

NEXIP-GSM/SIM Modelo H685



NEXIP-GSM Series Cellular Router Datasheet



Product Introduction

The NEXIP-GSM 685 series Cellular Router is newly published 2G/3G/4G router with mini smart size 87mm*50mm*23mm, specially designed for industrial application. Durable, flexible, and user-friendly feature is widely used for different kinds of high data transmission applications. With such size, customers can put it inside their machines easily.

Designed for establish a cellular broad band Internet connection. The NEXIP-GSM 685 series Cellular Router enables users to quickly create a secure wireless network and provide access to the Internet using a cellular network. By connect to cellular network; an Internet connection can be accessed and shared virtually anywhere within a wireless broadband network.

Hot Spot

Main:

Built-in 2G/3G/4G industrial cellular module, insert SIM/UIM card to work directly;
Built-in one sim card slot;
RJ45 LAN *1;

Option feature:

WiFi;
Serial to cellular gateway (RS232 or RS485 port);
Broadband M2M communications
SIM failover/standby APN
2G/3G/4G failover for fixed line broadband connections
Rapid service deployment applications
WiFi optional (802.11b/g/n)
RS232/RS485/TTL to Cellular Gateway
USB port for usb modem use
External antenna SMA socket
VPN (PPTP, IPSec supported)

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- Support At command optional
- Support multi-LAN IP address (VLAN feature)
- Always be online. Dynamic fresh network link to protect "fake link".
- Auto-dial feature, keep alive link
- Built-in watch dog

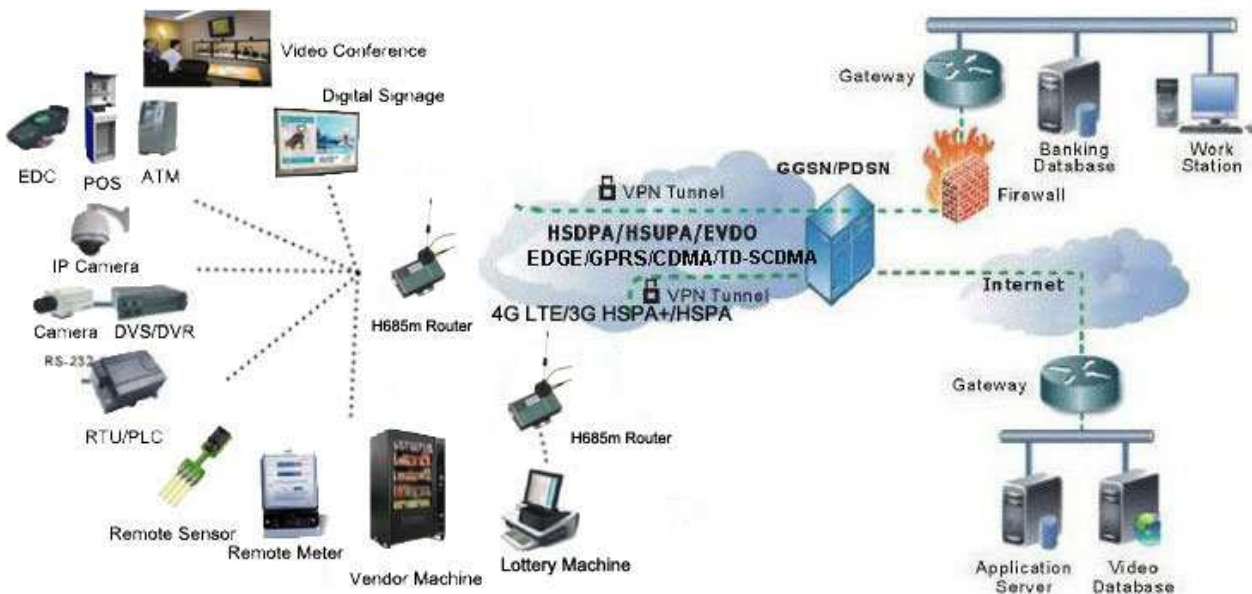
Brief

Broadband M2M Communications

The product line provides a cost-effective broadband Machine-to-Machine (M2M) solution and supports the following radio access technologies: HSDPA, HSUPA UMTS, EDGE, GPRS, GSM, HSPA, HSPA+, 4G LTE, CDMA2000 EVDO, TD-SCDMA networks

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



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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 GSM, GPRS, EDGE, HSDPA, HSUPA, HSPA, HSPA+, 4G LTE network, and CDMA1x, CDMA2000 EVDO networks, and TD-SCDMA networks
- SMA Standard antenna
- Optimized EMC design
- Always on line: On-line detection and automatic redial and keep-alive while the line dropped
- Wide range power input (up 50V)
- Smart power management
- Reliable, flexible, easy to use and management
- RS-232/485/TTL interface transparent communication (DTU modem function) optional
- 1 LAN RJ45 ports for Ethernet interface
- WiFi 802.11b/g/n optional

Enhanced Features

- Real-time clock
- VPN (PPTP, IPSec)
- Built-in DHCP server
- Supports NAT and DMZ host
- Supports DNS proxy and Dynamic DNS (DDNS)
- Supports Static routing table

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- 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) optional
- 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 optional
- Firewall, packet filtering
- Support data center communication
- Support NTP
- Support LED status indication
- Support VLAN
- Support LCP, ICMP check

