

ADSL
GPRS/EDGE
HSDPA/HSUPA

ROUTERS



Advantages

- Connection over ADSL link and alternatively over GSM/UMTS mobile network
- Linking with remote devices
- Remote equipment control
- Primary and backup Internet access
- Ethernet Network Routing between LAN and joint network or Internet
- Download up to 8160 kbit/s
- 2 SIM card support

Introduction

Geneko ADSL - GWR Series Routers enable connection of computers and small computer networks (LAN) in remote business units with central server over ADSL link and alternatively by mobile network and Internet, using GPRS/EDGE/HSDPA/HSUPA technology. This device is also designed for access to Internet by one or several PCs or engaging other networks devices (automatic units, sensors...), but also for securing spare (redundant) IP connection or connecting field mobile systems with central computer.

System description

Central processor unit of Geneko ADSL GWR Router is based on ARM CPU family. WAN connection to GSM and UMTS networks is provided by integrated GPRS/EDGE/HSDPA/HSUPA module. GWR Router provides communication with outside devices through Ethernet and RS232 connection. Device operation system is reliable and efficient GNU/Linux, which provides modern router necessary functions. Beside static and dynamic routing function, this operation system performs as well all other functions of network routers, like: DHCP server, IP filtering, NAT/PAT translation, etc. System concept enables great flexibility and adaptability for other specialized purposes as well. Device supports operation with two SIM cards (alternate connection), and if one connection is interrupted, it automatically transfers communication to the other connection (SIM card) with possibility of automatic relapse to first connection.

Technical specifications

Complies with standards	EMC	Directive 2004/108/EC
		EN 301 489-1 V1.6.1(2005-09)
		EN 301 489-7 V1.3.1(2005-11)
	LVD	EN 60950-1:2001(1st Ed.) and/or EN 60950-1:2001
	R&TTE	Directive 1999/05/EC
ETSI EN 301 511 V9.0.2		
EN 301 908-1 & EN 301 908-2(v2.2.1)		
RoHS	Directive 2002/95/EC	
	EU Commission 2005/618/EC, 2005/717/EC, 2005/747/EC, 2006/310/EC, 2006/690/EC, 2006/691/EC and 2006/692/EC	
Ethernet interface	Connector RJ-45; Standard: IEEE 802.3; Physical layer: 10/100Base-T; Speed: 10/100Mbps; Mode: full or half duplex	
Other interfaces	1 x UART(RS-232C)	
RF characteristics of GSM module	GPRS	Tri-band: 900/1800/1900 GPRS multi-slot class 10, mobile station class B; GPRS DL: 85.6Kbps, UL: 42.8Kbps
	GPRS EDGE	Quad band: GSM 850/900/1800/1900MHz; GPRS/EDGE multi-slot class 12, mobile station class B; EDGE DL: 236.8Kbps, UL: 236.8Kbps; GPRS DL: 85.6Kbps, UL: 85.6Kbps
	GPRS/EDGE UMTS HSUPA	UMTS/HSDPA/HSUPA: Quad band, 850/900/1900/2100MHz; GSM/GPRS/EDGE: Quad band, 850/900/1800/1900MHz; GPRS/EDGE multi-slot class 12, mobile station class B; HSUPA DL: 7.2Mbps, HSDPA: UL: 5.76Mbps; UMTS DL: 384Kbps, UL: 384Kbps; EDGE DL: 236.8Kbps, UL: 236.8Kbps; GPRS DL: 85.6Kbps, UL: 85.6Kbps
ADSL characteristics	Line interface: Multimode, ANSI T1.413, ITU-T G.dmt annex A, ITU-T G.lite Encapsulation: PPPoE	
RF Connector	SMA, 50Ω	
Status LED	Ethernet activity / network traffic Power on GSM/ADSL link activity Signal quality	
Power supply	9 – 12VDC / 1000mA	
Temperature range	Operation: -5°C to +50°C Storage: -20°C to +85°C	
Physical characteristics	Width x Length x Height: 95 x 135 x 35 mm Weight: 380g	

Network

- DHCP server
 - Static lease reservation
 - Address exclusions
- Static routing
- RIP
- IP port forwarding
- DMZ support
- PPPoE
- MAC access control
- SNMPv1, 2c
- NTP(RFC1305)
- Firewall
 - NAT
 - PAT
 - IP filtering
- Ser2net, ModbusRTU-to-ModbusTCP

Maintenance

- Device identity
- Diagnostics(ping utility)
- Settings backup
- Factory default settings

VPN

- VPN endpoint and pass-through
- IPsec
 - IPsec compliant
 - IPsec modes: AH
 - 3DES, AES
 - Data integrity
 - HMAC-MD5, SHA-1
 - Authentication and key management
- IKE, manual keys
- IKE features
 - Perfect Forward Secrecy
 - Diffie-Hellman Group 1, 2, 5
 - DPD for constant connection
 - NAT Traversal
 - Support IP Payload Compression protocol
 - max. number of tunnels: 5
- GRE
 - GRE Cisco compliant
 - GRE Keepalive
 - max. number of tunnels: 30

Embedded advanced function

- Real-time clock
- Watchdog

GSM features

- Dual SIM support(for operator Back-up functions)
- SIM card detection
- PIN enabler
- Failover functionality
- Advanced CHAT script settings
- Auto-reconnect or manual
- GSM Keepalive

Management

- User-friendly web GUI
- Setup wizard
- CLI
 - SSH
 - telnet
 - serial port
 - Firmware upgradeable via browser
- Traffic and event log
 - Encapsulation protocols:
 - RFC 1483 bridged in VCMUX or LLC mode
 - RFC 1483 routed in VCMUX or LLC mode
 - Maximum upstream rate: 896 kbit/s
 - Maximum downstream rate: 8160 kbit/s

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