

# TRENDnet<sup>®</sup>



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Quick Installation Guide  
TEW-740APBO (V3)

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1. Before You Start
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# 1. Before You Start

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## Package Contents

- TEW-740APBO
- Quick Installation Guide
- Proprietary PoE injector
- Power adapter (12V DC, 1 A)
- Mounting Hardware
- Grounding wire
- Rubber seal

## Minimum Requirements

- Computer with a network port and web browser
- A network switch or router with an available network LAN port
- Additional TEW-740APBO H/W: v3.xR wireless N300 directional access point
- 4 x RJ-45 network cables

### **Note:**

It is recommended to use network cables without additional caps, molded caps, or boots with the access points for cable fitment inside the enclosure.

### **Note:**

The TEW-740APBO does not support IEEE 802.3at/af PoE standards. You must use the proprietary Power over Ethernet injector that is supplied with the TEW-740APBO. This installation guide will walk you through the installation and configuration of two TEW-740APBO access points to establish a wireless point to point bridge using WDS (wireless distribution system). The RJ-45 Ethernet cable between the passive PoE injector and access point can have a maximum length of up to 60 m (197 ft.).

**COMPATIBILITY NOTE:** If you are establishing WDS bridge connections to TRENDnet TEW-740APBO H/W: v2.0R outdoor access points, please make sure to upgrade the TEW-740APBO H/W: v2.0R access points to firmware 2.10 or above for WDS compatibility with the TEW-740APBO H/W: v3.0R.

## 2. Hardware Setup and Configuration

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### **Note:**

- The default IP address of the TEW-740APBO is 192.168.10.100. To configure the TEW-740APBO, your network adapter must have an IP address within the 192.168.10.x subnet (e.g. 192.168.10.10). Please refer to the Appendix in the User's Guide for more information.
- The initial configuration should be completed in a testing environment with two TEW-740APBO access points approximately 15 ft. (5 m) apart from one another with the front of the access points directly facing each other.
- Configure and connect the access points before mounting.

### **Phase 1: Overview**

In this installation guide, we will assume the following:

#### **Router Settings**

Router/Default Gateway IP address: 192.168.10.1

Subnet Mask: 255.255.255.0

The TEW-740APBO access points will be configured with the following settings:

#### **TEW-740APBO #1**

IP Address: 192.168.10.50

Netmask (Subnet Mask): 255.255.255.0

IP Gateway (Default Gateway): 192.168.10.1

Primary DNS: 192.168.10.1

Wireless Channel (Default): 1

WDS AES Encryption

#### **TEW-740APBO #2**

IP Address: 192.168.10.51

Netmask (Subnet Mask): 255.255.255.0

IP Gateway (Default Gateway): 192.168.10.1

Primary DNS: 192.168.10.1

Wireless Channel (Default): 1

WDS AES Encryption

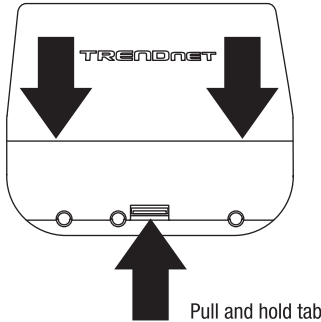
In this example, we will assume the device use the following MAC addresses:

TEW-740APBO #1 MAC Address: 00:11:22:33:44:00

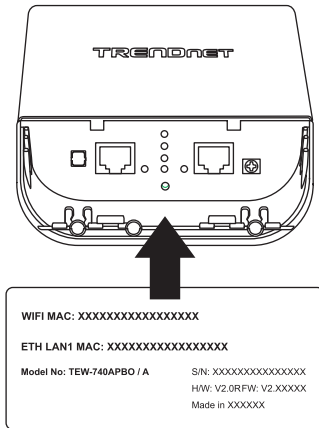
TEW-740APBO #2 MAC Address: 00:11:22:33:44:11

