DATACOM

DM955M
WIRELESS ROUTER

DATASHEET

DM955M

Dual Band Wireless AC1200 Gigabit Router

WIRELESS GIGABIT ROUTER WITH 4 HIGH PERFORMANCE ANTENNAS FOR LONG REACH WIFI

DM955M with dual band 802.11ac Wi-Fi technology provides a reliable and extremely fast network for its users. The 2.4 GHz band offers speeds of up to 300Mbps, perfectly supporting everyday tasks such as e-mails and web browsing, while the 5GHz band offers throughput of up to 867Mbps, ideal for UHD video streams and online games.

This Datacom wireless router has four external antennas that emit Wi-Fi signals to all rooms in the customer's environment. DM955M eliminates shadow zones and keeps the user connected by enjoying fast Wi-Fi access, whether in the living room, kitchen, bedroom or any other room in the home.

It supports a mesh network solution through the EasyMesh standard, expanding the network coverage. In this solution, the DM955M routers connect and distribute the signal forming a single network, providing a high quality signal throughout the environment.

Using MU-MIMO multi-antenna technology, the DM955M operates simultaneously with multiple devices. In this way it is able to avoid congestion and latency problems. This feature ensures that all connected devices gain access to data more quickly, making the user's connectivity experience much more efficient than in traditional wireless networks.
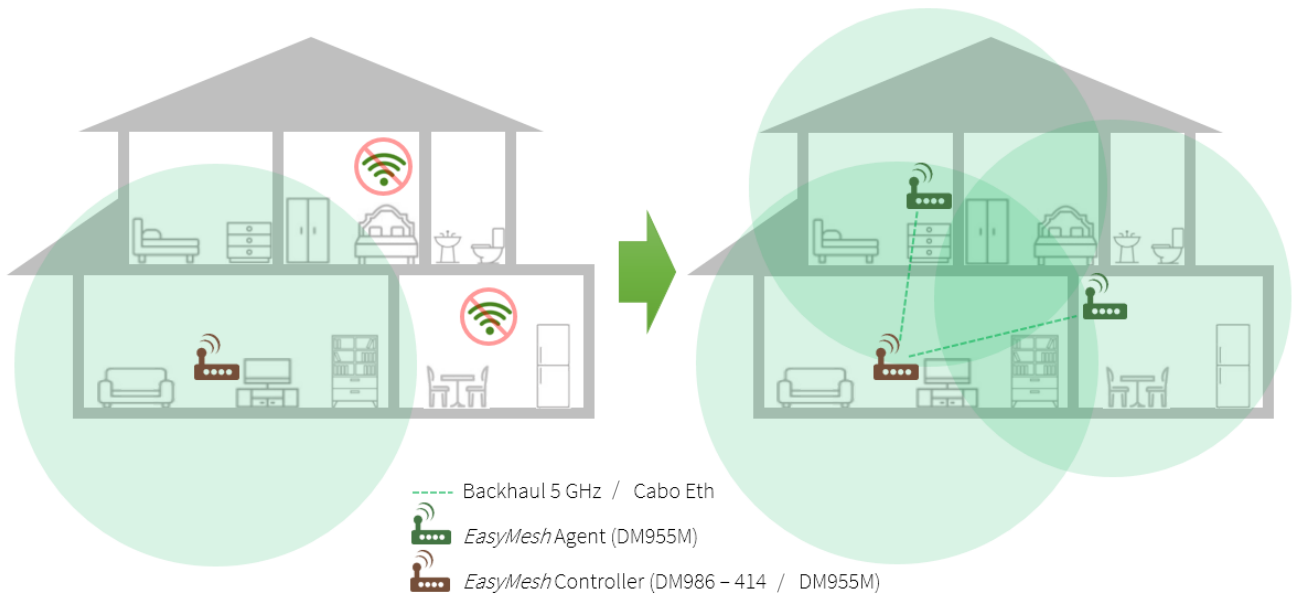
In addition to having advanced wireless technology, the DM955M has a Gigabit Ethernet WAN port for receiving the internet signal, and four Gigabit Ethernet LAN ports, allowing the users to directly connect their wired devices and obtain maximum network performance.

