



## DRG 400 series

### DRG 460 products



**The DRG 460 is a robust and manageable 8 port fiber/TP switch, built for enterprise and residential environments.**

#### **The DRG**

The DRG 460 is a robust fiber/TP switch for mounting in wiring cabinets.

The DRG 460 is also adapted for mounting into a 19" rack, for installation in Central Office and enterprise environments.

DRG 460 provides up to 1 Gbps WAN access. It features 8 10/100 LAN ports. DRG 460 is stackable and can be daisy-chained to provide 7 additional LAN ports.

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

As there is no fan built into the DRG 460, the product's life cycle is prolonged.

Autosensing between 100 Mbps or 1 Gbps speed to the Central Office is supported in DRG 460. The network owner can install a future proof DRG at the premises starting with 100 Mbps, and to later update to full Gigabit speed.

#### **Advanced features and functionality for enterprise services**

With its advanced VLAN support and L2 switching capabilities, DRG 460 naturally fits the requirements for delivering broadband services to small and medium-size enterprises. Other advanced features supported are non-blocking, queue-in-queue, and bandwidth shaping, to mention only a few.

#### **Triple-play services for residential customers**

The DRG 460 supports triple-play services, such as fast Internet access, IP telephony and IPTV.

The DRG 460 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.

#### **Managed solution**

The DRG 460 is built on 42Network's well proven DRG series of gateways for the residential market. By introducing the DRG 460 network owners are offered a CPE portfolio covering both residential and enterprise segments.

The DRG 460 can, as the whole 42Network's CPE portfolio, be managed remotely, including configuration and software upgrade that allows the operator to easily and efficiently manage and control a vast number of installed units. In addition, DRG 460 provides possibilities to collate quality measurement of LAN ports.

#### **Choice of FTTx networks**

The DRG 460 can be used in fiber and/or copper networks and is ideal for the particular requirements of FTTx networks.

# Product Specification for DRG 460

Interfaces						
Model	Port	Wavelength TX/RX (nm)	Max/Min output pwr (dBm)	Max/Min input pwr (dBm)	Speed (Mbps)	Specification
DRG 461	WAN	-	-	-	10/100/1000	Copper, UTP, Cat5, RJ-45
DRG 466s	WAN	1310/1550	-8/-14	0/-31	100	Single-mode, single-fiber, SC
DRG 466Gs	WAN	1310/1550	-3/-9	-3/-21	1000	Single-mode, single-fiber, SC
DRG 46x*	LAN	-	-	-	10/100	8 x Copper, UTP, Cat5, RJ-45
DRG 46x*	Other	-	-	-	N/A	Serial port RS232, RJ-11

\* x can be either 1 or 6

Management	
SNMP management	SNMP v1, SNMP v2, MIB-II for statistics, Enterprise-specific DRG MIB for configuration
HTTP server	Two access levels for manual configuration, can be turned on/off remotely
TFTP/HTTP client	Software download
DHCP	Configuration support
HDD	Pre-integrated with 42Networks Element Management System, HDD, that allows optimal management of large populations of DRG units

Quality of Service	
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	IGMP v1, IGMP v2

Traffic Classification and Security	
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	
MTBF	>150 000 hours

Physical	
Dimensions	38 mm (D) x 145 mm (H) x 200 mm (W)
Weight	Approximately 820 g
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, humidity 5-95% RH non-condensing

Regulatory Compliance	
CE marked	
ETL marked	
FCC Part 15 Subpart B	
CB certified	
IEC/EN/UL 60950, IEC/EN/UL 60825, ETSI EN 300386	
RoHS directive 2002/95/EC	
WEEE directive 2002/96/EC	

Subject to change without notice