## Phase 2: TEW-740APB0 Unit #1 Hardware Setup and Configuration

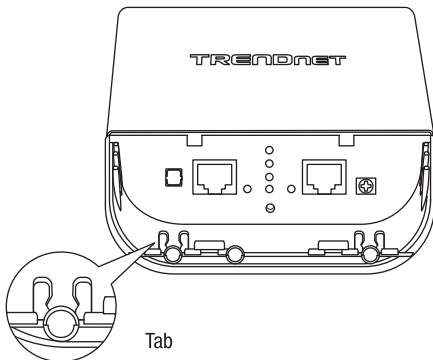
1. Remove the cover of the access point by pulling and holding the tab in the vertical direction upward (based on the access point orientation below) and sliding the cover in the two locations noted below away from the access point.



2. Write down the MAC address (WiFi MAC) of the TEW-740APB0 #1 access point. The MAC address (WiFi MAC) can be found on the inside of the device cover where the Ethernet LAN ports are located (shown below).

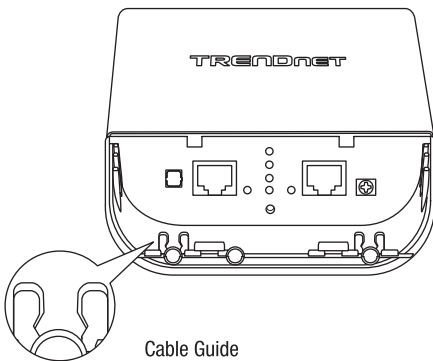


3. Remove the tab on the far left by gently bending it back and forth until the tab is removed. This will create the opening for a RJ-45 network cable to be routed through.



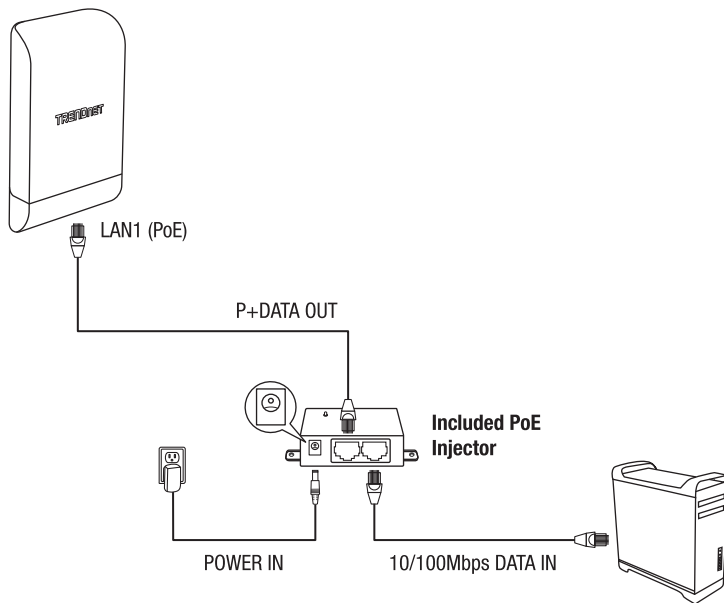
Tab

4. Using a network cable, connect one end of the cable to the LAN (PoE) port and push the cable into the cable guide on the far left, then through the opening that was created in the previous step.



Cable Guide

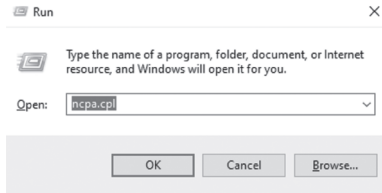
5. Connect the other end of the network cable to the **P+DATA OUT** port on the included PoE injector.
6. Using another network cable, connect one end to the **10/100 DATA IN** port on the included PoE injector.
7. Connect the other end of the network cable to your computer's Ethernet port.
8. Connect the included power adapter to the PoE injector **POWER IN** on the included PoE injector.
9. Plug the connected power adapter into a power outlet.
10. Confirm the device is powered on through the LED indicators.



11. Assign a static IP address to your computer's network adapter in the subnet of 192.168.10.x (e.g. 192.168.10.10) and subnet mask of 255.255.255.0.

