



## MESHdot Kit

EnGenius MESHdot Kit features the high-performing Wave 2 802.11ac mesh router and the mesh dot to deliver ultra-fast high-speed Wi-Fi for superb whole-home coverage—without interruptions. No more dead spots or delayed studying, working, or entertaining. The easy-to-use MESHdot Kit puts your network's control in your hands.

- The hottest high-tech 11ac Wave 2 technology with built-in mesh capabilities
- Simplified mesh Wi-Fi means no unsightly wires & annoying software.
- The EnMesh Mobile App guides you step by step through a simple, stress-free set-up.
- Customize parental controls easily via the EnMesh Mobile App.
- Expand system up to eight MESHdots for areas demanding more coverage.
- Transportable for adding Wi-Fi coverage wherever you need it

### Portable & Powerful Wi-Fi From Anywhere

The mesh router (ESR530) is the brains of your mesh network and works as your primary router. The mesh dot (EMD11) is transportable and smaller yet does the big job of expanding your network. Together, the MESHdot Kit lets you add Wi-Fi and customize your existing home network quickly and easily. Need to add a device to resolve a spotty Wi-Fi signal in your backyard? Have problems watching how-to videos from your garage during a tough home project? Just take the completely transportable EMD11 with you, plug it into an electrical socket, and create your own hotspot.

### Fast Wave 2 Wireless Speeds

Enjoy smooth HD streaming, accelerated surfing, and rapid file loading through fast Wave 2 speeds reaching 867 Mbps on 5 GHz and 400 Mbps on the 2.4 GHz frequency, mobile phones, laptops, and tablets, and maintain peak performance for older wireless devices through simultaneous dual-band connections.

### Simplified Setup of Your Mesh Network & Optimal Performance



Use the EnMesh app to easily set up and deploy your mesh network. It uses a smart, wireless method called "meshing" to connect MESHdots quickly, without running wires or setting up additional software.

The MESHdot sensors continuously scan the environment to detect the optimal connection quality and speeds. And EnMesh helps you monitor and control the network easily. Its multiple features give you insights into the entire mesh network.

### Access the Cloud via the EnFile App



Connect a USB storage device to the ESR530 to access your files and media wherever you go ... while they all remain safe. Play music and videos, back up your photos, and transfer multimedia files without hassle from wherever you are. You also

can access documents via the cloud or organize those files on your phone via the app's file management.



## Technical Specifications ESR530

### Standards

IEEE 802.11 b/g/n on 2.4 GHz

IEEE 802.11ac Wave 2/a/n/ on 5 GHz

### Processor

Qualcomm 717 MHz Quad-Core CPU

4x ARM Cortex A7

### Antenna

Integrated Omni-Directional 5dBi on 2.4 GHz

Integrated Omni-Directional 5dBi on 5 GHz

### Physical Interface

2x 10/100/1000 Mbps Ethernet Port  
(1 WAN/1 LAN)

1x USB 2.0 Port

1x Reset Button

1x DC Jack

### LED indicator

1 LED indicator with different colors  
and types

-White - Mesh and Internet connection  
status

-Red - No Internet connection or no Mesh  
connection

-Orange - Mesh connection signal is weak

## Wireless & Radio Specifications

### Operating Frequency

Dual-Radio Concurrent 2.4 GHz & 5 GHz

### Operation Modes

Mesh Router Mode

### Wireless Initial Setup (for Home Use)

EnMesh App Required

### Radio Chains/Spatial Stream

2x2:2 MU-MIMO

### Transmit Power

Up to 20 dBm on 2.4 GHz

Up to 19 dBm on 5 GHz

### Frequency Radio

2.4 GHz: 2400 MHz ~ 2835 MHz

5 GHz: 5150 MHz ~ 5250 MHz, 5250 MHz ~  
5350 MHz, 5470 MHz ~ 5725 MHz,  
5725 MHz ~ 5850 MHz

### Supported Data Rates (Mbps):

2.4 GHz: Max 400

5 GHz: Max 867

802.11b: 1, 2, 5.5, 11

802.11a/g: 6, 9, 12, 18, 36, 48, 54

802.11n: 6.5 to 400 Mbps (MCS0 toMCS15)

802.11ac: 6.5 to 867 Mbps (MCS0 to MCS9,  
NSS = 1 to 2)

### Supported Radio Technologies

802.11b: Direct-Sequence Spread Spectrum  
(DSSS)

802.11a/g/n/ac: Orthogonal Frequency-Division  
Multiplexing (OFDM)

### Channelization

802.11n Supports High Throughput (HT)  
—HT 20/40 MHz

802.11n Supports Very High Throughput  
(VHT) Under the 2.4 GHz Radio—VHT 40  
MHz (256-QAM)

