

## 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

## Genexis 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 / $\mu$ -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) 2T2R/3T3R
Automatic channel selection
Internal antennas
WEP*, WPA, WPA2
WPS button for WLAN network setup
Multiple SSIDs supported

### CATV

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

### Management and control

TR-069, TR-104
TR-098 *
TR-181
Genexis 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)	

\* Applicable to selected models only

## Genexis 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 $\mu$ V)
DRG7820	4x	1000/100/10	2x	11n	11ac	1x	-	80 ± 2
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@genexis.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.