



Genexis DRG

DRG7000-Series

Rock solid all-in-one gateway



The DRG7000 is an easy-to-install high-performance homegateway for Fiber-to-the-Home (FTTH) networks. Packed with features to support triple-play services, including high-definition TV services and optional CATV support.

It is the ultimate home gateway for fiber networks. With its four Gigabit LAN ports and the ability to reach up to Gigabit wirespeed packet routing, the DRG is designed for residential customers, small offices and medium size businesses.

Key features

- Easy installation on the DRG Fiber Termination Unit
- Four Gigabit LAN ports and one USB 2.0 port
- WAN auto-sensing 100BASE-FX and 1000BASE-X
- WLAN Access Point (2.4GHz 11b/g/n and 5GHz 11a/n/ac, concurrent dual band, optional)
- Two telephony ports for SIP based Voice-over-IP
- Remotely managed CATV (optional)
- Manageable via GAPS, TR-069, CLI, DHCP/TFTP or SNMP
- Gigabit speed firewall and NAT routing
- IPv4 and IPv6 supported concurrently
- Support Jumbo frames (up to 9K)

Up to a full gigabit

The DRG7000 WAN is multi-rate supporting 100Mbit/s and 1Gbit/s speeds on the optical interface. It automatically detects the used link speed. Therefore, the network operator can deploy the Gigabit capable DRG7000 in a mixed speed network today and be ready for next generation access. If the network gets upgraded to 1Gbit/s, there would be no need to revisit the customer and change the home gateway.

VoIP and WLAN

The DRG7000 is available in multiple variants which support POTS telephony with a built-in SIP Voice-over-IP client. The WLAN access point supports up to 750Mbit/s TCP throughput wireless communication, which gives customers access to the network anywhere in the home without having to build a wired network.



Product features and specifications

Genesis DRG7000-Series

General specifications

Dimensions	170x202x48mm
Weight	350 g
Power supply	12 VDC ± 10%
Power consumption	typ. 8 W
Operating temperature	0 - 40 °C
Storage temperature	0 - 70 °C

WAN interface

Transmit wavelength	1310 nm
Receive wavelength	1490/1550 nm
Output power range	-9 ... -3 dBm
Input power range	-23 ... -3 dBm

- Single mode fiber (ITU-T G.652)
- SC/PC connector
- Compliant with 1000BASE-BX-U
- Compliant with 100BASE-BX-U
- Auto sensing 1Gb/s and 100Mb/s

Protocols

- IPv4/IPv6 dual stack
- DHCP(v4/v6) client
- PPPoE client
- QoS
- 802.1ad (Q-in-Q)

LAN interfaces

- 4x 1000/100/10Base-T LAN ports (RJ-45)
- LED indicators for link and activity

Button and USB

- 1x Reset button (recessed)
- 1x WPS/Pair button
- 1x USB 2.0

Routing

- Line-speed (1000 Mbps) routing performance for packets > 256 bytes
- DHCP server
- NAT / PAT
- UPnP
- VPN pass-through
- SPI Firewall
- DMZ
- Mixed bridged/routed port(s) for IPTV
- IGMPv2, IGMPv3 snooping and proxy
- Video on Demand (VoD)

Voice features

- SIP based Voice-over-IP
- G.711 A-law / μ -law codec
- G.729 codec
- 5 REN support
- Line Echo Cancellation
- DTMF transmission: in-band, RFC2833, SIP-info

IEEE 802.11n/ac wireless interface

- IEEE 802.11b/g/n (2.4 GHz) 2T2R
- IEEE 802.11ac (5.0 GHz) 3T3R
- Automatic channel selection
- Internal antennas
- WEP*, WPA, WPA2
- WPS button for WLAN network setup
- Multiple SSIDs supported
- Dual band, dual concurrent
- Guest WLAN






CATV

Wavelength	1550 nm
Frequency range	47-875 MHz
RF output F connector	75 Ω
Output return loss	14 dB
RF output level (AGC)	80 ± 2 dB μ V
Flatness	± 1 dB
Optical input power measurement	
RF output power measurement	
Various filter options	

Management and control

- TR-069, TR-104
- TR-181
- Genesis Automatic Provisioning System (GAPS)
- SNMP
- DHCP / TFTP
- CLI
- Fail-safe firmware upgrade
- End user management via web interface
- Reset button for factory default settings

Status LEDs

- Power 
- Fiber uplink status 
- Telephony status 
- WiFi status 
- CATV status (not all models) 

Genesis DRG7000 product models

Model	LAN		VoIP	WLAN 2x2	WLAN 3x3	USB 2.0	CATV	
	Ports	Speed (Mbps)	POTS ports	2.4 GHz	5.0 GHz		Available	RF output Level (AGC) (dB μ V)
DRG7820	4x	1000/100/10	2x	11n	11ac	1x	-	-
DRG7860	4x	1000/100/10	2x	11n	11ac	1x	Yes	80 ± 2
DRG7870	4x	1000/100/10	2x	11n	11ac	1x	Yes (Denmark specific)	80 ± 2
DRG7880	4x	1000/100/10	2x	11n	11ac	1x	Yes (multi-dwelling)	86 ± 2

Specifications may differ from those listed. Please contact sales@genesis.eu for further information

Note: Not every listed feature may be included in the shipping product. We reserve the right to make changes of technical specifications, housing or design without prior notice.