



SkyKey I

# SkyKey Series

# **Cloud Access or Local Access Management**

The SkyKey series solution can be applied to manage EnGenius Wireless Access Points and switches from both remote and local sites intuitionally and easily. The solution is also supported to power by either 802.3af/at PoE (Power Over Ethernet) or DC12V power.

EnGenius Wireless Management system is a flexible, robust, and affordable solution designed for deploying on the versatile application which could handle multi-requirements to fulfill customers' desire from pro-users to large scope deployment under a corporate easily and intuitionally.

The simple and edge design could realize plug and play easily without complicated installation on your personal computers or servers. SkyKey series can be worked with EnGenius PoE switches or other ones throughout Ethernet, as well as stacked on rack or desktop easily.



## **Features**

- Built-in Qualcomm Quad-core CPU with supporting powerful computing for driving and boosting performance effectively.
- Compliance with 802.3af/at or DC12V Input power source
- 2 x 10/100/1000 Mbps Ethernet ports that use to network with switches or servers easily.
- Expanding Micro SD slot for backing up configuration of this SkyKey.
- Built-in management software to organize systemic and distributed managerial system for controlling 50 sets of EnGenius Access Points directly.
- Built-in 1GB DRAM and 4GB eMMC flash storage to control and to manage statistical information up to 7 days at least.

## Wireless Management solution is ideal for deployment in these venues:

- **Airport Terminals**
- Warehouse Operations
- College classrooms
- Corporate workspace
- **Rail Station**
- **Shopping Malls**
- **Resort Properties**
- Stadiums & Arena
- **Medical Centers**
- > Luxury Homes & Estates

## **Technical Specifications** SkyKey Solution

## **Hardware Specification**

Model: Qualcomm IPQ4019

Architecture: 32-bit

Clock Rate: ARM A7 Quad Core 717MHz Hardware Encryption Acceleration: Yes

Memory: System Memory: 1GB DDR3

eMMC: 4GB (MLC)

Interfaces and LEDs 2×10/100/1000 Mbps RJ45 ports (1×PoE) 1×Micro SD Slot 1×DC-Input Jack

1 x Reset Button

1x Power LED (Orange) 2x LAN LED (Green)

## **Mechanical & Environment**

### Dimension

## Weight (Without accessories)

Operating: Temperature:  $0^{\circ}\text{C}^{-}40^{\circ}\text{C}$  (32°F~104°F) Humidity:  $0\% \sim 90\%$  typical

**Storage:**Temperature: -40°C~80°C (-40°F~176°F)
Humidity: 0% ~ 90% typical

## **Compliance Regulatory**

Subpart15 B

EN 55032 EN 55024

Low Voltage Directive 2014/30/EU

## Mounting

Ceiling Mounting
Assemble a mounting bracket for drop ceiling

Wall Mounting
Mount Access Point on a flat wall via included accessories





## **Technical Specifications** SkyKey Solution

### Controlling capability

Managing Qty of Access Points Maximum 50 pcs of EnGenius Access Points

### Reserving duration of managerial data

Maximum 30 days if users control and manage 50pcs of Access Points on a SkyKey solution. Each Access Point has networked with 40 client devices simultaneously.

### Dashboard

Managed Access Points / Switches Users can realize status of Access Points and Switches

### System Resource Usage

CPU: Usage (%) of CPU for this SkyKey Memory: Usage (%) of Memory for this SkyKey Disk: Usage (%) of Disk for this SkyKey

### System Overview

Users can realize ezMaster software version on this SkyKey

Updated or revised projects are listed in the right side bar.

### **Global Settings**

### Account Management (Multi-Tenant)

Master: A supervisor user can be considered as a master which can implement any managerial behavior under a Sky.

Users: Master can assign one of users to a project. Users can edit, manage, remove, Add Access Points, as well as block/allow client devices to access

Guests: Master can assign one of guests to a specified project. Under this project, a guest can review any information, except for configuration.

Provide a network monitoring tool for administrators to stay informed the configuration change.

Backup overall setting of a ezlMaster account. Users can restore this settings/configuration to one ezMaster easily.

Reboot/Reset SkyKey Reboot this ezMaster under this SkyKey.

Reset all configuration to default value on this SkyKey.

## **Background Scanning**

Regular scanning signal level of an environment to provide parameters for performing Auto Transmit power and auto channel.

### Diagnostic

Enable this function to detect the connecting status of this ezMaster under the SkyKey.

### **Auto Transmit Power**

Automatically adjust power level when EWS access points work at an environment.

### **Auto Channel**

Automatically assign a clearly channel to perform RF transmission under a pervasive environment.

### Software Update

Update ezMaster under this SkyKey throughout manually update Update ezMaster under this SkyKey throughout one-click-update function

Put AP to this SkyKey inventory list before managing. The maximum Qty is supported up to 50 APs.

