN Pass-through
Media Access Control	CSMA/CA with ACK
Certifications	REDIUS Client
Interface	
LAN	<p>1 x 10/100M LAN port (RJ45 interface) 1 x 10/100M WAN port (RJ45 interface)</p>
Antenna	<p>2 x antennas for Wi-Fi (detachable SMA interface x 1, Internal x 1, CM685P-W model) Or, 3 x antennas for Cellular and GPS (detachable 50 Ω SMA female interface, CM685P-G model), Cellular support diversity receiving (MIMO)</p>
Led	<ul style="list-style-type: none"> • SYS*1 • VPN*1 • Signal*1 • Cell*1 • WAN*1 • LAN*1 • WiFi*1
Serial port	RS232 built-in terminal block interface
IO port	2 (optional)

At command	Supported
UIM/SIM Card Slot	Supports 1.8V/3V UIM/SIM cards, one sim card slot
DC Jack	Two types of input jack for DC 2.5mm DC jack*1 Terminal Block*1
Power	
Power supply	DC5V-40V, typical DC9V1A or 12V 1A, 12V car use
Power consumption	<p>Current</p> <ul style="list-style-type: none"> Idle: 22mA@12VDC Max: 208mA@12VDC Average:125mA@12VDC <p>Power</p> <ul style="list-style-type: none"> Idle: 1.2w@12VDC Max: 2.5w@12VDC Average:2w@12VDC
Software	
Device Management	<ul style="list-style-type: none"> WEB interface (Internet Explorer v6 or Later; Mozilla Firefox v1.5 or Later, Chrome, Opera, Safari or other Java-enabled Browsers)
Minimum System Requirements	<p>Mobile Internet Access Subscription and Internet PC Adapter Computer with:</p> <ul style="list-style-type: none"> Windows 7, 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	<ul style="list-style-type: none"> Storage: -40 °C to 85 °C Working: -30 °C to 75 °C
Humidity	95% Maximum (Non-condensing)
Dimensions	PCBA: 96mm x 56mm x 14mm With case: 100mm x 60mm x 21mm

Weight	220g (not including antennas) 330g (including antennas) 650g (including all accessories)
Others	
Warranty	1 Year
Regulatory Compliance	RCM *, FCC, CE, RoHS * Effective 1 st March 2013, the C-Tick and A-Tick marks are consolidated into a single compliance mark, RCM. For more information, visit the ACMA website.
Package Contents	<ul style="list-style-type: none"> • The CM685 Series Router • CAT5 Ethernet Cable • Power Adapter • Antenna • Other depends on option features