DM955M also has the remote management feature through the TR-069 protocol. With this feature, the ISP can manage, through the cloud, all the routers installed at its subscribers. Management by TR-069 allows the ISP to perform diagnostics and tests remotely, reducing operational costs.
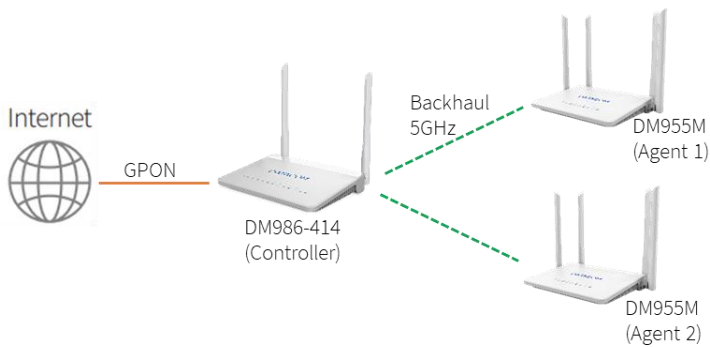.

- Dual band Wi-Fi 2.4GHz and 5GHz

- Rates up to 1200Mbps:
    - 300Mbps at 2.4GHz
    - 867Mbps at 5GHz

- Four 5dBi antennas

- EasyMesh

- 2x2 MU-MIMO and *Beamforming*

- Band Steering

- Multiple SSIDs

- Gigabit Ethernet WAN

- 4 Gigabit Ethernet ports

- IPv4/IPv6

    UPnP
- DMZ

- WebUi Management

- TR-069 Remote management
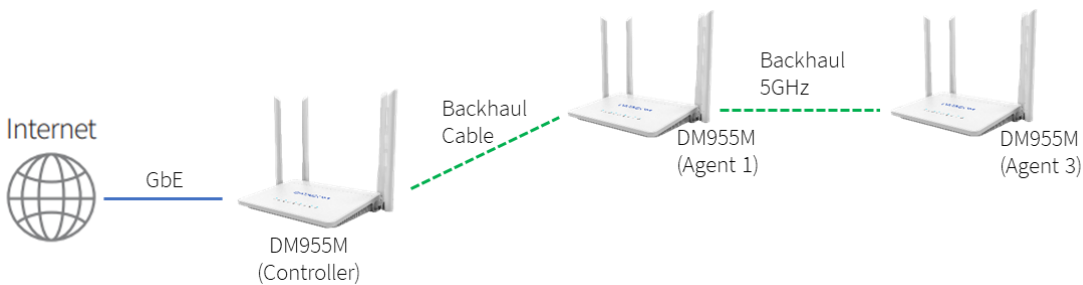
EASYMESH APPLICATION

The mesh network solution through the EasyMesh standard extends network coverage, providing a single network with quality signal in places that were previously shadow areas.

- - - - Backhaul 5 GHz / Cabo Eth

📶 *EasyMesh* Agent (DM955M)

📶 *EasyMesh* Controller (DM986 – 414 / DM955M)

MESH TOPOLOGY WITH DM986-414 ONU AS CONTROLLER

Internet

GPON

DM986-414
(Controller)

Backhaul
5GHz

DM955M
(Agent 1)

DM955M
(Agent 2)

MESH TOPOLOGY WITH DM955M AS CONTROLLER

Internet

GbE

DM955M
(Controller)

Backhaul
Cable

DM955M
(Agent 1)

Backhaul
5GHz

DM955M
(Agent 3)

FUNCTIONALITIES

WIRELESS INTERFACES (WI-FI)

