

GPRS • EDGE • HSPA



TYPICAL APPLICATION

Data collection and system supervision

- Extra-high voltage equipment monitoring
- Running water, gas pipe line supervision
- Centralized heating system supervision
- Environment protection data collection
- Flood control data collection
- Alert system supervision
- Weather station data collection
- Power Grid
- Oilfield
- Light Supervision
- Solar PV Power Solutions

Financial and department store

- Connection of ATM machines to central site
- POS
- Vending machine
- Bank office supervision

Security

- Traffic control
- Video Surveillance Solutions

Other

- Remote Office Solution
- Remote Access Solution



GWR-I INDUSTRIAL CELLULAR ROUTER SERIES

GWR-I router series represents a group of industrial graded routers specially designed for expansion of existing industrial networks, remote telemetry and data acquisition in harsh environments. Low transmission delay and very high data rates offered by existing cellular networks completely eliminate the need for very complex installation of wired infrastructure in industrial environments. Easy to install, reliable and high performance router models from GWR-I series introduce a completely new dimension into industrial networking area.

The complete series inherited the basic concept of GWR cellular router series – RELIABILITY COMES FIRST. Therefore all router models have dual SIM card support. What truly makes this series special is powerful Event/Action handling system. This system provides absolute control over all functionalities and parameters of each router model from GWR-I series. Select or define custom EVENT and define the appropriate ACTION in few easy steps. Doesn't matter if user wants to receive the Email or SMS when the router is down or activate already defined ACTION once the signal on digital inputs is changed, thanks to this powerful and flexible system it can be achieved. Intuitive and easy to use web interface perfectly fits into the whole concept.

So many useful features make GWR routers a perfect solution for wide variety of applications:

- Support for most common SCADA protocols
- Support for M-bus, Wireless M-bus, KNX, Zigbee
- Remote Management and Monitoring System
- Support for DUAL SIM
- Wide temperature range
- DIN Rail mounting kit
- Robust metal housing

Modbus ASCII	Modbus RTU	Modbus TCP
LONWorks	CANopen	EtherCAT
MPI	PROFIBUS	PROFINET

Technical specifications

Interfaces and connectors

- 1x embedded interface LTE/HSPA+/HSPA/UMTS/EDGE/GPRS (depending on the router model)
- Dual SIM slots
- SMA female connectors (50 Ω) for external antenna (one or two, depending on the router model)
- 1x Ethernet interface 10/100 Base-T (LAN), 1.5KV isolation
- 1 x RS-232C / RS485 / RS422 – RJ45 (+/- 15KV ESD protection)
- 1 x RS-232C / RS485 / RS422 – DB9 (+/- 15KV ESD protection)
- 1 x digital input (0/48VDC; 1.5KV isolation)
- 1 x digital output (700mA@60VDC; 1.5KV isolation)
- 1x USB Host 2.0 interface

RF characteristics

RF characteristics depend on the GWR-I router model. Below is a list of available router models from GWR-I series and corresponding RF characteristics:

GWR-I202 model – GPRS

GPRS Tri-band: 900/1800/1900
 GPRS multi-slot class 10, mobile station class B
 GPRS DL: 85.6Kbps, UL: 42.8Kbps

GWR-I252 model – GPRS/EDGE

GSM/GPRS/EDGE Quad band: GSM 850/900/1800/1900 MHz
 GPRS/EDGE multi-slot class 12, mobile station class B
 EDGE DL: 236.8Kbps, UL: 236.8Kbps
 GPRS DL: 85.6Kbps, UL: 85.6Kbps

GWR-I352 model – GPRS/EDGE/UMTS/HSPA

UMTS/HSDPA/HSUPA Quad band: 850/900/1900/2100 MHz
 GSM/GPRS/EDGE Quad band: 850/900/1800/1900 MHz
 GPRS/EDGE multi-slot class 12, mobile station class B
 HSDPA DL: 7.2Mbps, HSUPA UL: 5.76Mbps
 UMTS DL: 384Kbps, UL: 384Kbps
 EDGE DL: 236.8Kbps, UL: 236.8Kbps
 GPRS DL: 85.6Kbps, UL: 85.6Kbps

Status LED

- Ethernet activity/network traffic
- Power on
- GSM link activity
- Signal quality
- Reset

Power requirements

9 - 48VDC

Environmental

- Operating temperature: -25° C to 70° C (-13° F to 158° F)
- Storage temperature: -40° C to +75° C (-40° F to +167° F)
- Relative humidity: 5% to 95% (non-condensing)

Housing

- Robust metal housing
- DIN rail mounting kit

Dimensions and weight

- Width: 50mm
- Length: 104mm
- Height: 135mm
- Weight: 500g

Protocols and Features

Network

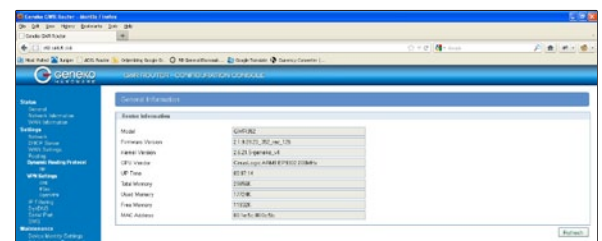
- DHCP server
- RIP
- Port forwarding
- DMZ support
- SNMPv1,2c
- DynDNS
- NTP
- Firewall (NAT, PAT, IP filtering)
- Serial-to-IP
- ModbusRTU-to-ModbusTCP
- Support for various SCADA protocols, M-bus, Wireless M-bus, KNX, Zigbee... (depending on the actual model)

VPN

- GRE
- GRE Keepalive
- IPsec pass-through
- IPsec
- Data integrity
 - HMAC-MD5, SHA-1
 - Authentication and key management
- IKE, manual keys
- IKE features
 - Perfect Forward Secrecy
 - Auth-Method PSK
 - Identify IP address
 - DPD for constant connection
 - Automatic NAT-T behind NAT
 - Initiator and responder
- IPsec tunnel failover
- OpenVPN

Management

- Web application (HTTP based)
- Command Line Interface on serial console, telnet and SSH
- GWR connection wizard
- Event/Action handling system
- Remote management and monitoring software
- Detailed system log
- Default reset
- Firmware upload
- Partial or full configuration Export/Import



RG2i Groupe 2AR
 Interfaces pour l'informatique industrielle

Produits et Solutions en Communication Industrielle
 Acquisition de Données et Transport de l'Information

5 Rue Edmond Charpentier - 42000 Saint Etienne - France
 Tél: +33 (0) 4 77 92 03 56 - Fax: +33 (0) 4 77 92 03 57
 Internet: <http://www.rg2i.fr> Email: info@rg2i.fr

