

OxyGEN Router



ADSL2+ WAN
Ethernet Switch LAN
Wireless 802.11b/g/n*
Multiple SSIDs
Wireless on/off switch
USB 2.0 Host*
3G WAN backup*
VPN and Firewall

OxyGEN Router

OxyGEN Router is an advanced 802.11b/g/n* Wireless ADSL2/2+ modem/router, which combines an ADSL2+ WAN interface with a complete set of LAN Interfaces (four Ethernet ports, Wi-Fi and USB*) and an extended list of software features.

OxyGEN Router offers in a compact design, the needed functionality and performance for home ADSL2+ broadband communication. It is the ideal platform for advanced Internet based services. Versatile and network-oriented, the device offers impressive functionality for Data and Video access, with comprehensive support for:

- **High speed Internet access of up to 24 Mbps**
- **Assured communication to PCs, IP Set-Top Boxes, and other IP devices**

Based on the Linux OS, Gennet OxyGEN Router is a future-proof design with increased CPU and memory capacities. These characteristics allow broadband operators to enhance their portfolio of offered services with new applications and ensure that their investment is future proof, as more and more IP-enabled



devices join the residential network. At the same time, advanced policy-based Quality of Service (QoS), together with complete service separation and a powerful and flexible firewall ensure carrier-grade real-time applications and services.

Taking also into account the functionality and expansibility offered by the optional USB 2.0 Host (master) interface (File Server, Print Server, 3G WAN connectivity in case of ADSL network failure), OxyGEN Router is clearly a device that allows the operator to offer differentiated services.

Technical Specifications

Network Interfaces

WAN

- 1 x ADSL, ADSL2, ADSL2+
- Multi mode Standard ANSI T1.413 I2 G.992.1 (G.dmt) Annex A, B, L, M
- G.992.3 (G.dmt.bis) Annex A, B, M, I, J, L
- G.992.5 ADSL2+ Annex A, B, M, I, J, L
- SRA, DELT
- Impulse Noise Protection 32kb

LAN

- 4 x Ethernet ports (10/100 Base-T, Auto-MDIX)
- 802.11b/g/n* WiFi with on/off switch, external antenna
- 1 x USB 2.0 Host (master) interface (optional)

Routing/Bridging

- RFC 2364 PPPoA, RFC 2684 MPoA, RFC 1577 Classical IPoA, RFC 2516 PPPoE
- Up to 8 Virtual Circuits
- UBR, VBR-rt, VBR-nrt, CBR
- Per-PVC Queuing and Traffic Shaping
- PVC-to-Service mapping support
- 802.1d bridging
- 802.1q VLAN support, Private VLANs
- RIP v1/v2, OSPF*, Static Routing
- DHCP Client/Server/Relay
- NTP
- NAT, PAT and DNS relay agent
- IGMP v1/2/3, proxy, snooping
- IP QoS (ToS/DSCP)
- Ethernet QoS (802.1p/q CoS)
- Queuing, rate limitation, fragmentation
- Low latency handling of VoIP/Video services
- Multihoming, Load-balancing, 3G data-backup
- GRE Tunneling
- Multiple WLAN SSIDs
- Dynamic DNS

Security

- Enhanced policy-based and SPI firewall
- Standard and Extended Access Lists
- URL Filter, Virtual Server, DMZ
- PAP/CHAP
- MAC filtering
- VPN IPSec, TLS/SSL OpenVPN, L2TP, PPTP
- VPN pass-through
- WEP 64/128-bit encryption, WPA, WPA2, 802.1x

Management

- DSL Forum TR-069
- Automatic PVC scanning
- Multilevel Web-based graphical user interface
- SNMP
- ATM F4&F5 OAM
- SSH/Telnet remote access to CLI
- Automatic STB and video service detection
- Diagnostic and performance monitoring
- Connection test (end-user), ping, traceroute
- Syslog with network support
- Configuration backup and restore
- Zero-touch deployment mechanism
- Automatic firmware upgrades
- Dual firmware image support
- WiFi Protected Setup (WPS)
- UPnP IGD, NAT-PMP
- Wake on LAN

Recommended: OxyGEN Centre Manager

Offers a highly scalable and centralized auto-provisioning and management solution for mass deployments of terminals and managed services.

Includes following components:

- Service management
- Network management
- Security management
- Hardware and Software inventory
- Performance management
- Fault management
- Software management

USB Services*

- Print Server support
- File Server support (FTP, SMB)
- UPnP Media Server support
- Data-backup through external 3G modem

Additional specifications

- Memory capacity: Flash 32MB-128MB, RAM 16-64MB
- Functional LED indicators: Power, ADSL, WLAN, Ethernet, IP connectivity, USB
- Power on/off switch
- WiFi on/off switch
- Factory reset button
- External power adaptor: 12V DC, 1A / 90-240V AC, 50-60Hz
- Power consumption 4W (typical), 9W (max)
- Operating temperature: 0 to 40°C
- Storage temperature: -20 to 70°C
- Operating humidity: 10% to 90% (non-cond.)
- Storage humidity: 5% to 95% (non-cond.)
- Physical characteristics: 146x146x33mm, 274gr
- Certification: CE Mark, IEC 60950, EN 60950, CSA 950, UL1950
- ADSL: TR-67 / TR-100
- RoHS compliance

(*) Optional