

## EPOYNT

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## User Guide

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**Note:** Please ensure that you are using the latest version of this User Guide, which can be downloaded from [www.poynting.tech](http://www.poynting.tech)

# 1. Packing Check List

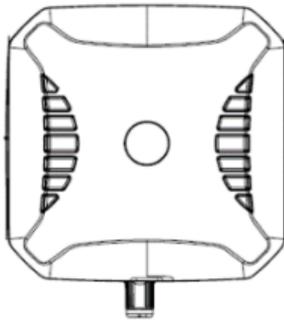
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Item	Description	Quantity
1.	EPOYNT-CPE Only	1
2.	Wall Knock-in Screws	4
3.	Pipe Clamp	2
4.	Suckers	4
5.	Sucker Mounting Pins	4
7.	PCB Mounting Screws	4
8.	PCB Spacers	4
9.	Spanner	1
10.	Ethernet Gland	1

# Appearance of components

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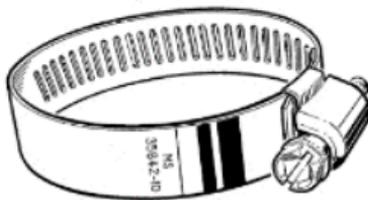
## CPE Unit



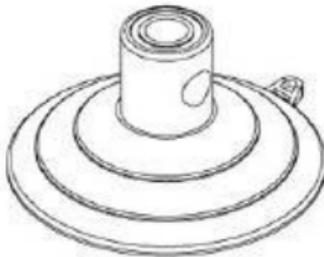
## Wall Knock-in Screw



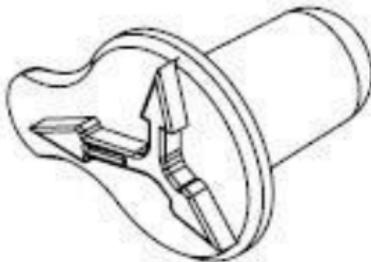
## Pipe Clamp



## Suckers



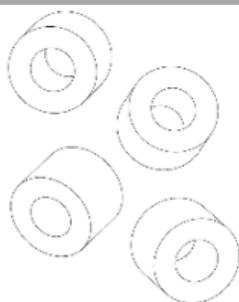
## Sucker Mounting Pins



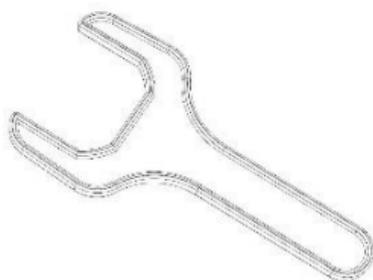
## PCB Mounting Screws



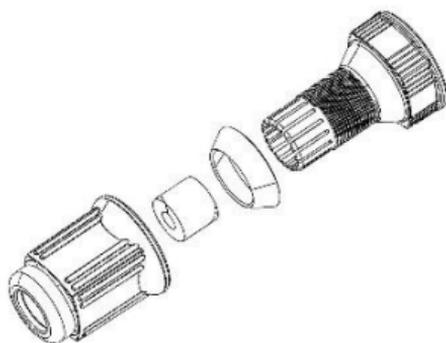
## PCB Spacers



## Spanner



## Ethernet Gland





Gland  
Knock-out

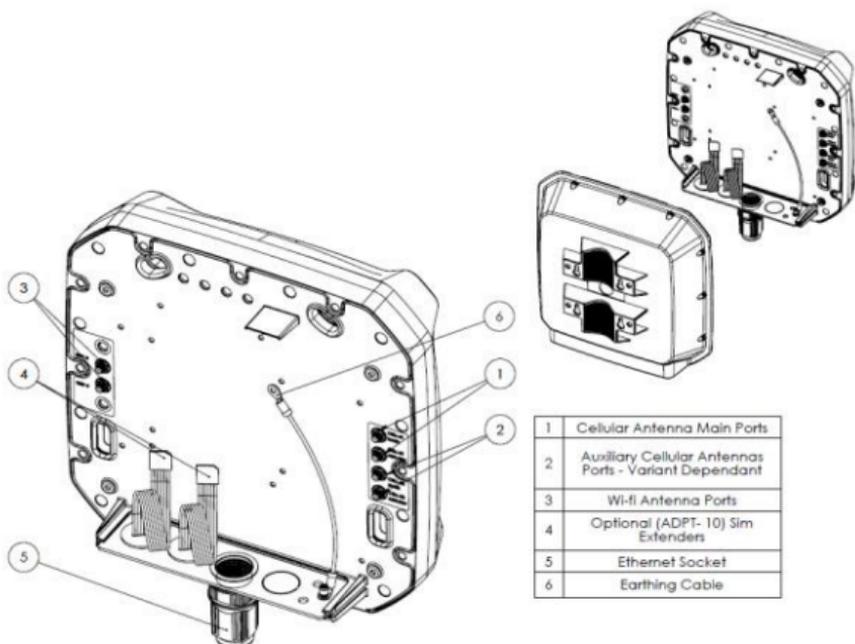
PoE  
Port

Optional SIM  
Ports Available  
(ADPT-10)

