



motorola

Cable Modem plus Router

16x4 686 Mbps plus
AC1600 Dual Band Wi-Fi

The Motorola Model MG7540 cable modem with built-in router supports modem speeds up to 686 Mbps. With its high speed and IPv4 and IPv6 networking support, this is a product designed and built for use today and for years to come. The embedded AC1600 Dual Band wireless router provides the range, wireless speeds and networking support needed for multimedia, Internet video and high-performance networking in a home or office. AnyBeam implicit beamforming at 5.0 GHz focuses the wireless signal toward the wireless clients, increasing speed and range.



MG7540

16x4 686 Mbps*
DOCSIS 3.0
Cable Modem plus
AC1600 Wi-Fi® Router

Features

Fast data speed – Up to 686 Mbps downstream and 123 Mbps upstream with bonding of up to sixteen channels downstream and four channels upstream. Full-Band Capture Digital Tuning lets service providers deliver faster, more reliable Internet.

High speed AC1600 Dual Band Wi-Fi Router

- AC1600 Dual Band Wi-Fi plus 4 Gigabit Ethernet ports
- AC1600 Dual Band Wi-Fi provides wireless Internet access for wireless ac, n, a, g, and b devices including smartphones, computers, tablets, and HDTVs
- AnyBeam implicit beamforming at 5.0 GHz focuses the signal on wireless clients to allow better performance and range
- Four 10/100/1000 Gigabit Ethernet ports for wired connection to computers, HDTVs, game stations, and other Ethernet-capable devices

Security and Safety Features

- Advanced Firewall with DoS (Denial-of-Service) attack prevention, plus double SPI and NAT firewall protection
- Guest network access gives visitors Internet services while protecting your local network's information
- Parental control lets parents restrict access to child-inappropriate Web sites
- Browser-based Configuration Manager with easy menus and context-sensitive help

Easy installation

Supports IPv4 and IPv6 – Support for the latest Internet addressing keeps your equipment current.

Status-reporting LEDs – Power, Downstream, Upstream, Online, 2.4 GHz Wireless, 5.0 GHz Wireless, WPS, and Ethernet link lights allow easy status monitoring.

DOCSIS 3.0 compatible, and compatible with earlier standards – Provides support for DOCSIS 3.0 as well as DOCSIS 1.1 and 2.0, to ensure operation and compatibility with all U.S. operators. DOCSIS (Data Over Cable Service Interface Specification) is the industry standard for transmission of Internet data over cable-based systems in the U.S. and many other countries.

SNMP v1/v2/v3

Compact, space-saving design

Experienced, U.S.-based technical support

Certified by CableLabs®, Comcast XFINITY®, Time Warner Cable®, and other service providers

Two year warranty



Specifications

General

Cable Modem Service Interface:	F-type female 75 Ω (standard coaxial connector)	
Ethernet LAN Interface:	4 X RJ-45 10/100/1000 Mbps Ethernet, with Auto-MDI/MDIX	
Wireless:	<ul style="list-style-type: none">• 802.11ac/n/g/b/a• 2.4 GHz 2x2 MIMO (Multiple Input Multiple Output)• 5.0 GHz 3x3 MIMO	
Router Mode:	<ul style="list-style-type: none">• Dynamic DNS• DHCP Server and Client• NAT• Bridging	<ul style="list-style-type: none">• Port Forwarding/DMZ support• RIP V1 and V2• Support for up to 253 client devices
Security:	<ul style="list-style-type: none">• Stateful Packet Inspection (SPI)• VPN passthrough: PPTP, IPsec tunneling• Parental Control• Attack Protection• Password protected system management	<ul style="list-style-type: none">• IP/MAC/Port filtering• Denial of Service Notification• Wireless MAC address filtering• Supports Baseline Encryption (BPI) Management• Cable modem diagnostic log
Wireless Networking and Security:	<ul style="list-style-type: none">• Compliant with IEEE 802.11ac, n, g, b, and a standards• Up to 300 Mbps* at 2.4 GHz• Up to 1300 Mbps* at 5.0 GHz• Simultaneous Dual Band radios• WDS• WMM/WME• WPA-PSK/WPA2-PSK• WPA/WPA2	<ul style="list-style-type: none">• TKIP/AES• WPS• 802.1x Authentication• 6 SSIDs (3 per radio)• Wireless Quality of Service• Transmit power: 20dBm• Three internal dual band antennas• AnyBeam at 5.0 GHz for implicit beamforming with Wi-Fi devices that support 5.0 GHz
Status Indicators:	Front panel: Power, Downstream link, Upstream link, Connection status, 2.4 GHz Wireless link, 5.0 GHz Wireless link, WPS Back panel: Each Ethernet port has two LEDs indicating data flow and LAN connection speed. Green indicates 1 Gigabit; amber indicates 10 or 100 Mbps. Blinking indicates data flow.	
Size:	2 ½" wide by 8 ½" deep by 9" tall (63.5mm 216mm x 229mm)	
Weight:	23 ounces (652 grams)	
Power Adapter:	DoE-compliant Level VI energy-saving, UL-listed power adapter with 12 Volt DC, 2 Amp output and 100-240VAC universal input. NEMA 1-15 (North American style) 2-prong plug is provided in the US.	
Operating Temperature:	32° to 104° F (0° to 40° C)	
Certifications:	FCC 15B and 15C, FCC MPE, Bureau Veritas 60950-1 ITE safety, Wi-Fi Alliance®, CableLabs®, cable service providers	
Surge Protection:	Ruggedized cable and power lightning protection	
Warranty:	Two years	

