

DRG 560

Digital Residential Gateway

Reliable home gateway for high quality triple-play services

Key benefits:

- Optimized for residential and SME users
- Gigabit WAN access (optional)
- Carrier-grade data and video quality
- 100/1000 Mbps autosensing of fiber WAN
- Fully automated service activation process
- Remotely managed, allows mass deployment
- Easily integrated with click-on Fiber Termination Unit



The DRG 560 is a triple-play home gateway that provides up to 1 Gbps WAN access and 8 LAN ports with 100 Mbps. Autosensing of 1 Gbps speed to the Central Office is supported in DRG 560. This allows the network owner to install a future proof Gigabit DRG at the customer premises starting off with 100 Mbps, for later service update to full Gigabit speed.

DRG 560 is designed for residential customers, small offices and medium size businesses wishing to take advantage of multiple LAN ports and high throughput.

Triple-play services

The DRG 560 supports triple-play services, such as fast Internet access, IP telephony and IPTV. CATV can also be supported, via a CATV receiver which converts optical TV signals received via the fiber network into traditional electrical RF signal.

An integrated serial port provides additional means of communication for services like telemetry and security.

High quality services

The DRG 560 provides carrier-grade video quality, through priority mechanisms on both the Ethernet and IP levels.

DRG 560 supports IGMP snooping, which allows multicast video streams to be routed only to LAN ports which have joined the multicast group, preventing unnecessary traffic on other ports.

Efficient remote management

The DRG 560 is designed for remote management. This includes remote configuration and a software upgrade mechanism, allowing the operator to easily and efficiently manage and control a vast number of installed units.

In addition, the DRG 560 provides quality measurement of LAN ports. These statistics can be collated and this allows the operator to monitor and control quality of the offered services.

Easy Click-On deployment of FTU

By simply using a click-on mechanism, you can easily integrate an FTU (Fiber Termination Unit) with the DRG 560. This provides network builders with a cost-effective and robust solution for terminating fiber access. Once the FTU and corresponding fiber connectors have been installed, the end user can install the active equipment themselves by simply clicking on the DRG 560 unit. No special skills or patch cables are required, (see separate FTU datasheet for more information).

Choice of FTTx networks

The DRG 560 can be used in fiber and copper networks and is ideal for the particular requirements of FTTx networks.

DRG 560

Interfaces and description

| Model | Port | Wavelength TX/RX (nm) | Max/Min output pwr (dBm) | Max/Min input pwr (dBm) | Speed (Mbps) | Specification |
|-----------|-------|--------------------------|-----------------------------|----------------------------|-----------------|-------------------------------|
| DRG 561 | WAN | | | | 10/100/1000 | Copper, UTP, Cat5, RJ-45 |
| DRG 562m | " | 1310/1310 | -14/-22.5 | -14/-31.8 | 100 | Multi-mode, dual-fiber, MT-RJ |
| DRG 562s | " | 1310/(1260-1610) | -14/-23.5 | 0/-31 | 100 | Multi-mode, dual-fiber, SC |
| DRG 566s | " | 1310/1550 | -8/-14 | 0/-31 | 100 | Single-mode, single-fiber, SC |
| DRG 567c | " | 1310/(1260-1600) | 0/-20 | 0/-28 | 100 | Single-mode, dual-fiber, LC |
| DRG 567s | " | 1310/(1260-1610) | -8/-15 | 0/-34 | 100 | Single-mode, dual-fiber, SC |
| DRG 567Gc | " | 1310/(1260-1610) | -3/-9.5 | -3/-20 | 1000 | Single-mode, dual-fiber, LC |
| DRG 56x* | LAN | | | | 10/100 | 8 x Copper, UTP, Cat5, RJ-45 |
| DRG 56x* | Other | | | | N/A | Serial port RS232, RJ-11 |

* x can be either 1, 2, 6 or 7

Management

| | |
|------------------|--|
| Protocols | SNMP v1, SNMP v2, MIB-II for statistics, enterprise-specific DRG MIB for configuration |
| HTTP server | Two access levels for manual configuration, can be switched on/off remotely |
| TFTP/HTTP client | Software download |
| DHCP | Configuration support |
| BECS | PacketFront's network control and provisioning system |
| HDD | Full configuration and supervision via the Home Device Director (HDD), the DRG element manager |

Quality of Service

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|-------------------|---|
| DiffServ | Layer 3 (IP) QoS mechanism, 4 hardware queues for prioritization |
| Class of service | IEEE 802.1p, Layer 2 (Ethernet) QoS mechanism, 4 hardware queues for prioritization |
| LAN port priority | 4 hardware queues |
| Bandwidth shaping | Rate limitation per LAN port |
| IGMP snooping | v1 and v2 |

Traffic classification and security

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|------------------------|---|
| VLAN | Services and port separation |
| VLAN stacking (Q-in-Q) | Service provider tagging |
| Hybrid links | Tagged and untagged traffic simultaneously on the same link |

Reliability

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| MTBF | >150 000 hours |
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Physical

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|--|---|
| Dimensions | 56mm (D) x 170mm (H) x 238mm (W), 2.20" (D) x 6.69" (H) x 9.37" (W) |
| Weight | Approximately 430g, 0.9lbs |
| Power requirements (incl. AC/DC adapter) | 7.5-10.5 watts |
| Power supply | 12Vdc, external plug-in wall adapter, UPS optional |
| LED indicators | WAN, LAN per port, POWER |
| Operating conditions | Temperature 0°C to +40°C, 32°F to 104°F, humidity 5-95% RH non-condensing |

Regulatory compliance

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| CE-mark | |
| ETL-mark | |
| FCC Part 15 Subpart B | |
| CB-mark | |
| IEC/EN/UL 60950, IEC/EN/UL 60825, ETSI EN 300386 | |
| RoHS directive 2002/95/EC | |
| WEEE directive 2002/96/EC | |