## How to static your computer's IP address

- On your keyboard push keys “windows” and “R” at the same time.
- Enter “ncpa.cpl” in the window to pull up the “Network Connections” on your PC.

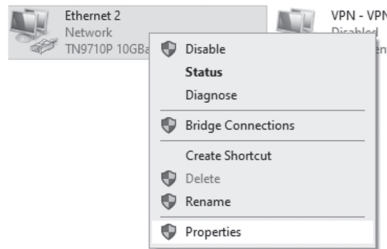


**Note:** Network connections will display the network adapters that are currently connected to your computer.

- Right click on the network adapter that is currently connected to the device you are trying to configure. Generally this will be the one with the word “Ethernet” in the title.

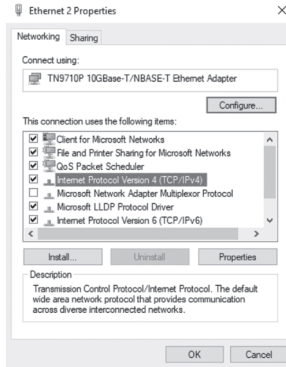


- Select “Properties” from the menu after you have right click on the adapter.





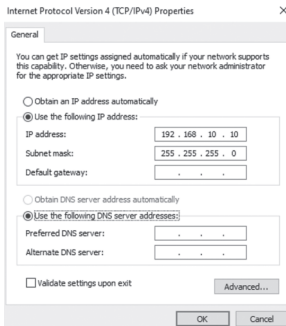
e. Double click on “Internet Protocol Version 4 (TCP/IPv4)”.



f. Select “Use the following IP Address” to set manually set the IP Address of your computer. Input the following information in the following fields:

IP address: Check with the device that you are connected to, to find out the IP address. The 1st 3 sets of digits should match. For the purpose of this video, we will use 192.168.10.10.

Subnet mask: The subnet mask between the device that you are trying to connect to needs to be the same as your computer. For the purpose of this video, our subnet mask will be 255.255.255.0



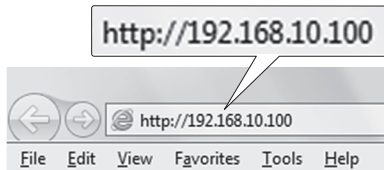
g. When the settings are complete, please click the OK button on “Internet Protocol Version 4 (TCP/IPv4) Properties”, and also click OK button on “Ethernet Properties”.

**Note:** If the OK button is not clicked, your settings will not be saved.

h. To set your computer back to DHCP, please follow steps 1-5 again. When you get to the “Internet Protocol Version 4 (TCP/IPv4) Properties” screen, click “Obtain an IP address automatically”. This will allow your computer to randomly be assigned an IP address on your network.



12. Open your web browser and type the IP address of the access point in the address bar, then press **Enter**. The default IP address is 192.168.10.100.

