



# **EnGenius Mesh Dot EMD1**

EnGenius Mesh Dot EMD1 is a 802.11ac Wave 2 Dual-Band Access Point that installs in an instant, adding Wi-Fi, strengthening range, and increasing speed in homes or small offices. Portable and easy to use, Mesh Dot adds Wi-Fi where you need it, in more remote areas of the home like garages, attics or basement work spaces, and backyards.

## Portable, Powerful & Pocket-Sized

The Mesh Dot adds Wi-Fi and customizes an existing home network quickly and easily when added to an EnMesh Whole Home Wi-Fi System. Need to add a device to resolve a spotty Wi-Fi signal in your backyard pool area? Having trouble watching how-to videos in your garage workshop during a tricky project? Simply take the Mesh Dot with you, plug it into an electrical socket, and create your own hotspot!

This tiny-but-mighty device fits in the palm of your hand, plugs in easily, and blends into most home or office settings. It can be used wirelessly or connected via an Ethernet cable and port. Whether the Mesh Dot resides in a dedicated spot, or moves about creating portable hotspots based on need, the Mesh Dot is the perfect way to plug and play. Up to seven Mesh Dots can be added to an EnMesh Whole Home Wi-Fi Router.

# **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 to 400 Mbps on the 2.4 GHz frequency band ensuring ample capacity for all connected digital devices. Ensure network performance for newer 11ac mobile phones, laptops and tablets, and maintain peak performance for older wireless devices through simultaneous dual-band connections.

## **Features & Benefits**

- Perfect for creating hotspots in difficult-to-cover spots inside or outside the home
- Portable, compact and easy to use either wirelessly or wired with 1 Gigabit port
- · Boosts signal speed, strength, and coverage
- Create Wall-to-Wall Wireless Coverage That Eliminates Dead Spots
- Mesh Utilizes Smart Sensors to Automatically Optimize Connections
- High Performing Wave 2 Supports Buffer-Free Video & Audio in Every Room
- Simplified Mesh Wi-Fi: No Wires to Run & No Software to Setup
- Quick, Step-by-Step Setup via EnMesh Mobile App
- Full Network Insight, Parental Controls, and Secure Guest Wi-Fi via EnMesh App
- Advanced Management via Managed Switches or ezMaster™



# Smart Mesh Wi-Fi Simplifies Setup & Optimizes Connections

Simple, quick step-by-step setup is completed via the EnMesh Mobile App. This solution utilizes a smart wireless method called meshing to connect Mesh Dots quickly, without running wires or setting up software. Mesh technology uses smart sensors that are always scanning the environment to detect the optimal connection quality and speeds, and immediately fix network slowdowns, re-routing data in the event a Dot ever loses connection.

### You're in Total Control

The EnGenius EnMesh Mobile App not only makes installing the Mesh Dot easy; it makes monitoring and controlling the network just as simple. Multiple features give users full insight and control into the entire home network.

Speed-test your Internet connection and monitor the link quality of each Mesh Dot. Securely share Wi-Fi with guests and enable parental controls to define Internet usage rules and schedules for each family member. Automatically update each Mesh Dot and fix and detect network problems with one-touch troubleshooting.

# **Advanced Management**

Take your mesh system to the next level, locally or remotely, with EnGenius' managed gigabit switches or their license-free network management software − ezMaster™. EnGenius managed gigabit switches offer local management for up to 50 devices within the same location.

ezMaster Management Software includes remote monitoring and expanded management features. This flexible and scalable solution offers network management with rich reporting and analytics, business-class features and no licensing or annual subscription fees.











# **Network Management**

The EnGenius Mesh Dot EMD1 can be managed with either the EnGenius' EnMesh App or via Advanced Network Management software, ezMaster, creating a scalable solution that's perfect for a home, office, or small business.

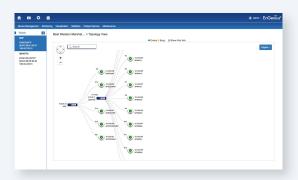
# Manage Mesh Dots with EnGenius Managed Switches

EnGenius' Managed Gigabit Switches can manage up to 50 EnGenius devices on the network, including Mesh Dots. Through the switch, gain access to all connected EnGenius devices and a full array of wireless and Layer 2 management tools. Managed Mesh Dots are wired via Ethernet or wireless and maximize flexible deployment and management options with no AP license or subscription fees.