802.11n/ac Packet Aggregation: AMPDU,  
ASPDU

802.11ac Supports Very High Throughput  
(VHT)VHT 20/40/80 MHz

### Support Modulation

802.11b: BPSK, QPSK, CCK

802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM

802.11ac: BPSK, QPSK, 16-QAM, 64-QAM,  
256-QAM

### Software Features

All setup on EnMesh mobile APP

Mesh easy connection

Internet Speed Test

Mesh connection status overview

Auto Channel Selection

Auto Transmit Power

Guest Network

Encryption: WEP / WPA / WPA2 / TKIP / AES

WAN: PPPoE / Static IP / DHCP

Band steering

Port Forwarding

DHCP Server

URL / IP / Port / ICMP Filtering

UID / DDNS / EnGenius DDNS Service

UPnP Support

Remote Control

Firmware Upgrade

Airprint Server Support

Emergency Recovery Page

Backup / Restore Setting

EnMesh & EnFile Mobile App. (iOS/Android)  
Supported

### Parental Controls

Wi-Fi Access Scheduler

Pause Internet

Guest Network per Band

Website & Keyword Filter - (URL, IP, Port, ICMP)

QoS (Quality of Service)

### Network Services

DHCP

Static IP

### Environment & Physical

#### Physical/Environment Condition

Operation Temp.: 0°C ~ 40°C

Humidity 90% or less (Non-Condensing)

Storage Temp.: -20°C ~ 60°C

Humidity 95% or less (Non-condensing)

### Hardware Specifications

#### ESR530

Dimension: 127 x 47.2mm (Diameter x  
Height)

Power Adapter: 12V / 1A

### Certifications

FCC, CE

### Warranty

1 Year

## Technical Specifications EMD11

### Standards:

IEEE 802.11b/g/n on 2.4 GHz

IEEE 802.11ac Wave 2/a/n/ on 5 GHz

### Processor

Qualcomm 717MHz Quad-Core CPU

4x ARM Cortex A7

### Antenna

Integrated Omni-Directional Antennas

### LED Indicators

1 Color-Status LED

-White: Mesh & Internet Connection Status

-Red: No Internet Connection or No Mesh Connection

-Orange: Mesh Connection Signal is Weak

## Wireless & Radio Specifications

### Operating Frequency

Dual-Radio Concurrent 2.4 GHz & 5 GHz

### Operation Modes

Mesh Mode, AP Mode

### Max. Nodes

8 (including the EnMesh Whole Home Wi-Fi System Router)

### Wireless Initial Setup (for home use)

EnMesh Whole Home Wi-Fi System

EnMesh App Required

### Radio Chains/Spatial Stream

2x2:2 MU-MIMO

### Transmit Power

Up to 19 dBm on 2.4 GHz

Up to 19 dBm on 5 GHz

### Frequency Radio

2.4 GHz: 2400 MHz ~ 2835 MHz

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802.11n/ac Packet Aggregation: AMPDU, ASPDU

802.11ac Supports Very High Throughput (VHT)VHT 20/40/80 MHz

### Support Modulation

802.11b: BPSK, QPSK, CCK

802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM

802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM

### Features – with EnMesh Whole Home Wi-Fi System

Auto Channel Selection

Auto Transmit Power

Wireless STA (Client) Connected List

Guest Network

Fast Roaming (802.11k & 802.11r)

AirPrint® Server Support

Restore Factory Settings

Auto Reboot

Internet Speed Test

Mesh Connection Status

UPnP Support

System Recovery

Manual/Auto Firmware Update Manual/Auto Firmware Update

Band Steering

Port Forwarding

UID/DDNS/EnGenius DDNS Service

### Parental Controls

Wi-Fi Access Scheduler

Pause Internet

Guest Network per Band

Website & Keyword Filter - (URL, IP, Port, ICMP)

QoS (Quality of Service)

### Wireless Security

WPA2 Enterprise (AES)

SSID Password

### Network Services

DHCP

Static IP

## Environment & Physical

### Temperature Range

Operating: 32 °F~95 °F (0 °C~35°C)

Storage: -4 °F~140 °F (-20 °C~60 °C)

### Humidity (non-condensing)

Operating: 90% or less

Storage: 90% or less

## Hardware Specifications

### EMD11 Mesh Dot

Weight: .6 lbs. (316 g)

Width: (62.5 mm) (2.46 inches)

Length: (62.5 mm) (2.46 inches)

Height: (52.7 mm) (2.07 inches)

### Package Contents

#### EMD11

1 x EMD11 Wave 2 Dual-Band AC1300 Mesh Dot

1 x Quick Start Guide

#### ESR530/EMD11 Bundle Kit

1 x ESR530

1 x EMD11

1x Quick Start Guide

1x RJ-45 Ethernet Cable

1x Power Adapter (for EMR3500)

1x Security Chain

### Certifications

FCC, CE

### Warranty

1 Year

## ESR530



## EMD11



# EnGenius®

Maximum data rates are based on IEEE 802.11 standards. Actual throughput and range may vary depending on distance between devices or traffic and bandwidth load in the network. Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners. For United States of America: Copyright ©2019 EnGenius Technologies, Inc. All rights reserved.