Quick Start Guide

Cloud-Enabled Enterprise Access Point

The Spark AC750 are dual AP. The units are designed to be operated either placed on a desk or mounted on a wall or ceiling. The package includes a mounting plate for attaching the AP to a wall or ceiling T-bar. The APs can be powered either by the universal power supply included in the package, through an Ethernet cable connection from a Power-over-Ethernet (PoE) injector, or from a 802.3af-compliant PoE switch.

The Cloud-Enabled Enterprise Access Point includes these models:

- IR-AC750 & IR-AC750-EU — dual-band concurrent enterprise AP with integrated antennas plus passive Power-over-Ethernet (PoE)

Note: For Safety and Regulatory information, refer to the Safety and Regulatory Information document included with the AP.

Follow the steps in this guide to install the AP in your network.

Caution: The planning and installation of the AP requires professional personnel that are trained in the installation of radio transmitting equipment. The user is responsible for compliance with local regulations concerning items such as antenna power for instance. Therefore, it is recommended to consult a professional contractor knowledgeable in local radio regulations prior to equipment installation.

1. Unpack the AP

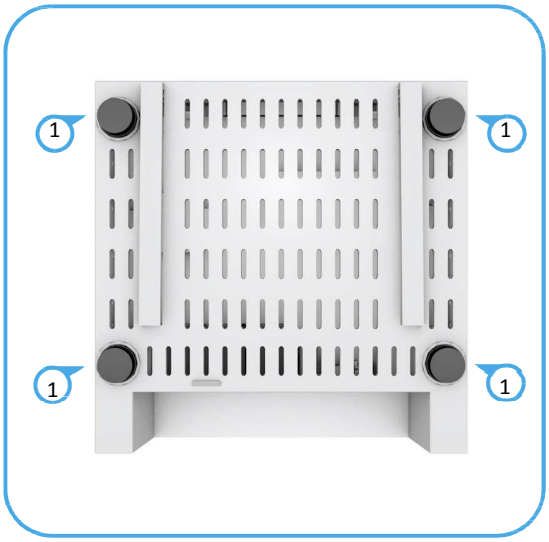
Unpack the AP and check the package contents.

- Cloud-Enabled Enterprise Access Point Spark AC750
- Mounting plate
- Mounting kit — 4 screws, 4 wall plugs, and 4 rubber feet
- Universal AC/DC power adapter
- Documentation —*Quick Start Guide* and *Regulatory and Safety Information*

2. Mount the AP

Using the AP on a desktop

If the AP is not mounted on a wall or on the ceiling, place the provided rubber feet on the AP.

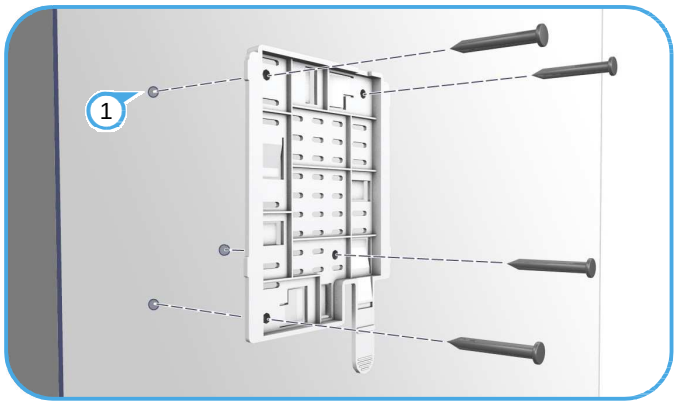


Desktop Mounting

1. Place the provided rubber feet over the four screw holes.

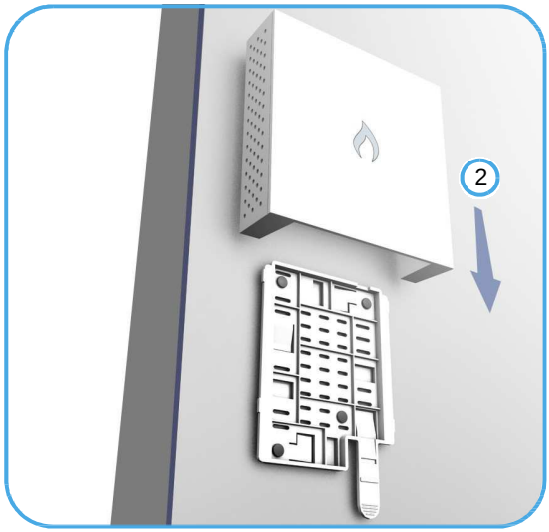
Mounting the AP on a wall

Mount the unit on a wall using the mounting plate, screws, and wall plugs provided in the mounting kit.