Enhanced Features

- Multi-level link detection and redial, keep the traffic channel alive
 1. PPP detection
 2. Local and remote ICMP detection
 3. Heart-beat detection
 4. WAN interface traffic detection
- On/off line control
 1. Auto or manual dial
 2. Timing on/off line control
- Flexible data communication
 1. Supports layer 2 and 3 data communication
 2. Supports RS-232/485/TTL transparent communication optional UDP/IP or TCP/IP Client/Server
 3. Supports both RS-232 and Ethernet communication
- Configuration and remote management
 1. Multi-language web based configuration interface (local or remote)
 2. Supports Telnet local or remote operation
- Virtual online technology (VKL, only CDMA)
 1. Release wireless network channel while there is no user's data traffic
 2. Keep the router online logically when the wireless channel released.
 3. The router will immediately restore to the connected status without any redial or authentication if there is any data transmitted.

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Specification

Wireless	
Compatible Mobile Networks	<ul style="list-style-type: none"> • UMTS WCDMA (HSDPA/HSUPA/HSPA/HSPA+) • GSM EDGE • GSM GPRS • CDMA1x • CDMA EVDO Rev 0 and Rev A • 4G LTE
Cellular Frequency	<ul style="list-style-type: none"> • UMTS/HSPA/HSUPA/HSPA/HSPA+ (WCDMA/FDD) 850/1900/2100 MHz or 850/900/1900/2100Mhz optional • Quad-band EGSM 850/900/1800/1900 • CDMA1x/EVDO: 800/1900Mhz or 450Mhz optional • 4G LTE <p>700(B17)/AWS or 700(B13)MHz or 800/900/1800/2100/2600MHz</p>
Bandwidth	<ul style="list-style-type: none"> • HSUPA/HSPA/HSPA+ Downlink 7.2Mbps or 14.4 Mbps or 21Mbps/42Mbps optional Uplink 5.7Mbps • 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 • CDMA1x Downlink/Uplink 153.6kbps • CDMA EVDO Rev A: 3.1Mbps downlink, 2.4Mbps uplink Rev O: 2.4Mbps downlink, 153.6kbps uplink • 4G LTE Downlink: 100Mbps, Uplink:50Mbps
DTU (Optional)	With DTU feature (Serial to cellular gateway feature), RS232 or RS485 for option
At command	supported

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VPN	<p>Support IPSec, PPTP</p> <p>Firewall Throughput Speed: 100Mbps</p> <p>VPN encryption speed: 5M~200M bps</p> <p>VPN channel: 100~5000</p> <p>key switch arithmetic: diffie—hellman</p> <p>HASH arithmetic: SHA-1 MD5</p> <p>Authentication mode: Preshare key</p> <p>VPN network type: support network-to-network Intranet</p> <p>VPN machine access: Remote Access VPN</p>
Wi-Fi	Optional 802.11b/g/n
VLAN	Support multi-LAN IP address, support more than two IP address
Protocol	
Protocol support	TCP, UDP, SMTP, POP, ICMP, FTP, PPP, DHCP, DDNS, DNS,, NAT, DMZ, Qos, ALG,VLAN
Security	
Security	<p>support 64/128 bits WEP, 802.1x, WPA, and WPA2</p> <p>support WDS</p> <p>support WPA1/2 – PSK</p> <p>support WPA1/2 – 802.1x</p> <p>support EAP – TLS, TTLS, LEAP, PEAP</p> <p>support access with user name & password.</p> <p>support access control base WAN/LAN interface</p> <p>support access control base source IP address</p> <p>defense DOS attack, support SYN flooding, IP surfing, ping of Death, fragile, teardrop, land etc.</p> <p>support PAP & CHAP</p> <p>support IP filtering</p>
Firewall Features	<p>Network Address Translation (NAT)</p> <p>Stateful Packet Inspection (SPI)</p> <p>VPN Pass-through</p>
Media Access Control	CSMA/CA with ACK
Certifications	RADIUS Client
Interface	
LAN	1X 10/100M LAN port (RJ45 interface)

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Antenna	1X antenna for Wi-Fi (detachable, SMA interface) for WiFi version 1X antenna for cellular (detachable, 50Ω SMA female interface)
USB	1X USB 2.0 Host for modem use
Led	<ul style="list-style-type: none"> • SYS • Cell • Link • LAN • VPN • WiFi
Serial port (optional)	rate: 300~115200bps
Configuration interface	Web/Telnet
UIM/SIM Card Slot	Support 1.8V/3V UIM/SIM cards, one sim card slot
Power	
Power supply	DC5V-27V (50V optional) , typical DC9V1A
Power consumption	Idle: 250mA@9VDC Average: 300mA@9VDC Max:400mA@9VDC
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) • SYSLOG
Physical	
Operating Temperature	<ul style="list-style-type: none"> • Storage: 72°F to 153°F (-40°C to 90°C) • Working: 36°F to 126°F (-30°C to 80°C)
Humidity	95% Maximum (Non-condensing)
Dimensions	Item not including installation hole (L x B x H): 87mm*50mm*23mm Item including installation hole (L x B x H): 102m*70mm*23mm PCBA size: 84mm*48mm*20mm
Weight	Item: 160g

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