Item	Functionality
Operating Frequencies	Dual band: 2.4 GHz and 5 GHz
Radio Mode	2.4 GHz – MIMO 2x2 (two external antennas with 5dBi gain) 5 GHz – Beamforming MU-MIMO 2x2 (two external antennas with 5dBi gain) Band Steering
Standards	2.4 GHz - IEEE 802.11 b/g/n 5 GHz - IEEE 802.11 a/n/ac
Bandwidth	2,4 GHz - 20, 40 MHz with 20/40 MHz coexistence 5 GHz - 20, 40, 80 MHz
Operation Channels	2,4 GHz – 1 to 11 and Auto mode 5 GHz – 36, 40, 44, 48, 149, 153, 157, 161 and Auto mode
Transmission Rate	2,4 GHz – up to 300 Mbps (802.11n) 5 GHz – up to 867 Mbps (802.11ac)
Transmission Power	**For 2.4 GHz:** 19,0dBm , +-80mW (802.11b) 17,0dBm , +-50mW (802.11g) 17,0dBm , +-50mW (802.11n) **For 5 GHz:** 19,0dBm, +- 80mW (802.11a) 17,0dBm, +– 50mW (802.11n) 16,0dBm, +- 40 mW(802.11ac)
Receiver Sensitivity	**For 2.4 GHz:** 11g 54M: -72dBm 11n HT20 MCS7: -70dBm 11n HT40 MCS7: -66dBm **For 5 GHz:** 11a 54Mbps:-72dBm 11ac HT20 MCS7: -67dBm 11ac HT40 MCS7: -64dBm 11ac HT80 MCS9: -57dBm
Connected Devices	Up to 60 devices connected simultaneously
Security	WEP, WPA2-PSK (AES), WPA-PSK/WPA2-PSK (TKIP/AES) 64/128 bit encryption WPS - Wi-Fi Protected Setup MAC (permission/Block) Access Control
Site Survey	SSID List

WAN INTERFACE

Item	Functionality
Quantity	1
Standard	10/100/1000 Base-T (RJ-45)
IPv4 Connections	DHCP Client, PPPoE Client, Static IP
IPv6 Connections	SLAAC/DHCPv6 Client (Stateless and Stateful), PPPoE Client, Static IPv6
Multicast	IGMP Proxy

LAN INTERFACES

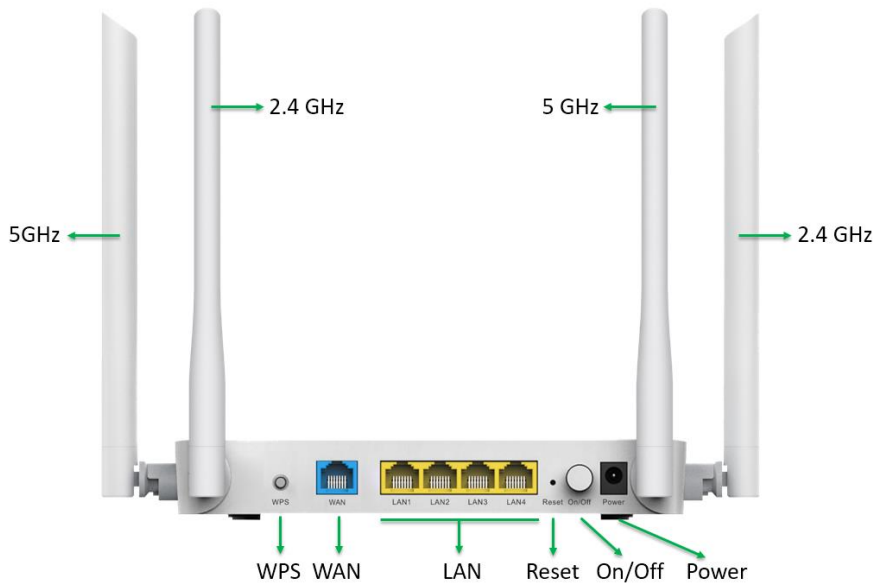| Item	Functionality
Quantity	4
Standard	10/100/1000 Base-T (RJ-45)
IPv4 Connections	DHCP Server, Static IPv4
IPv6 Connections	DHCPv6 Server, SLAAC+Stateless DHCP, Static IPv6
DNS	DNS Proxy

SOFTWARE

Item	Functionality
Security	Port Forwarding DMZ UPnP IPv4/IPv6 Filtering MAC Filtering URL Filtering
Mesh	EasyMesh standard support Controller and Agent mode Backhaul EasyMesh through Wi-Fi and / or Cable (hybrid mode)] EasyMesh Routes Agent compatibility: DM955M EasyMesh Controller devices compatibility: DM955M, DM986-204 and DM986-414
QoS	Bandwidth Control (Uplink and Downlink)
Management	IPv4 Management via WEB interface (HTTP) TR-069 Remote Management Wizard Setup for WAN and Wi-Fi DHCP Option43 for TR-069 Configuration Preset SNTP System Log Two levels of access to the WEB interface Factory configuration restore Save and Load via configuration file
Troubleshooting	Ping IPv4/IPv6 Traceroute IPv4/IPv6 WAN/LAN/WLAN interface statistics

