

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	<p>1x EPON/GPON port, SC/APC connector</p> <p>According to ITU-T G.984, ITU-T G.988 and IEEE 802.3ah.</p> <p>1.244 Gbit/s upstream and 2.488 Gbit/s downstream</p> <p>Laser type B+, according to ITU-T G.984.2 Amd1</p> <p>Transmission Power: +0.5dBm to +5dBm, Reception Sensibility: -27dBm</p> <p>Reception Overload: -8dBm</p> <p>Wavelengths: upstream 1310nm and downstream 1490nm</p> <p>Laser according to FCC 47 CFR Part 15, Class B, FDA 21 CFR 1040.10 and 1040.11, Class I</p> <p>Activation by automatic discovery of serial number and password according to ITU-T G.984.3</p> <p>Upstream 802.1p VLAN mapping</p> <p>Flexible mapping between GEM Ports and TCONTs</p> <p>Up to 8T-CONTs</p> <p>Up to 8 GEM Ports</p> <p>AES-128 decryption</p> <p>DBA support</p> <p>Unlocked for third-party OLTs</p>
Wi-Fi	<p>Wi-Fi interface according to IEEE 802.11 b/g/n</p> <p>Support up to 300Mbps in 2,4Ghz 802.11n</p> <p>Support up to 867Mbps in 5,8Ghz 802.11ac</p> <p>2,4GHz MIMO 2x2 radio with two external antennas with 5dBi gain</p> <p>5,8GHz MIMO 2x2 radio with two external antennas with 5dBi gain and Beamforming</p> <p>Operation channels 2,4Ghz: 1 to 11 and Auto mode</p> <p>Operation channels 5,8Ghz: 36, 40, 44, 48, 149, 153, 157, 161 and Auto mode</p> <p>Wi-Fi Transmission Power:</p> <p>for 2,4 GHz</p> <p>22,9dBm , +/-195mW (802.11b)</p> <p>19,0dBm , +/-80mW (802.11g)</p> <p>17,8dBm , +/-60mW (802.11n)</p> <p>-----</p> <p>for 5,8G GHz</p> <p>21,3dBm, +/- 135mW (802.11a)</p> <p>21,0dBm, +/- 125mW (802.11N)</p> <p>18,8dBm, +/- 77mW (802.11ac)</p>

	<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) / 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
DM986-204 825.8018.xx	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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