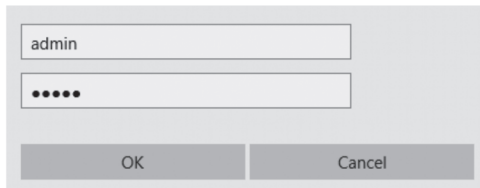


13. When prompted, login to the browser configuration page using the default user name and password settings.

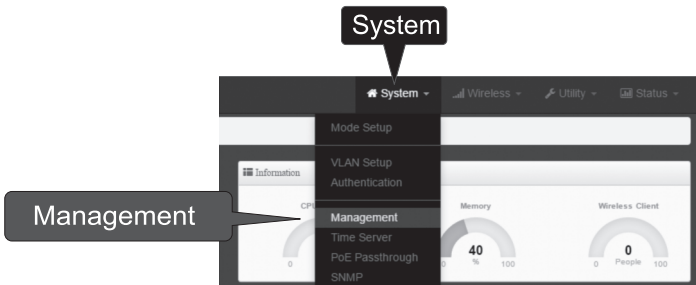
User Name: **admin**

Password: **admin**

**Note:** User Name and Password are case sensitive.

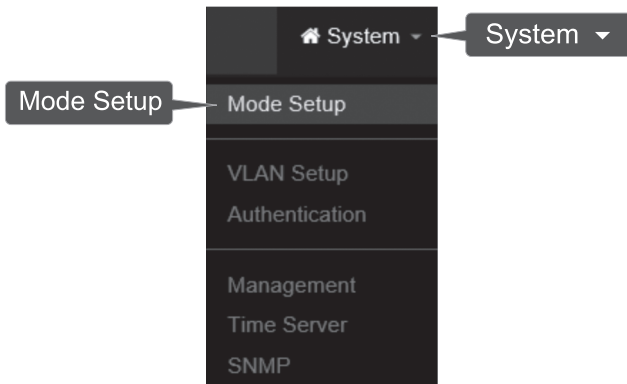


14. Click on the **System** tab and select **Management**.

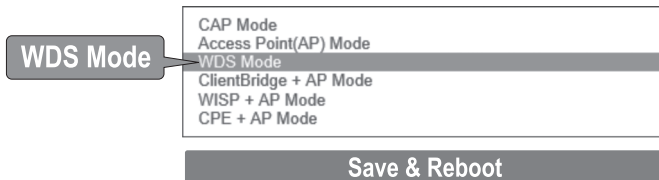


15. Under **Administrator Password**, change the default administrator password by typing in your new password in the fields provided and then click the **Save** button at the bottom of the page.

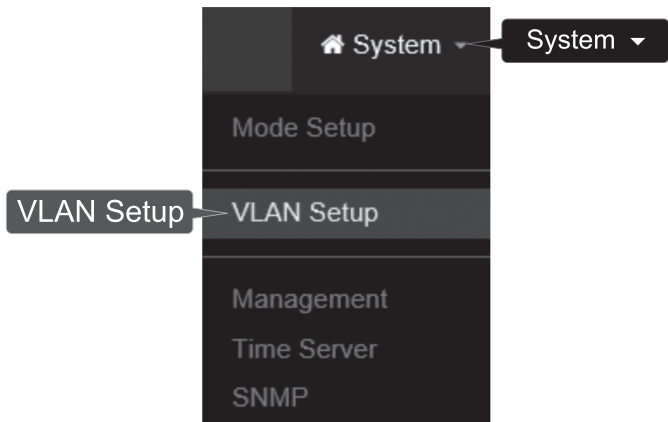
16. After the device saves changes and reboots, in the top menu, click on the **System** and click on **Mode Setup**.



17. Click on the **Mode** field and click on **WDS Mode**. Then click **Save & Reboot** and when prompted to change settings, click **Yes** to reboot the device and apply the changes.



18. In the top menu, click on **System** and click on **VLAN Setup**.



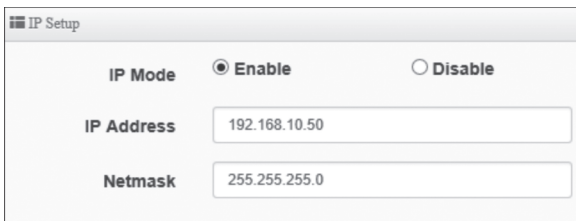
19. For the first entry in the VLAN List under the action column, click **Network**.

#	VLAN Mode	Flag	IP Address	Netmask	Action
0	On	Native ETH0 Native ETH1 Access Control	192.168.10.100	255.255.255.0	Network



20. In the IP Setup section, enter the IP Address **192.168.10.50** and Netmask **255.255.255.0**. Then click **Save**. In the menu located at the top, you will be prompted to reboot the device. Click the **Reboot** button and in the following page, click **Reboot**. When prompted to change settings, click **Yes** to reboot the device and apply the changes.