STANDARDS

Group	Standards
IEEE	IEEE 802.11a: Wi-Fi standard for 5 GHz frequency with a capacity of up to 54 Mbps.
	IEEE 802.11b: Wi-Fi standard for 2.4 GHz frequency with a capacity of up to 11 Mbps.
	IEEE 802.11g: Wi-Fi standard for 2.4 GHz frequency with a capacity of up to 54 Mbps
	IEEE 802.11n: Wi-Fi standard for 2.4 GHz and/or 5 GHz frequency capacity up to 150 to 600 Mbps
	IEEE 802.11ac: Wi-Fi standard for 5 GHz frequency capacity up to 1300 Mbps
	IEEE 802.11i: 802.11 protocol security standard - WEP/WPA/WPA2 (TKIP/AES)
	IEEE 802.1D MAC bridges
	IEEE 802.3i 10BASE-T 10Mbit/s (1.25 MB/s) over twisted pair
	IEEE 802.3u 100BASE-TX Fast Ethernet at 100 Mbit/s (12.5 MB/s) w/auto negotiation
	IEEE 802.3ab 1000BASE-T Gbit/s Ethernet over twisted pair at 1 Gbit/s (125 MB/s))
IETF	RFC2131 – Dynamic Host Configuration Protocol
	RFC3315 – Dynamic Host Configuration Protocol for IPv6 (DHCPv6)
	RFC 2516 – A Method for Transmitting PPP Over Ethernet (PPPoE)
	RFC 5072 – IP Version 6 over PPP
	RFC 4862 – IPv6 Stateless Address Auto configuration
	RFC 3633 – IPv6 Prefix Options for Dynamic Host Configuration Protocol (DHCP) version 6
	RFC2865 – Remote Authentication Dial In User Service (RADIUS)
	RFC2869 – RADIUS - Support For Extensible Authentication Protocol (EAP)
	RFC2030 – Simple Network Time Protocol (SNTP) Version 4 for IPv4, IPv6 and OSI
	RFC2929 – Domain Name System (DNS) IANA Considerations
	RFC3022 – Traditional IP Network Address Translator (Traditional NAT)
	RFC6296 – IPv6-to-IPv6 Network Prefix Translation
	RFC6970 - Universal Plug and Play (UPnP)
Broadband Forum	TR-069: CPE WAN Management Protocol v1.1
	TR-098: Internet Gateway Device version 1
ANATEL	ANATEL – Act 1120 - Technical Requirements for Electromagnetic Compatibility for the Evaluation of Telecommunication Product Conformity
	ANATEL – Act 950 - Requirements for the Evaluation of the Conformity of Telecommunications Equipment with respect to the Aspects of Electrical Safety

TECHNICAL SPECIFICATIONS

Hardware		DM955M 5GT 1200
Dimension	Height	27 mm
	Width	184 mm
	Depth	135 mm
Operational Conditions	Temperature Range	0°C to 40°C
	Relative Humidity	5% to 95%, non-condensing
Power Supply	Input	100 Vac to 240 Vac, 50 to 60Hz
	Output	12 Vdc, 1000mA
	Average Consumption	< 12 W
	Polarity	⊖─◉─⊕
Interfaces	WAN	1x 10/100/1000 Base-T port
	LAN	4x 10/100/1000 Base-T port
	Antennas	2x 2.4 GHz antennas and 2x 5 GHz antennas

ORDERING INFORMATION

Model	Description	
DM955M 5GT 1200 *825020.xx*	DM955M 5GT 1200 - 2.4GHz and 5GHz dual band Wi-Fi router in plastic housing for home use, with 4 Gigabit Ethernet LAN interfaces and 1 Gigabit Ethernet WAN interface. External AC power supply.	

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