Wall Mounting

1. At the installation location, hold the mounting plate against the wall with its release tab pointing down.
   Mark the four holes for the wall plugs and screws. Drill four holes for the wall plugs, and then insert the plugs and tap them flush with the wall surface.
   Align the mounting plate with the four holes, and then use the four screws to secure it to the wall.

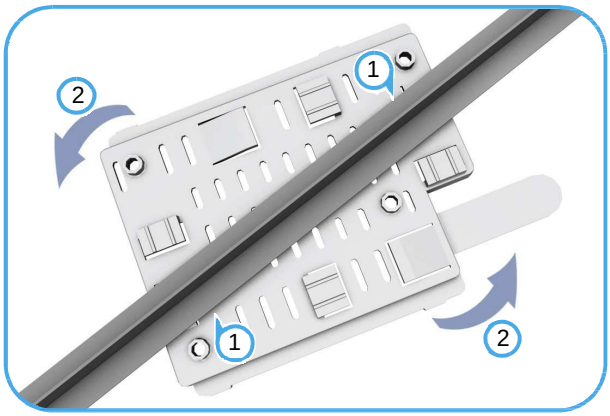


2. With its ports facing down, place the AP against the wall above the mounting plate.
   Slide the rails on the back of the AP down onto the mounting plate until it snaps into its secured position. Do not let go of the AP until you confirm that it is secure.

Mounting the AP on the ceiling

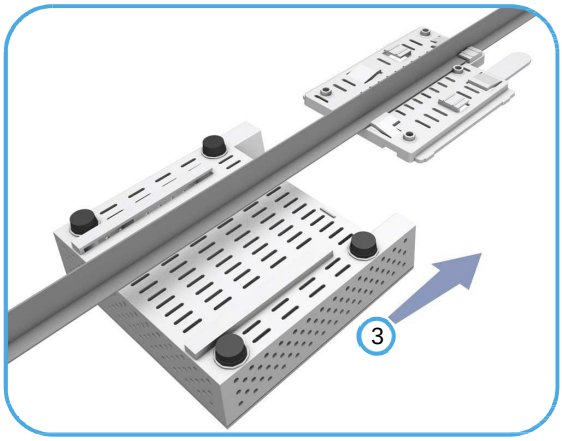
If the room is equipped with a suspended ceiling, use the mounting plate provided in the package to attach the AP to the metal ceiling T-bars.

The mounting plate supports two different sizes of suspended ceiling T-bars. The position illustrated below is for 15 mm bars. Use the position at a 90 degrees angle for 24.5 mm bars.



Suspended Ceiling Mounting

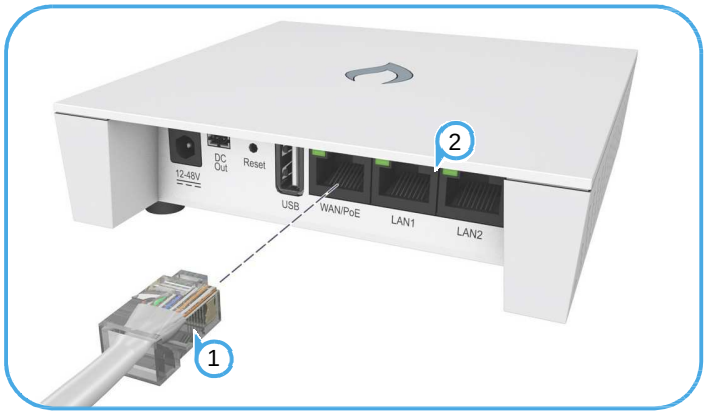
1. Press the retention clips of the mounting plate against the ceiling T-bar.
2. Rotate the plate until the T-bar snaps into place.