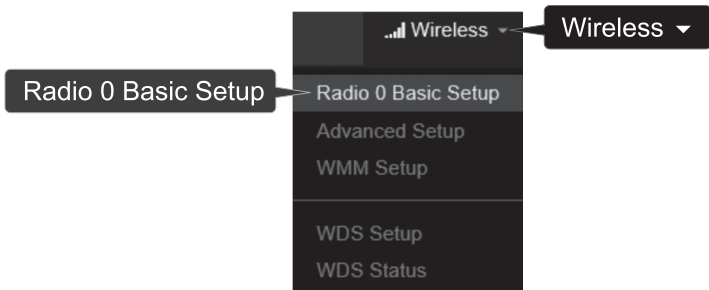
**Note:** When configuring TEW-740APB0 #2, enter the IP address settings 192.168.10.51 and Netmask 255.255.255.0.



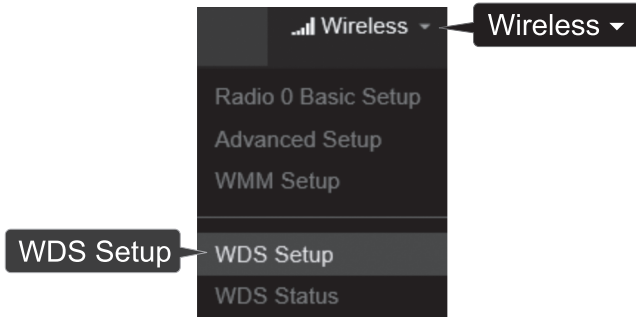
IP Setup	
IP Mode	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
IP Address	<input type="text" value="192.168.10.50"/>
Netmask	<input type="text" value="255.255.255.0"/>

21. Click on the **Wireless** tab and select **Radio 0 Basic Setup**. Make sure **Channel 1** is selected and click **Save**.

**Note:** When configuring TEW-740APB0 #2, the wireless channel must be the same as TEW-740APB0 #1.



22. Click on the **Wireless** tab and select **WDS Setup**.



23. Click **Enabled** for the WDS Setup and under Authentication, select **AES**. Enter a WDS **PassPhrase** (8-63 alphanumeric characters).

**Note:** When configuring TEW-740APB0 Unit #2, the WDS AES Passphrase must be the same as TEW-740ABP0 #1.

 A screenshot of the 'WDS Setup' configuration page. At the top, there are two radio buttons: 'Enable' (which is selected) and 'Disable'. Below this, there are three fields: 'ESSID' with the value 'TRENDnet\_740\_wds', 'Authentication' with a dropdown menu set to 'AES', and 'PassPhrase' with a series of 'X' characters.

24. Under WDS Client Setup, check the first entry and enter the WiFi MAC address of TEW-740APB0 #2. Then click **Save**.

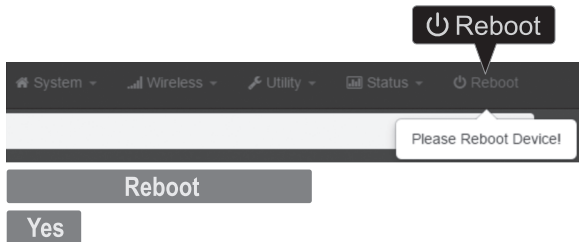
**Note:** When configuring the TEW-740APB0 #2, enter the WiFi MAC address of TEW-740APB0 #1.

 A screenshot of the 'WDS Client Setup' table. The table has two columns: 'Enable' and 'MAC Address'. The first row has a checked checkbox in the 'Enable' column and the MAC address '00:11:22:33:44:11' in the 'MAC Address' column.
 

Enable	MAC Address
<input checked="" type="checkbox"/>	00:11:22:33:44:11

25. When prompted, click **Reboot** at the top of the page, click the **Reboot** button, and click **Yes** to reboot and apply the configuration changes.

**Note:** After the device reboots and applies changes, you will need to reconnect to device configuration page using the new IP address settings.



### Phase 3: TEW-740APB0 Unit #2 Hardware Setup and Configuration

When configuring the TEW-740APB0 #2, repeat all of the steps in Phase 2 setup and configuration.

1. In Step 19 and 20, under IP Setup, enter the IP Address **192.168.10.51** and Netmask **255.255.255.0**. Then click **Save**.