Specifications

Operating Parameters

Downstream:

Data Rate*:	Up to 686 Mbps (16 channels), Up to 43 Mbps (single channel)
Frequency:	88 to 1002 MHz (edge to edge)
Modulation:	64 or 256 QAM
Operating Level Range:	-15 to +15 dBmV

Upstream:

Data Rate*:	Up to 123 Mbps (4 channels), Up to 31 Mbps (single channel)
Frequency:	5 to 42 MHz (edge to edge)
Modulation:	QPSK, 8QAM, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Operating Level Range:	A-TDMA: +8 to +54 dBmV (32QAM, 64QAM) +8 to +58 dBmV (QPSK) S-CDMA: +8 to +53 dBmV (all modulations)

Security: DOCSIS 3.0 Security (BPI+, EAE, SSD)

Network Protocols: IPv4, IPv6, TCP, UDP, ARP, ICMP, DHCP, FTP, TFTP, SNMP, HTTP

Application Protocol: SNMP v1/v2/v3

DHCP Client: Automatically retrieves IP and DNS server address from DHCP server at ISP

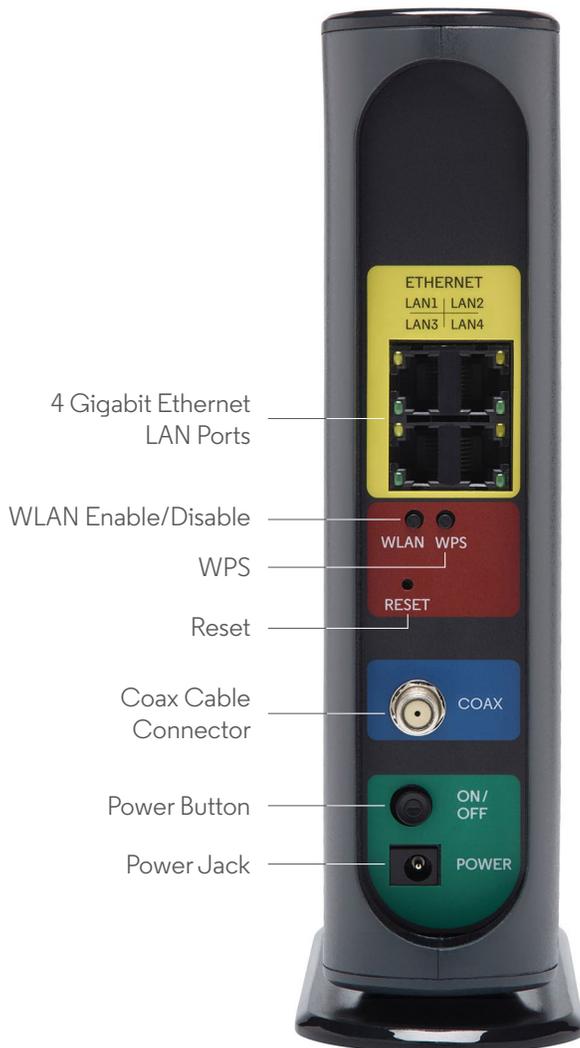
ToD (RF868): ToD support for local and MSO time synchronization

TFTP Client: TFTP support for cable modem configuration file download

Management: Web-based management interface utility

Core Chipset: Broadcom BCM33843G

Cable Modem/Router Back Diagram



System Requirements

- The cable modem must be connected to a cable modem service that uses any of the DOCSIS standards – 3.0, 2.0, 1.1.
- Directly connected devices, such as computers, HDTVs, and game stations, must have an Ethernet port.
- Devices connected wirelessly must have wireless ac, n, a, g, or b capability.
- The supplied power cube plugs into the most common USA power outlet.

Package Contents

- Cable Modem with built-in Wi-Fi Router
- Power Cube
- Ethernet Cable
- Velcro® Cable Organizer
- Coax Connection Tool
- Quick Start Flyer



* Data throughput will be reduced by network overhead. Delivered data speeds are also dependent upon the configuration and capacity of the data-over-cable service on which the MG7540 is used.

** Speeds shown are maximum wireless speeds derived from IEEE Standard 802.11 specifications. Actual speeds will vary.

MTRLC LLC
E-mail: sales@motorolacable.com
Phone: 1-800-753-0772

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