



Advantages

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

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 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 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.

Typical applications

Geneko ADSL GWR Routers are universal communication devices for business and personal use with wide applications range. Its ADSL interface transmits data between a terminal (PC, Mac or any other compatible device) connected by a Ethernet interface and an Internet Access Provider at speeds up to 8 Mbit/s. Geneko ADSL - GPRS/EDGE/HSDPA Routers are especially designed for critical applications where ADSL link is primary infrastructure, but also where there is a need for a high availability connection which is provided with GPRS/EDGE/HSDPA module.

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) 1 x USB Host	
RF characteristics of GSM module	GPRS	Tri-band: 900/1800/1900 GPRS multi-slot class 10, mobile station class B
	GPRS EDGE	Quad band: GSM 850/900/1800/1900MHz EDGE multi-slot class 10, mobile station class B GPRS multi-slot class 12, mobile station class B
	UMTS HSDPA GPRS EDGE	UMTS/HSDPA: Triple band, 850/1900/2100MHz GSM/GPRS/EDGE: Quad band, 850/900/1800/1900MHz GPRS multi-slot class 10, mobile station class B EDGE multi-slot class 10, mobile station class B
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 link activity / attached network(GSM, UMTS) 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	

<p>Network</p> <ul style="list-style-type: none"> • DHCP server <ul style="list-style-type: none"> Static lease reservation Address exclusions • Static routing • RIP • IP port forwarding • DMZ support • PPPoE • MAC access control • SNMPv1, 2c • NTP(RFC1305) • Firewall <ul style="list-style-type: none"> NAT PAT IP filtering • Ser2net 	<p>VPN</p> <ul style="list-style-type: none"> • VPN endpoint and pass-through • IPsec <ul style="list-style-type: none"> IPsec compliant IPsec modes: AH 3DES, AES Data integrity <ul style="list-style-type: none"> HMAC-MD5, SHA-1 Authentication and key management • IKE, manual keys • IKE features <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> GRE Cisco compliant GRE Keepalive max. number of tunnels: 10 	<p>GSM features</p> <ul style="list-style-type: none"> • 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
<p>Maintenance</p> <ul style="list-style-type: none"> • Device identity • Diagnostics(ping utility) • Settings backup • Factory default settings 	<p>Embedded advanced function</p> <ul style="list-style-type: none"> • Real-time clock • Watchdog 	<p>Management</p> <ul style="list-style-type: none"> • User-friendly web GUI • Setup wizard • CLI <ul style="list-style-type: none"> SSH telnet serial port • Firmware upgradeable via browser • Traffic and event log • Encapsulation protocols: <ul style="list-style-type: none"> 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

