GPRS • EDGE • HSPA

GWR Cellular Router Series

Skalable Router Series for M2M Applications

GWR routers represent a robust solution designed to provide remote connectivity across cellular networks. Low transmission delay and very high data rates offered by existing cellular networks completely elimina- te the need for expensive wired infrastructure. GWR series brings scala- bility of even most demanding corporate networks to the highest possib- le level.

Installing a reliable, high performance backup solution for existing land lines or satellite networks is now a simple task thanks to modern cellular networks. Therefore, no matter if the goal is to provide primary internet access or backup solution for already existing network GWR router series represents a top rated solution.

A highly reliable M2M SIM-card with private APN and fixed IP address can improve security and quality of a network connection significantly.

Features:

- Dual SIM card support increases the reliability of the router and provi- des a solution for those applications where failure of one mobile net- work must not result in system downtime. Automatic failover feature will detect the failure of primary connection and automatically switch to alternative connection.

- The whole set of advanced WAN settings allow a user to specify desi- red parameters in order to meet the requirements of specific cellular network. GWR routers proved themselves to be reliable and high per- formance devices in so many countries around the world.

- VPN (GRE, IPsec and OpenVPN) tunnel support provides powerful op- tions for network expansion and secure data transfer over the cellular network.

- With Serial-to-IP feature it is possible to connect, control and perform data acquisition from almost any device with serial RS232 port. In ad- dition to this feature, GWR router series implements ModbusRTU-to- ModbusTCP functionality designed to support expansion of Modbus SCADA networks over the cellular networks.

- Easy to use web interface, extended CLI (Command Line Interface), detailed log, SMS control feature, partial and full configuration Export/ Import. Remote management and monitoring software provide wide range of management functionalities. All those features and tools em- power a user with full control over GWR routers.

M2M SIM card with private APN and fixed IP address on request

TYPICAL APPLICATIONS

- Energy, Heat, Water, Gas and Oil Industries

- Remote Management and Monitoring (various indust- ries)

- Financial services and retail (ATM and all types of Vending machines)

- Advertisement systems (Digital Signage)

- Transportation, Meteorolo- gy and Alarm Systems

- Telecommunications and Internet Access

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

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
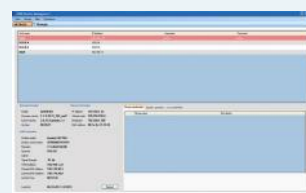 - Initiator and responder
- IPSec tunnel failover
- OpenVPN

Management

GWR connection wizard

Web application (HTTP based)

Remote management and monitoring software

Technical specifications

Interfaces and connectors
- 1x embedded interface HSPA/ 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)
- 1x Serial RS-232 interface
- 1x USB Host 2.0 interface

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

Power requriemenst
- -12VDC / 1000mA (9-36V DC option is available)

Environmental
- Operating temperature: -10° C - 55° C (14° F - 131° F)
- Storage temperature: -20° C - +85° C (–4° F - +185° F)
- Relative humidity: 5% - 95% (non-condensing)

Housing
- Robust metal housing (optional DIN rail mounting kit)
- Size (W x D x H): 95 x 135 x 35 mm
- Weight: 380 gr

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

GWR202 model – GPRS
GPRS Tri-band: 900/1800/1900
GPRS multi-slot class 10, mobile station class B
GPRS DL: 85.6Kbps, UL: 42.8Kbps

GWR252 model – GPRS/EDGE
GSM/GPRS/EDGE Quad band: GSM 850/900/1800/1900
GPRS/EDGE multi-slot class 12, mobile station class B
EDGE DL: 236.8Kbps, UL: 236.8Kbps
GPRS DL: 85.6Kbps, UL: 85.6Kbps

GWR352 model – GPRS/EDGE/UMTS/HSPA
UMTS/HSDPA/HSUPA Quad band: 850/900/1900/2100
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