3. Slide the rails on the back of the AP along the sides of the ceiling mounting plate until it snaps into its secured position.

3. Connect Cables

Connect Ethernet cable to the 1000BASE-T (**WAN/PoE**) port on the unit.

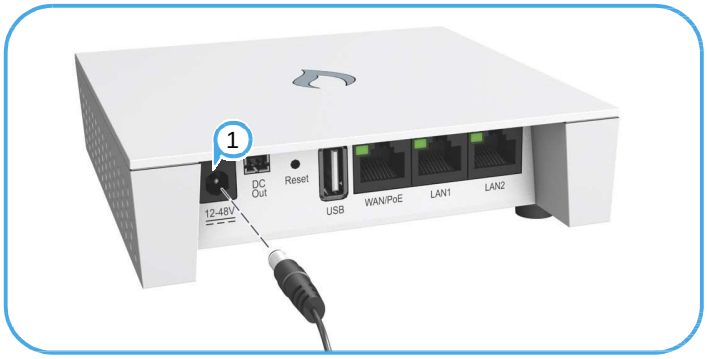


1. Connect Category 5e or better cable to the **WAN/PoE** RJ-45 port.
   Connect the other end of this cable to a PoE injector or LAN PoE switch (depending on AP model).
2. (Optional) Connect local LAN devices to any of the other RJ-45 ports on the AP using Category 5 or better cable.
   These 100BASE-TX ports are labeled **LAN1** and **LAN2**.

4. Connect Power

The AP can be powered either by the AC/DC power adapter provided in the package, by a PoE power injector (Spark AC750)

Powering the AP with the AC/DC Power Adapter



1. Connect the cable from the power adapter to the DC power jack on the AP.

   Connect the power adapter to a nearby AC power source (100-240 VAC, 50/60 Hz).

Powering the AP with a PoE Injector or PoE Switch

Connect Ethernet cable from the **WAN/PoE** port of the AP to a port on the PoE power source device:

- Spark AC750 — a PoE power injector (passive PoE, 24-48 VDC).

switch. Make sure that the PoE power injector or switch is connected to the

LAN.

Note: Connecting the Ethernet cable from the AP to a PoE injector or PoE switch powers on the unit.

5. Verify AP Operation

Verify basic AP operation by checking the system LEDs.

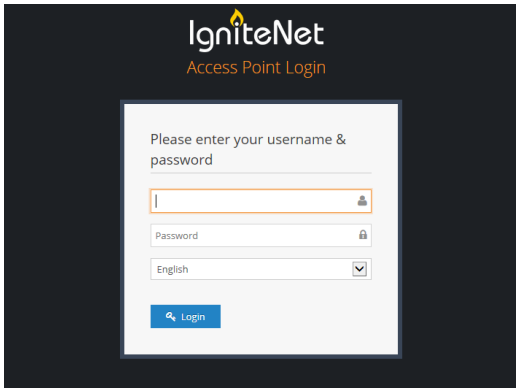
1. The **WAN/PoE** port link/activity LED should be on/blinking green. When connected, the **LAN1** and **LAN2** port link/activity LEDs should also be on/blinking green.

2. The system/wireless LED should be on red when the AP is powered on, or on/blinking green (2.4 GHz) or blue (5 GHz).

6. Connect to the Web User Interface

When managed in a stand-alone mode, the AP offers a web-based management interface for the configuration of all the unit's features. If cloud-managing the AP, go directly to "Manage the AP with the IgniteNet Cloud Controller" on page 7.

To access the web interface, connect a PC directly to the AP's **LAN1** or **LAN2** RJ-45 port. You must first set your PC IP address to be on the same subnet as the AP (that is, the PC and AP addresses must both start 192.168.2.x with a subnet mask of 255.255.255.0). In a web browser, enter the AP's default management IP address of 192.168.2.1 to access the web login page.



