DATACOM

DM986

ONU GPON

DATASHEET

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DM986-100

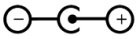
ONU - Optical Network Unit

GPON (Gigabit Passive Optical Network) is a technology for optical access, offering high speed and cost-effective solutions for broadband and Triple Play services (voice, video and data). This technology allows fiber optic sharing among customers, reducing costs and maximizing bandwidth usage.

DM986 ONUs offer a high speed fiber optic access solution enabling data, voice and video over IP services for residential users. Ethernet data is transported transparently over the GPON link and delivered to an optical line termination unit (OLT), such as the DM4610 OLT (4-GPON and 8-GPON) and the DM4615 OLT (16-GPON). The DM986 ONU is compatible with the ITU-T G.984 and ITU-T G.988 standards with a Gigabit Ethernet LAN interface.

DM986-100 ONU can be provided in two different modes of operation: one for operations in Bridge mode with support for GPON / EPON and another one for operations in Router mode PPPoE or DHCP with support for IPv4 and IPv6 with management by TR-069 and GPON interface. It is also possible to switch the ONU operation mode between bridge or router via a FW update.

Technical Specifications

Item	Description	Bridge Mode (SFU)	Router Mode (HGU)
Hardware	Dimensions (H xWL xDP)	20 x 74 x 74 mm	
	Operational temperature (Humidity 10% to 90% non-condensing)	-10°C to 55°C	
	Storage temperature (Humidity 5% to 95% non-condensing))	-40°C to 70°C	
	Power Supply (external)	Input: 100 ~ 240 Vac, 50/60Hz Output: 12V, 1A	
	Average Power Consumption	< 2,5 W	
	Polarity		
GPON	1x GPON port, SC/APC connector	✓	✓
	EPON Support	✓	-
	According to ITU-T G.984 and ITU-T G.988	✓	✓
	1.244 Gbit/s upstream and 2.488 Gbit/s downstream	✓	✓
	Laser type B+, according to ITU-T G.984.2 Amd1	✓	✓
	Transmission Power: +0.5dBm to +5dBm, Reception Sensibility: -27dBm	✓	✓
	Reception Overload: -8dBm	✓	✓
	Wavelengths: upstream 1310nm and downstream 1490nm	✓	✓
	Laser according to FCC 47 CFR Part 15, Class B, FDA 21 CFR 1040.10 and 1040.11, Class I	✓	✓
	Activation by automatic discovery of serial number and password according to ITU-T G.984.3	✓	✓
	Flexible mapping between GEM Ports and TCONTs	✓	✓
	Maximum T-CONTs	8	8
	Maximum GEM Ports	8	8
Ethernet Interface	1 LAN 10/100/1000 Base-T interface , RJ-45 connector	✓	✓
	Pinout identification via MDI / MDIX	✓	✓
	Virtual switch based on 802.1q	✓	✓
	MTU	1600 Bytes	1600 Bytes
Software	Transparent Bridge	✓	✓
	Bridged PPPoE	-	✓
	WAN: IPv4/IPv6 Dual Stack - PPPoE, IPoE (Static IP and DHCP)	-	✓
	LAN: DHCP IPv4/IPv6 Server, IPv4/IPv6 static	-	✓
	Simultaneous VLANs	7	7
	MAC Table	1024	1024
	Static routes IPv4/IPv6	-	✓
	NAPT, DNS Proxy, DNS static	-	✓
	IGMP Snooping and Proxy	-	✓
Security	DMZ	-	✓
	Filters per MAC and per IP/Port	-	✓
	Port Forwarding	-	✓
	Loop Detection	-	✓
Management	Web based management	✓	✓
	TR-069 based management	-	✓
	Access ACL through WAN/LAN interface	-	✓
	SNTP	-	✓
	Firmware upgrade through OLT or Web interface	✓	✓

IPv6 functionalities have some restrictions detailed in the product's Release Notes, with updates to the corrections provided in the Roadmap.

Ordering information

Model	Description	
DM986 – 100 *825.8016.xx (bridge mode)* *810.3819.xx (router mode)*	GPON ONU with one 10/100/1000Base-T LAN port (RJ45). Operation in bridge or router mode. Externa AC power supply.	

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