

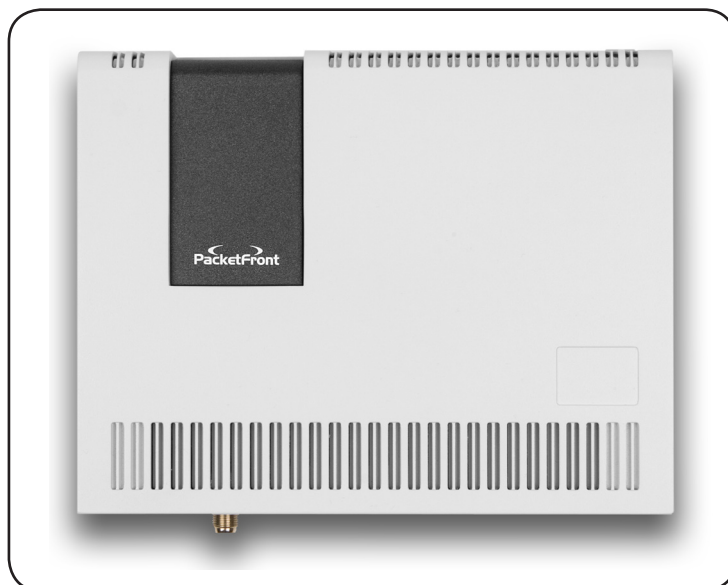
# DRG 700

Digital Residential Gateway

## High performance GTTH gateway

### Key benefits:

- Four Gigabit LAN ports and one USB 2.0 port
- Support for 100BASE-FX and 1000BASE-X connections
- Easy 1-click installation
- Managed by CLI, TR-069 or SNMP
- Wirespeed firewall and NAT
- IPv6 ready, including IPv4 to IPv6 transition support
- VoIP and WiFi (optional)
- Remote-managed CATV (optional)



### The new generation CPE

The DRG 700 is an easy-to-install high-performance home gateway for Gigabit-to-the-home (GTTH) networks. Packed with features to support triple-play services including high-definition TV services, the DRG 700 is the ultimate home gateway for fiber and copper networks. With four Gigabit LAN ports and an USB port for external hard-drive, the DRG 700 is designed for residential customers, small offices and medium size businesses.

### Supports GTTH

The DRG 700 WAN is multi-rate and supports 100Mbit/s and 1Gbit/s speeds on the fiber link. The network operator can deploy the Gigabit DRG700 today and be ready for the next generation access. As the network is upgraded, there is no need to revisit the customer and change the equipment. The DRG will automatically detect the speed that is used.

### Wirespeed firewall and NAT

The DRG 700 has a high-performance network processor which allows the unit to perform firewall and network address translation at wirespeed. This extends the lifetime of the DRG into the Gigabit Ethernet age.

### IPv6 Ready

The DRG 700 also operates as an IPv6 router, supporting stateful address assignment on the WAN with prefix delegation to allow native IPv6 routing into the home. In addition, 6to4 and 6rd transition mechanisms are also supported to allow deployment into legacy non-IPv6 networks.

### Managed by TR-069 or SNMP

TR-069 is widely deployed for the management of DSL modems. The DRG 700 has a built-in TR-069 client that allows an existing AutoConfiguration Server (ACS) to also manage the DRG. If no ACS is available, the DRG can be managed using the standard SNMP and TFTP protocols, for configuration and data collection for monitoring services.

### VoIP and WiFi

The DRG 700 is available in multiple variants which support POTS telephony with a built-in SIP Voice-over-IP client. Models with an 802.11b/g/n access point support up to 300Mbit/s wireless communication, which gives customers access to the network anywhere in the home without having to build a wired network.

### Remote-managed CATV

Models with the built-in CATV receiver make it possible to offer an optical TV signal over fiber that is converted by the DRG700 into a traditional electrical RF signal. A frequency filter allows premium channel packaging without the use of set top boxes (STB). The TV signal can also be adjusted through Automatic Gain Control (AGC).

### Easy 1-click installation

The DRG 700 uses a click-on mechanism for easy integration with the DRG Base fiber termination unit. This gives network builders a cost-effective and robust solution for terminating fiber access.

Once the DRG Base and fiber connectors have been installed, customers can simply install the DRG 700 unit themselves with the 1-click installation design. No special skills or patch cables are required (see the DRG Base datasheet for more information).

# DRG 700

## Fiber WAN models

Transmit wavelength: 1310nm, Receive wavelength: 1480-1580nm (wideband) Max/Min output power: -3/-9 dBm, Max/Min input power: -3/-23 dBm

Model	LAN	WiFi (b/g/n)	2 x POTS	CATV/EU-1
DRG711	4x10/100/1000	-	-	-
DRG712	4x10/100/1000	-	-	Yes
DRG714	4x10/100/1000	-	Yes	Yes
DRG716	4x10/100/1000	Yes	Yes	Yes
DRG718	4x10/100/1000	-	Yes	-
DRG719	4x10/100/1000	Yes	Yes	-

## Copper WAN models

Model	LAN	WiFi (b/g/n)	2 x POTS	CATV/EU-1
DRG701	4x10/100/1000	-	-	-
DRG702	4x10/100/1000	-	Yes	-
DRG703	4x10/100/1000	Yes	Yes	-

## Management

Protocols	SNMP v1/v2 including MIB-II and enterprise-specific DRG MIB, TR-069
HTTP server	Single access level for end-user configuration of home network features
TFTP/HTTP client	Software download
DHCP	Configuration support

## Quality of Service

DiffServ	Layer 3 (IP)
Class of service	IEEE 802.1p, Layer 2 (Ethernet) QoS mechanism, 4 hardware queues for prioritization
IGMP snooping	v2 and v3

## WiFi

RF output level	<=70mW
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## CATV

Frequency range	45-875MHz
Filter selector on/off	87-875MHz, High-pass filter, 40dB attenuation
RF output impedance	75Ω
Output return loss	14dB
RF output level	EU-1: 78 - 82dBμV
Flatness	+/-1.5dB
Automatic Gain Control (AGC)	-10 - 0 dBm

## Traffic classification and security

VLAN	Services and port separation
Hybrid links	Tagged and untagged traffic simultaneously on the same link

## Reliability

MTBF	>150 000 hours
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## Physical

Dimensions	53mm (D) x 170mm (H) x 202mm (W)
Weight	Approximately 445g
Power requirements	7.5-12.0 W
Power supply	12Vdc 1.5A external plug-in wall adapter,
LED indicators	WAN, LAN, WLAN, POTS per port, CATV, System
Operating conditions	Temperature 0°C to +40°C, humidity 5-95% RH non-condensing

## Regulatory compliance

CE-mark, FCC Part 15 Subpart B, CB-mark, IEC/EN/UL 60950-1, IEC/EN/UL 60825-1