Geneko

GWR-HS HIGH SPEED

CELLULAR ROUTER SERIES

HSPA • HSPA+ • LTE

GWRHS cellular router series represents a group of high speed routers specially designed for those applications where high speed data transfers (up to 100 Mbps) over GSM network are required. Complete series is based on reliable and high performance hardware platform including ARM Cortex-A8 microprocessor.

GWRHS series inherited the basic concept of GWR cellular router series – RELIABILITY COMES FIRST. Therefore all router models have dual SIM card support. This router series also supports additional WiFi option.

Many useful features make GWRHS cellular routers a perfect solution for wide variety of mobile broadband applications (video surveillance, digital signage, mobile office and retail/point-of-sale, field service …):

• Dual SIM card support increases the reliability of the router and provides a solution for those applications where failure of one mobile network must not result in system downtime. Automatic failover feature will detect the failure of primary connection and automatically switch to alternative connection. When the connectivity over primary connection is restored GWR router will perform switchover to primary connection.

• The whole set of advanced WAN settings allow a user to specify desired parameters in order to meet the requirements of specific cellular network. GWR routers proved themselves to be reliable and high performance devices in so many countries around the world. All advanced parameters included represent the result of detailed analysis of large number of different cellular networks. In few simple steps it is possible to optimize the performance of the router on almost any cellular network.

• VPN (GRE, IPsec and OpenVPN) tunnel support provides powerful options 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 addition 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 and remote management and monitoring software provide wide range of management functionalities. All those features and tools empower a user with full control over GWR routers.

Technical specifications

RF characteristics

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

GPRS/EDGE/UMTS/HSPA/HSPA+

UMTS/ HSDPA/HSUPA/HSPA+: 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
HSPA+ DL: 21Mbps, UL: 5.76Mbps
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

GPRS/EDGE/UMTS/HSPA/HSPA+/LTE

LTE Five band: 800/900/1800/2100/2600 MHz
UMTS/ HSDPA/HSUPA/HSPA+ Dual band: 900/2100 MHz
GSM/GPRS/EDGE Three band: 900/1800/1900 MHz
GPRS multi-slot class 10, mobile station class B
EDGE multi-slot class 12, mobile station class B
LTE DL: 100Mbps, UL: 50Mbps
HSPA+ DL: 21Mbps, UL: 5.76Mbps
HSDPA DL: 14.4Mbps, HSUPA UL: 5.76Mbps
UMTS DL: 384Kbps, UL: 384Kbps
EDGE DL: 236.8Kbps, UL: 236.8Kbps
GPRS DL: 85.6Kbps, UL: 85.6Kbps

Wi-Fi

• Wireless Standards
  IEEE 802.11b, IEEE 802.11g, IEEE 802.11n
• Frequency Band
  2.4GHz to 2.472GHz(1 to 13 channels)
• Rates
  11b: 1, 2, 5.5, 11Mbps
  11g: 6, 9, 12, 18, 24, 36, 48, 54Mbp
  11n: 6.5, 7,2, 13, 14.4, 19.5, 21.7, 26, 28.9, 39, 43.3, 52, 57.8, 58.5, 65, 72.2Mbp
• Minimum Reception Sensitivity
  802.11b: -87dBm; 802.11g: -73dBm; 802.11n: -68dBm
• Transmit output power
  802.11b: 17dBm; 802.11g: 15dBm; 802.11n: 14.5dBm
• Wireless Security
  WEP 64 and 128 bits, WPA-PSK, WPA2-PSK, WPA-PSK/WPA2-PSK

Interfaces and connectors

• 1x embedded interface HSPA/HSPA+/LTE (depending on the router model)
• Dual SIM slots
• GSM: 2xSMA female connectors (50 Ω) for external antenna
• WiFi: RPSMA male connector (50 Ω) for external antenna
• 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
• WiFi link activity • Signal quality • Reset

Power requirements

12VDC / 1A

Environmental

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

Housing

• Robust metal housing with optional DIN rail mounting kit

Dimensions and weight

• Size (W x D x H): 95 x 135 x 35 mm
• Weight: 380 gr

Management

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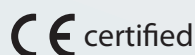
Protocols and features

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

Ordering information

Part Number	Router description
GWRHS352	High-Speed Cellular GPRS/EDGE/UMTS/HSPA
GWRHS352-WIFI	High-Speed Cellular GPRS/EDGE/UMTS/HSPA with 802.11bgn Wi-Fi
GWRHS352P	High-Speed Cellular GPRS/EDGE/UMTS/HSPA/HSPA+
GWRHS352P-WIFI	High-Speed Cellular GPRS/EDGE/UMTS/HSPA/HSPA+ with 802.11bgn Wi-Fi
GWRHS402	High-Speed Cellular GPRS/EDGE/UMTS/HSPA/HSPA+/LTE
GWRHS402-WIFI	High-Speed Cellular GPRS/EDGE/UMTS/HSPA/HSPA+/LTE with 802.11bgn Wi-Fi

CE certified

CONTACT US

Geneko Sales Team
e-mail: gwrsales@geneko.rs

Geneko Support Team
e-mail: gwrsupport@geneko.rs

Bul. Despota Stefana 59a
11000 Belgrade • Serbia

Phone: +381 11 3340-591, 3340-178
Fax: +381 11 3224-437

www.geneko.rs