IP Setup	
IP Mode	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
IP Address	<input type="text" value="192.168.10.51"/>
Netmask	<input type="text" value="255.255.255.0"/>

2. In Step 24, under WDS Client Setup, enter the WiFi MAC address of TEW-740APB0 Unit #1. Then click **Save**.

WDS Client Setup	
Enable	MAC Address
<input checked="" type="checkbox"/>	<input type="text" value="00:11:22:33:44:00"/>

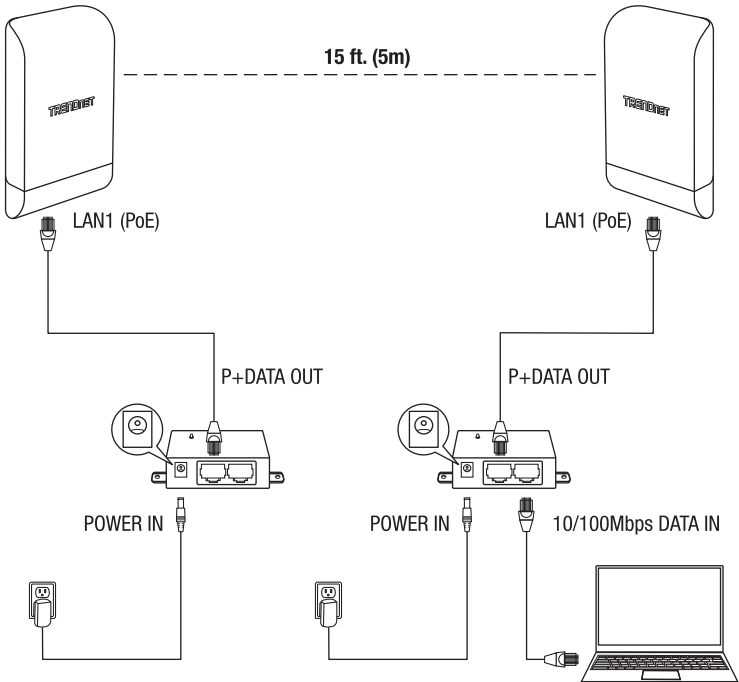


#### Phase 4: Confirm Connectivity

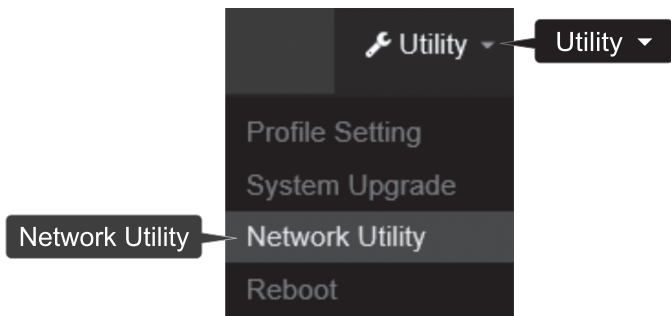
1. Leave your computer connected to TEW-740APB0 #2 and keep the web management interface open.
2. Make sure both TEW-740APB0 #1 and TEW-740APB0 #2 access points are powered on approximately 15 ft. (5 m) apart from one another with front of access points directly facing each other.

TEW-740APB0 #1

TEW-740APB0 #2



3. To verify connectivity, in the TEW-740ABPO #2 web management interface, click on **Utility** and click on **Network Utility**.



4. In the **IP/Domain** field, enter the IP address of TEW-740APBO #1, 192.168.10.50, then next to **Times**, click **Ping**.

A screenshot of the 'Ping Utility' form. The 'IP/Domain' field contains '192.168.10.50'. The 'Times' field contains '5'. A 'Ping' button is visible next to the 'Times' field.

5. Ping replies and 0% packet loss will indicate as successful point to point bridge connection between the TEW-740APBO #1 and #2.

**Note:** If the connectivity test fails, wait for about a minute and try again. Make sure there are no obstacles between the two access points when running the connectivity test and make sure the two access points are not too close together.