Log in to the web interface using the default settings:

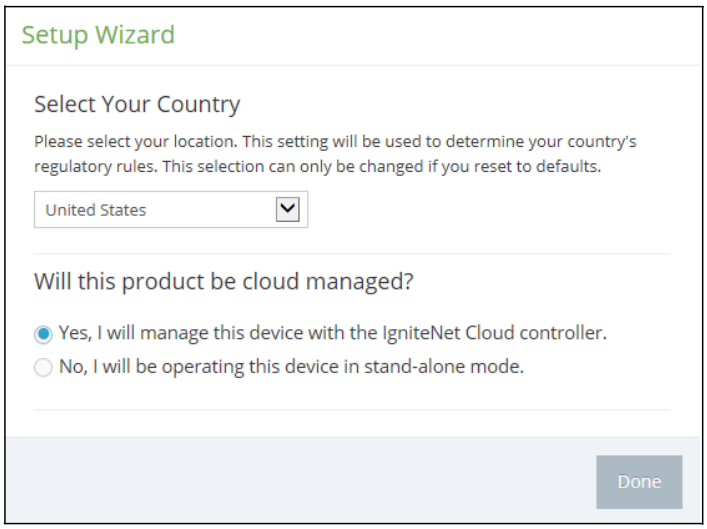
- Login Name — root
- Password — admin123

Note: To reset the AP to factory default settings, press and hold down the AP's **Reset** button for 5 seconds.

7. Complete the Setup Wizard

The first time you log in to the web interface, the Setup Wizard is displayed.

Select the country of operation for the AP. Setting the correct country ensures that the radios operate within local regulations specified for Wi-Fi networks.



Manage the AP with the IgniteNet Cloud Controller

Go to **cloud.ignitenet.com** to register your AP.

Log in and select **Devices** from the menu. Click **Add Device** and enter the AP serial number and MAC address to register the AP with your cloud network. The serial number and MAC address can be found on the product packaging or label.

Manage the AP in Stand-Alone Mode

If you select to manage the AP in stand-alone mode, complete the “Easy” or “Advanced” setup in the wizard.

For more information on AP configuration in stand-alone mode, refer to the *User Guide*.

Hardware Specifications

Item	Specification
Chassis	
Size (L x W x H:)	121 x 121 x 30.5 mm (4.76 x 4.76 x 1.2 inches)
Weight	196 g (0.43 lb)
Temperature	Operating: -20 °C to 65 °C
Humidity	Operating: 10% to 90% (non-condensing)
Network Interfaces	
Ports	**WAN/PoE** RJ-45 Port: 1000BASE-T, passive PoE **LAN1** RJ-45 Port: 100BASE-TX **LAN2** RJ-45 Port: 100BASE-TX
2.4 GHz Radio	IEEE 802.11b/g/n
5 GHz Radio	IEEE 802.11a/n/ac
Radio Frequencies	2412 ~ 2462 MHz 5180 ~ 5240 MHz 5745 ~ 5825 MHz
Power Supply	
AC Power Adapter	Input: 100-240 VAC, 50-60 Hz, auto-sensing Output: 12, 24 VDC, 1.5 A maximum @ 12 VDC
Passive PoE Input Power	24 VDC, 0.7 A maximum @ 24 VDC
Regulatory Compliances	
Radio	EN 300 328 V1.8.1:2012 EN 301 893 V1.7.1:2012 EN 301 489-1 V1.9.2 (2011-09) EN 301 489-7 V1.3.1:2005 FCC Part 15C 15.247/15.207 FCC Part 15E 15.407
Emissions	EN 55022 2010+AC:2011 EN 61000-3-2 2006+A1:2009+A2:2009 FCC Class B Part 15
Immunity	EN 55024 : 2010 EN 61000-4-2 : 2009

Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that
  to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

Professional installation instruction

1. Installation personal

   This product is designed for specific application and needs to be installed by a qualified personal who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.

2. Installation location

   The product shall be installed at a location where the radiating antenna can be kept 20cm from nearby person in normal operation condition to meet regulatory RF exposure requirement.

3. External antenna

   Use only the antennas which have been approved by the applicant. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC limit and is prohibited.

4. Installation procedure

   Please refer to user's manual for the detail.

5. Warning

   Please carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.