Geneko

GWG 3G/4G GATEWAY

Geneko GWG Gateway is compact and cost effective communications solution that provides cellular capabilities for fixed and mobile applications such as data acquisition, smart metering, remote monitoring, traffic control and management. GWG allows users to create their own applications and add functionalities that they need.

GWG supports a variety of radio bands options on 2G, 3G and 4G cellular technologies. It is reliable solution thanks to high performance hardware platform and VPN/Security powerful options. When coupled with the rich embedded intelligence, it is the perfect choice for a broad set of M2M solutions.

GWG comes with numerous connectivity options and multiple configuration methods. It allows you to connect your existing Ethernet and serial devices using basic configuration. Besides Ethernet, RS-232 and RS-422/RS-485 serial ports, the device is equipped with USB port as well as 1-Wire interface and 2/2 configurable digital input/outputs available on GPIO Connector, and digital input/output available on power connector. Its small size and easy installation makes it suitable for challenging and size-constrained applications. GWG Gateway can be used on either desktop or mounted on a DIN rail.

Features

- Compact, cost effective communication solution
- Cellular capabilities for M2M applications
- Support for remote Management and Monitoring
- Reliable, high performance solution
- Small-sized, convenient for easy installation and rapid deployment
- Multiple configuration methods, including web/serial console
- Numerous connectivity options: Ethernet, RS-232, RS-422/RS-485, USB, 2/2 + 1+1 Digital I/O
- 1-Wire interface on GPIO connector
- Chroot environment allows the user to write scripts and adapt and develop existing functionality

Typical application

Data collection and system supervision
- Remote control of devices
- Extra-high voltage equipment monitoring
- Running water, oil/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 and light supervision
- Solar PV and wind turbine Power Solutions

Financial and department store
- Connection of ATMs and payment terminals
- Monitoring of vending and dispensing machines
- Connection of lottery and gaming machines
- Bank office supervision

Security
- Traffic control
- Video Surveillance Solutions

Other
- Primary Internet access from remote areas
- Backup connectivity solution by cellular networks
- Solutions for Remote Access to IT resources
- Internet access on the move
- Digital signage
- Information kiosks

Technical specifications

Interfaces and connectors

RF Characteristics - 4G LTE model
LTE FDD/TDD
- 800/850/900/1800/2100/2300/2500/2600 MHz

WCDMA/DC-HSPA+
- 850/900/2100 MHz

GSM/GPRS
- 900/1800 MHz

RF Characteristics - 3G HSPA+ model
UMTS/HSPA+
- 800/850/900/1900/2100 MHz

GSM/GPRS/EDGE
- 850/900/1800/1900 MHz

Host Interfaces
- 10/100 Base-T Ethernet, RJ-45 connector
- RS-232 serial port, D-SUB 9 female connector
- RS-422/485, 4 wires, Full-Duplex/Half-Duplex, Phoenix 1844249 connector
- USB 2.0, mini AB connector
- 1 or 2 SMA antenna connectors (depending on the GWG model)
- Mini-SIM slot (2FF), Hinge

Digital Input/Output (available on GPIO Connector)
- Digital Inputs/Outputs: 2 user selectable input or output
- Digital inputs: pull-up, active GND
- Digital outputs: open-drain, 4-28 V, no over-current protection
- Pinout: 1: +9..36 VDC (Power Supply) with 500 mA resettable PTC fuse, 2: IO1, 3: IO2, 4: 1-Wire, 5: GND

Digital Input/Output (available on Power Connector)
- Digital Inputs/Outputs: 1 output, 1 ignition sense input
- Digital Output: open-drain, 4-28 V, 350 mA ressetable PTC fuse
- Ignition Sense Input: active when pulled up to 9-36 VDC
- Pinout: 1: +9..36 VDC, 2: GND, 3: Ignition Sense Input, 4: Digital Output

Power

- Input: 9-36 VDC
- Input protection: Reverse polarity, transients, overcurrent (internal 1 A time-lag fuse)

Physical

- Dimensions (L x W x H): 101 x 88 x 30 mm
- Weight with 2 antennas: 372 gr
- Status LEDs: Power, Signal, Network, LAN (on Ethernet connector: Link, Activity)
- Housing: Plastic coated 0.8 mm steel sheet, black

Protocols and features

- Network: TCP/IP, UDP/IP, DNS, DHCP client, DHCP server, DynDNS
- Routing: NAT, Static routes, PAT, Port forwarding, RIP, OSPF, VRRP, DMZ Support, Firewall (IP Filtering, MAC Filtering)
- Application: SMS remote control, SMS sending, SSH, SNMP, NTP, CLI, Remote Management, Connection Manager
- Chroot: Support for shell scripts, LUA, Perl and compiled C/C++ executables
- Serial ports: RS-232 and RS-485, Modbus (TCP/IP and serial RTU), Serial over TCP/UDP, Console on Serial port
- USB port as serial port
- VPN/Security: Ipsec (IKEv1 and IKEv2), OpenSSL, and GRE (with keepalive option); OpenVPN, L2TP, PPTP; Encryption: AES, Blowfish, IPsec and OpenVPN tunnels with authentication possibility using certificates (upload of CA, private and CRL certificates as well as key files on a device) or pre-shared key files
- Other: Radius; Timed Actions; Advanced scripting functions; System control; LED management; GPIO (ability to send SMS after status change); Ping utility; Backup setting (Export/Import configuration); Logs reading

Environmental

- Operating Temperature: -20°C to +70°C
- Storage Temperature: -40°C to +85°C
- Relative Humidity: 5% to 95% (non-condensing)
- IP rating: IP40
- Ethernet Isolation: 1.5 kV RMS
- RS-485 Port Protection (ESD): 2 kV

Accessories (included)

- Power supply cord
- GSM antenna, frequency: 698-960 / 1710-2700 MHz, 1 or 2 pcs depending on the GWG Gateway model
- Rubber Round Feet, 4 pcs

Certifications

QMS ISO 9001:2015 **ISMS** ISO/IEC 27001:2013 CE certified

Important note: Geneko reserves the right to make changes or improvements to any of the products without prior notice. Please contact the Sales Department regarding current product specifications.

Ordering information

Model	GPRS/ EDGE	HSPA+	WCDMA/ DC-HSPA+	LTE	RS-232	RS-422/ RS-485	Eth Port	USB 2.0	Digital I/O on GPIO	Digital I/O on power c.	1-Wire interface
GWG-30	●	●	—	—	●	●	●	●	2/2	1+1	●
GWG-40	●	●	●	●	●	●	●	●	2/2	1+1	●

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