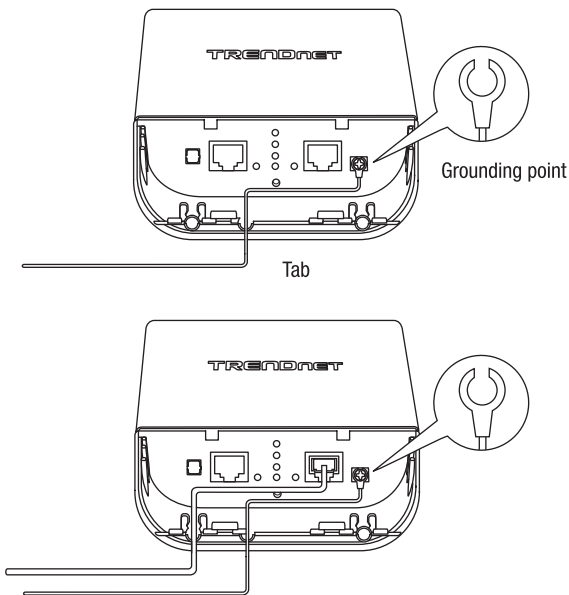
```
PING 192.168.10.50 (192.168.10.50): 56 data bytes
64 bytes from 192.168.10.50: icmp_seq=0 ttl=64 time=10.3 ms
64 bytes from 192.168.10.50: icmp_seq=1 ttl=64 time=0.2 ms
64 bytes from 192.168.10.50: icmp_seq=2 ttl=64 time=0.2 ms
64 bytes from 192.168.10.50: icmp_seq=3 ttl=64 time=0.2 ms
64 bytes from 192.168.10.50: icmp_seq=4 ttl=64 time=0.2 ms

--- 192.168.10.50 ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max = 0.2/2.2/10.3 ms
```

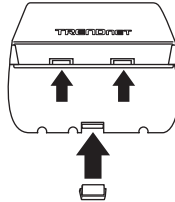
### 3. Ground Wire and Pole Mount Installation

1. Locate the grounding point located in the bottom section of the enclosure. Using a Phillips screwdriver, remove the grounding point screw (counter clockwise) and attach the included grounding wire to the grounding point screw. Reattach the ground screw (clockwise) along with the grounding wire. After installing the grounding wire, remove another tab on the enclosure by gently bending back and forth until the tab is removed. This will create the opening for the ground cable to be routed through.

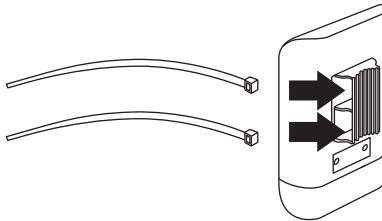
**Note:** The ground wire may need to be cut and extended using additional ground wire in order to reach a proper grounding point.



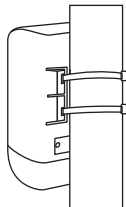
2. Re-install the cover by lining up the guides into the notches as shown and push the cover down until the cover clips in and is secure. After reinstalling the cover, insert the included rubber seal in opening as show.



3. Insert the included fasteners through the holes located at the back of the access point.



4. Wrap the fasteners around the pole where the access points will be installed. On the fasteners, insert the open end into the locking mechanism and pull tight until the access point is secured.



5. After the access points are properly mounted, you can connect the grounding wires to the proper ground points and RJ-45 cables from each access point to your network.



# Declaration of Conformity

TRENDNET<sup>®</sup>

## Manufacturer's Name and Address

TRENDnet, Inc.  
20675 Manhattan Place  
Torrance, CA 90501 USA

Zwolsestraat 156 2587 WB  
The Hague The Netherlands



## Product Information:

**Model Number:** TEW-740APBO  
**Product Name:** 10 dBi Wireless N300 Outdoor PoE Access Point  
**Trade Name:** TRENDnet

TRENDnet hereby declare that the product is in compliance with the essential requirements and other relevant provisions under our sole responsibility.

