

DATACOM



DM986 - 204

GPON ONU

DATASHEET

DM986 - 204

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.

DM986-204 ONU offers a high speed fiber optic access solution in an interface that supports EPON or GPON technologies, two (02) Gigabit Ethernet LAN interfaces and also a Dual Band Wi-Fi interface 802.11 b/g/n/ac (2,4Ghz and 5,8Ghz) with two external antennas, providing excellent performance and wireless coverage for domestic users.

It supports a mesh network solution through the EasyMesh standard, expanding the network coverage. In this solution, the DM986-204 ONU acts as controller, managing links between mesh routers that are connected and distribute the signal forming a single network, providing a high quality signal throughout the environment.

Together with DATACOM's OLTs (DM4610, DM4611, DM4612, DM4615 and DM4618), it offers a competitive, high performance FTTH solution.


The DM986-204 ONU supports Preset settings, which allows the customization of factory settings, so that when the customer performs a reset on the equipment, it returns to the default defined in the preset and not to the manufacturer's default settings.

DM986-204 also has the remote management feature through the TR-069 protocol. With this feature, the ISP can manage, through the cloud, all the devices installed at its subscribers. Management by TR-069 allows the ISP to perform diagnostics and tests remotely, reducing operational costs.

- GPON ONU with Dual Band Wi-Fi interface
- GPON class B+ transceiver
- EPON Support
- Two Gigabit Ethernet LAN interfaces
- Bridge / Router operation
- Wi-Fi IEEE 802.11 b/g/n 2,4GHz Wi-Fi and 802.11ac 5,8Ghz
- MIMO 2x2 and Beamforming
- EasyMesh
- High gain external antennas
- TR-069 Remote management




TECHNICAL SPECIFICATIONS

Item	Description
Dimensions (H x W x D)	28.6 x 130.2 x 101.2 mm (without antennas)
Operational Conditions	Temperature: 0°C to 50°C – Humidity: 10% to 90%, non-condensing
Storage Conditions	Temperature: -40°C to 70°C – Humidity: 5% to 95%, non-condensing
Power Supply	External adapter. Input: 100 ~ 240 Vac, 50/60Hz – Output: 12V, 1A
Average Power Consumption	< 12 W
Polarity	
Leds	Power, PON, LOS, INTERNET, 2.4GWLAN, 5GWLAN, LAN1, LAN2, WPS
xPON	1x EPON/GPON port, SC/APC connector
	According to ITU-T G.984, ITU-T G.988 and IEEE 802.3ah.
	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
	Upstream 802.1p VLAN mapping
	Flexible mapping between GEM Ports and TCONTs
	Up to 8T-CONTs
	Up to 8 GEM Ports
	AES-128 decryption
	DBA support
Wi-Fi	Unlocked for third-party OLTs
	Wi-Fi interface according to IEEE 802.11 b/g/n
	Support up to 300Mbps in 2,4Ghz 802.11n
	Support up to 867Mbps in 5,8Ghz 802.11ac
	2,4GHz MIMO 2x2 radio with two external antennas with 5dBi gain
	5,8GHz MIMO 2x2 radio with two external antennas with 5dBi gain and Beamforming
	Operation channels 2,4Ghz: 1 to 11 and Auto mode
	Operation channels 5,8Ghz: 36, 40, 44, 48, 149, 153, 157, 161 and Auto mode
	Wi-Fi Transmission Power:
	for 2,4 GHz 22,9dBm , +/-195mW (802.11b) 19,0dBm , +/-80mW (802.11g) 17,8dBm , +/-60mW (802.11n) ----- for 5,8G GHz 21,3dBm, +/- 135mW (802.11a) 21,0dBm, +/- 125mW (802.11N) 18,8dBm, +/- 77mW (802.11ac)

	<p>Wi-fi Receiver Sensitivity:</p> <p>for 2,4GHz: 11g 54M: -73dBm 11n HT20 MCS7: -67dBm 11n HT40 MCS7: -64dBm -----</p> <p>for 5,8GHz: 11a 54Mbps:-73dBm 11ac HT20 MCS8: -59dBm 11ac HT40 MCS9: -54dBm 11ac HT80 MCS9: -51dBm</p> <hr/> <p>Connected Devices: Up to 64 devices connected simultaneously, 32 devices in 2,4Ghz and 32 devices in 5,8Ghz</p> <hr/> <p>Support of up to 4 SSIDs per radio: 4 at 2.4Ghz and 4 at 5.8Ghz</p> <hr/> <p>Band Steering support</p> <hr/> <p>Site survey</p> <hr/> <p>64/128 bit WEP, WPA2-PSK (AES), WPA-PSK/WPA2-PSK (TKIP/AES) authentication Enterprise (802.1x Authentication) / RADIUS WPS - Wi-Fi Protected Setup</p>
Mesh	<p>EasyMesh standard support: Controller mode</p> <hr/> <p>Connection between Agents and Controller uses 5Ghz Backhaul or UTP Cable</p> <hr/> <p>Supports up to 2 synchronized agents</p> <hr/> <p>Mesh Agents Routers supported: DM955 and DM955M</p>
Ethernet Interface	<p>2x LAN 10/100/1000 Base-T interface, RJ-45 connector</p> <hr/> <p>Manual configuration or auto negotiation</p> <hr/> <p>Pinout identification via MDI / MDIX</p> <hr/> <p>Virtual switch based on 802.1q</p> <hr/> <p>MTU: 1600 bytes</p>
Software	<p>Web interface management, with two levels of access</p> <hr/> <p>Remote management via TR-069</p> <hr/> <p>Remote firmware upgrade via OLT or Web interface</p> <hr/> <p>Configuration Preset</p> <hr/> <p>Provisioning by OMCI protocol according to G.984 and G.988</p> <hr/> <p>Multiple WAN connections</p> <hr/> <p>IPv4 configurations: PPPoE or DHCP client, with option to set static IP IPv6 configurations: PPPoE or SLAAC/DHCPv6 client and static IPv6 option</p> <hr/> <p>IPv4 or IPv6 DHCP server for LAN and Wi-Fi interfaces</p> <hr/> <p>NAT/PAT, DNS Relay, SNTP support</p>

ORDERING INFORMATION

Model	Description	Photo
DM986-204 <i>825.8018.xx</i>	GPON ONU with integrated router, two 10/100/1000Base-T LAN port (RJ45) and IEEE 802.11b/g/n /ac Wi-Fi Dual Band 2,4Ghz and 5,8Ghz with Mesh support. Plastic cabinet with two external antennas. External AC power supply.	

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