# ezMaster™ Network Management Software

EnGenius ezMaster Software's simple, intuitive Webbased interface allows flexible access point monitoring locally or remotely. Quickly and easily set up, manage, monitor, and troubleshoot multiple Mesh Dots at the same time. See real-time network performance and monitor AP traffic through ezMaster's at-a-glance dashboard. ezMaster provides management local or remotely with no licensing or subscription fees.







## **System Requirements**

Recommended environment for managing up to 500 APs

CPU: Intel® Core™ i7 quad-core or above

RAM: 4 GB minimum

HDD: 500 GB (actual requirement is dependent on log size) OS: Microsoft® Windows® 7 or later + VMware® Player 7.0 or compatible virtualization software

Recommended environment for managing up to 1000 APs

CPU: Intel® Xeon® Processor E3 or above

RAM: 4 GB minimum

HDD: 500 GB (actual requirement is dependent on log size) OS: Microsoft® Windows® 7 or later + VMware® Player 7.0 or compatible virtualization software

### **Browser Requirements**

Internet Explorer 10 or better, Firefox 34.0 or better, Chrome 31.0 or better, Safari 8.0 or better

#### **Network Topology Requirements**

At sites where APs are deployed: A DHCP-enabled network for APs to obtain IP address

### Technical Specifications EMD1 Mesh Dot

#### Standards:

IEEE 802.11b/g/n on 2.4 GHz IEEE 802.11a/n/ac on 5 GHz

#### Antenna

Integrated Omni-Directional Antennas

Physical Interface 1 x 10/100/1000 BASE-T, RJ-45 Gigabit Ethernet Ports

#### **LED Indicators**

1 Color-Status LED

- -White: Mesh & Internet Connection Status
- -Blue: Bluetooth 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

#### **Frequency Radio**

2.4 GHz: 2400 MHz ~ 2835 MHz 5~GHz:  $5150~\text{MHz} \sim 5250~\text{MHz}$ ,  $5250~\text{MHz} \sim 5350~\text{MHz}$ ,  $5470~\text{MHz} \sim 5725~\text{MHz}$ , 5725 MHz ~ 5850 MHz

#### **Transmit Power**

Up to 19 dBm on 2.4 GHz Up to 19 dBm on 5 GHz

#### **Radio Chains/Spatial Stream**

2x2:2 MU-MIMO

#### Max. Speeds

400 Mbps on 2.4 GHz 867 Mbps on 5 GHz

#### **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 to MCS15) 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)

802.11ac Supports Very High Throughput (VHT)-VHT 20/40/80 MHz 802.11n Supports High Throughput (HT)—HT 20/40 MHz 802.11a/b/g Supports High Throughput (HT)-20 MHz

#### **Supported 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 USB Features: SAMBA UPnP Support System Recovery Manual/Auto Firmware Update Band Steering Port Forwarding UID/DDNS Remote Control

### **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 PPPoE

#### **Mobile App**

EnMesh (setup, monitoring, parental control) EnFile (private cloud storage) Available for iPhone® & Android™

#### **Environment & Physical**

Temperature Range Operating: 32 °F~104 °F (0 °C~40 °C) Storage: -4 °F~140 °F (-20 °C~60 °C)

**Humidity (non-condensing)** Operating: 90% or less Storage: 90% or less

#### **Dimensions & Weights**

EMD1 Mesh Dot Weight: .6 lbs. (316 g) Width: 5" (126.8 mm) Length: 5" (126.8) Height: 1.86" (47.2 mm)

Packaging Weight: 1.5 lbs. (464 g) Width: 5.74" (146 mm) Length: 5.86" (149 mm) Height: 3.7" (94 mm)

# Package Contents EMD1

- 1 x EMD1 Wave 2 Dual-Band AC1300 Mesh Dot 1 x Power Adapter
- 1 x Quick Start Guide
- 1 x RJ-45 Ethernet Cable

# **Certifications** FCC, CE

### Warranty:

1 Year