**Safety** EN 62368-1: 2014 + A11: 2017

**EMC** EN 55032: 2015 + AC: 2016  
EN 55035: 2017  
EN 61000-3-2:2014  
EN 61000-3-3:2014

**Radio Spectrum & Health** EN62311: 2008  
EN 301 489-1 V2.2.1 (2019-03)  
EN 301 489-17 V3.2.0 (2017-03)  
EN 300 328 V2.1.1 (2016-11)

**Energy Efficiency** Regulation (EU) No 1275/2008, (EU) No 801/2013

This product is herewith confirmed to comply with the Directives.

**Directives:** EMC Directive 2014/30/EU  
RoHS Directive (EU) 2015/863  
RoHS 3 Directive 2015/863/EU  
WEEE Directive 2012/19/EU  
REACH Regulation (EC) No. 1907/2006  
Low Voltage Directive 2014/35/EU  
Ecodesign Directive (EU) 2019/1782

This device is designed to provide uninterrupted operation. This device does not offer power management functionality such as Off mode or Standby mode.

Person responsible for this declaration.

Place of Issue: Torrance, California, USA

Date: July 22, 2021

Name: Sonny Su

Title: VP of Technology

Signature:

A handwritten signature in black ink, appearing to read 'Sonny Su', is written over a horizontal line.



# Declaration of Conformity

TRENDNET®

## Manufacturer's Name and Address

TRENDnet, Inc.  
20675 Manhattan Place  
Torrance, CA 90501 USA

Authorized Representative:  
Office: +44 (0) 1635 887 399  
Unit 4 Rivermead Business Park,  
Pipers Way, Thatcham, RG19 4EP England



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**Directives:** Electromagnetic Compatibility Regulations 2016  
The Waste Electrical and Electronic Equipment Regulations 2013 (as amended)  
The REACH Enforcement Regulations 2008 (as amended)  
Electrical Equipment (Safety) Regulations 2016  
The Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019

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Person responsible for this declaration.

Place of Issue: Torrance, California, USA

Date: July 22, 2021

Name: Sonny Su

Title: VP of Technology

Signature:

A handwritten signature in black ink, appearing to read 'Sonny Su', is written over a horizontal line.



<b>Information published</b>	<b>Value and precision</b>	<b>Unit</b>
Manufacturer's name or trade mark, commercial registration number and address	-	-
Model identifier	-	-
Input voltage	100-240VAC	V
Input AC frequency	50/60	Hz
Output voltage	12	V
Output current	1	A
Output power	12	W
Average active efficiency	83.26	%
Average active efficiency	83.26	%
Efficiency at low load (10 %)	93.85	%
No-load power consumption	0.2	W
No-load power consumption	0.2	W

<b>Percentage of nameplate output current</b>	
Load condition 1	100 % $\pm$ 2 %
Load condition 2	75 % $\pm$ 2 %
Load condition 3	50 % $\pm$ 2 %
Load condition 4	25 % $\pm$ 2 %
Load condition 5	10 % $\pm$ 2 %
Load condition 6	0 % (no-load condition)



## **FCC Statement**

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 or more 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 Radiation Exposure Statement**

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and consider removing the no-collocation 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.

## **Caution!**

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

## Canada Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) L'appareil ne doit pas produire de brouillage;
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

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## Certifications

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.
- (2) This device must accept any interference received.

Including interference that may cause undesired operation.



Waste electrical and electronic products must not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or Retailer for recycling advice.

Applies to PoE Products Only: This product is to be connected only to PoE networks without routing to the outside plant.

## Note

The Manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

## Advertencia

En todos nuestros equipos se mencionan claramente las características del adaptador de alimentación necesario para su funcionamiento. El uso de un adaptador distinto al mencionado puede producir daños físicos y/o daños al equipo conectado. El adaptador de alimentación debe operar con voltaje y frecuencia de la energía eléctrica domiciliar existente en el país o zona de instalación.

## Technical Support

If you have any questions regarding the product installation, please contact our Technical Support.

Toll free US/Canada: **1-866-845-3673**

Regional phone numbers available at [www.trendnet.com/support](http://www.trendnet.com/support)

## TRENDnet

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## Product Warranty Registration

Please take a moment to register your product online. Go to TRENDnet's website at: [www.trendnet.com/register](http://www.trendnet.com/register)