### Scheduler Settings

Reboot: Reboot Access Points under a project at a time for every weeks or

specified days. Scheduler for SSIDs: Enable this function to allow one of SSIDs for enabling during a session or days of week.

Finger Printing
The value added solution collect information of client devices including name of devices, IP address, MAC address, Operating system version, transmitting and receiving data, and signal level.

### **Cluster Setting (Group Setting)**

SSID Setting
Support 8 SSIDs on both 2.4GHz and 5GHz radios
Users can consider to enable either 2.4GHz or 5GHz radios' interfaces, as well as enable both radios under a SSID.

### Hidden SSID in beacons

Hide this SSID to avoid users for finding it.

### VLAN Per SSID

Integrate VLAN ID with a SSID interface to forward packets over the defined path.

### Fast Roaming (802.11k)

Collect parameters of neighborhood Access Points to find the optimal AP, then client devices will use a fast transition key to handover between AP.

Steer client devices to a proper frequency band for getting more bandwidth and speed under an Access Point.

### RSSI Threshold

Kick the client which the signal (RSSI) is above the set value from the AP for reducing the interference and optimize the connecting quality.

The NAS IP address to be sent in RADIUS packets from that server.

It is primarily used to notify the source of RADIUS access request so that, the RADIUS server can choose Policy for that request.

Assign a port to be sent in Radius packets from that server.

Wireless Encryption Standard WPA3/WPA2 AES WPA3/WPA2 Enterprise (WPA-EAP AES)

\*WPA3 will be supported in Q3, 2019.

### 12 Isolation

Block the communication between the associated clients to communicate with other clients from all hosts on the same subnet.

## **Scheduler Settings**

Reboot: Reboot Access Points under a project at a time for every weeks or specified days.

Scheduler for SSIDs: Enable this function to allow one of SSIDs for enabling during a session or days of week

## Whited List/Blocked List per SSID

Whited List: Enable a list to allow client devices for accessing to this SSID.

## Whited List/Blocked List per SSID

Whited List: Enable a list to allow client devices for accessing to this SSID. Blocked List: Enable a list to block client devices for accessing to this SSID.

## Captive Portal (NAT / Bridge mode)

Differentiate the authority of users on using Internet access

MAC Address Filtering
Filter up to 32 sets of MAC addresses per SSID

Traffic Shaping
Controls the bottle of bandwidth to offer the limited bandwidth for an individual SSID or each client per Access Point.

### Monitoring

### **Rogue AP Detection**

Enable the function to detect the fake access points in the environment.

The page will show clients' information including client name, getting IP, MAC address, Client OS\*, SSID, Band, Tx, Rx, and RSSI information.

### Statistics Information

## **Access Point**

Top ten traffic for the Managed AP. We can reserve data up to 30 days.

### Wireless Client Information

Top Fifty (50) traffic for wireless client devices.





## **Technical Specifications** SkyKey Solution

## Visualization

### **Topology View**

Topology view
Topology view could assist users to realize status of your network and then
find abnormal devices for trouble shooting easily.

Map View
Enter this view to find locations of Access Points or switches on global view of google map. You may also filter one of APs from google map easily.

### Floor Plan View

Upload a floor plan for this project. Users can put a known floor plan and then place Access Points or switches on this view.

Mesh view also can be realize the overall topology for mesh.

**Hotspot Service**Cpative Portal profile setting will be set a profile to apply on one of SSIDs. Users can configure authentication types, session of connecting clients, redirect page types and redirect behavior

System Overview
Users can realize ezMaster software version on this SkyKey

Recent Projects Updated or revised projects are listed in the right side bar.

### Maintenance

### **Bulk Update**

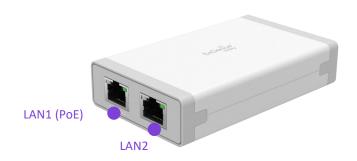
Throughout this function to proceed mass upgrade procedure on a specific AP.

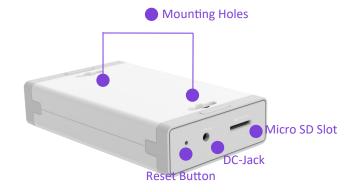
## **Bulk Update (Switch)**

Throughout this function to proceed mass upgrade procedure on a specific

AP Remote Log Synchronize clients' information of AP to a remote log server.

## **Physical Interfaces**





### HQ, Taiwan

www.engeniusnetworks.com

Costa Mesa, California, USA | (+1) 714 432 8668 www.engeniustech.com

Markham, Ontario , Canada | (+1) 905 940-8181 www.engeniustech.com

Dubai, UAE | (+971) 4 357 5599

www.engenius-me.com

Singapore | (+65) 6227 1088 www.engeniustech.com.sg

**Eindhoven, Netherlands** | (+31) 40 8200 888

www.engeniusnetworks.eu



Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense. Prior to installing any surveillance equipment, it is your responsibility to ensure the installation is in compliance with local, state and federal video and audio surveillance and privacy laws.

Version 1.1— 15/01/19