## 2. Setting up the CPE

### Step 1 Install router into the CPE

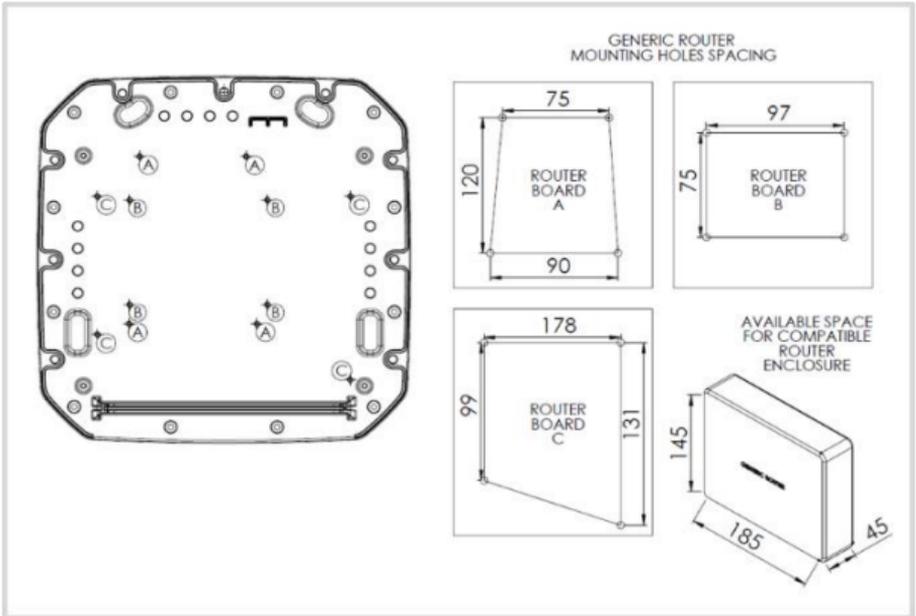
- Carefully unscrew the fasteners at the back cover of the CPE using a Phillips screwdriver.



- Assess mounting options.

**a) Option 1:** Use provided holes

Locate the router mounting holes on the CPE and align the holes to those of your router using the template below.



**b) Option 2:** Download backplate template from [www.poynting.tech](http://www.poynting.tech) to create an adapter plate which interfaces between the provided holes and your router.

**c) Option 3:** Drill and use self-tapping screws on the backplate to mount your router.

Precautions on router mounting

- Ensure that the screws used do not protrude more than 5mm on the other side of the backplate as this will damage the antenna components.
- Damage caused to components during the drilling process will void your warranty, proceed with caution. Ensure that the drilling operation and effects thereof are

limited to the backplate which is used for mounting the router.

- Secure the router onto the CPE using the provided spacers and screws.



- Disassemble the Ethernet gland on the PoE port of the CPE and pass an Ethernet cable through it, with the over-nut first, then the rubber gasket and finally the contracting gland as shown below.
- Make sure that the Ethernet cable goes through the CPE's PoE port and manually rotate the screw cap to lock the Ethernet gland.



- Connect the Ethernet cable from the CPE's Ethernet gland to the router's Ethernet port.
- Carefully insert the SIM card(s) into the router or into optional CPE SIM extender(s) (ADPT-10). See step 2 below.
- Connect the CPE's antenna ports to the respective connectors on the router (LTE and/or Wi-Fi) using a suitable fly lead available at a cost.
- Connect the earthing cable to one of the mounting points where the router board is fastened to the CPE.
- Connect the CPE's USB port to your router's USB port using a USB cable (router dependent & not provided).
- Connect the Ethernet cable from the CPE's Ethernet gland to the router's Ethernet port.



- Carefully place the CPE back cover to close the CPE and screw the fasteners firmly. Do not over-tighten the screws, as this could strip the plastics.

- Connect one end of another grounding cable (not provided) to the external screw and the other end to an existing earthing connection or earth spike.



- A 20mm knock-out is provided behind the gland seal for an additional gland to be added (not provided), should one be required for additional cables.

## Step 2 Inserting SIM card(s)

**Note:** Make sure the CPE is turned OFF before you insert or remove your SIM card(s).

### Method 1:

Insert your SIM card(s) into the router as per the supplier recommendation. An example is shown below.



### Method 2:

Insert your SIM card(s) into optional (ADAPT-10) SIM extender slot(s) as shown below.



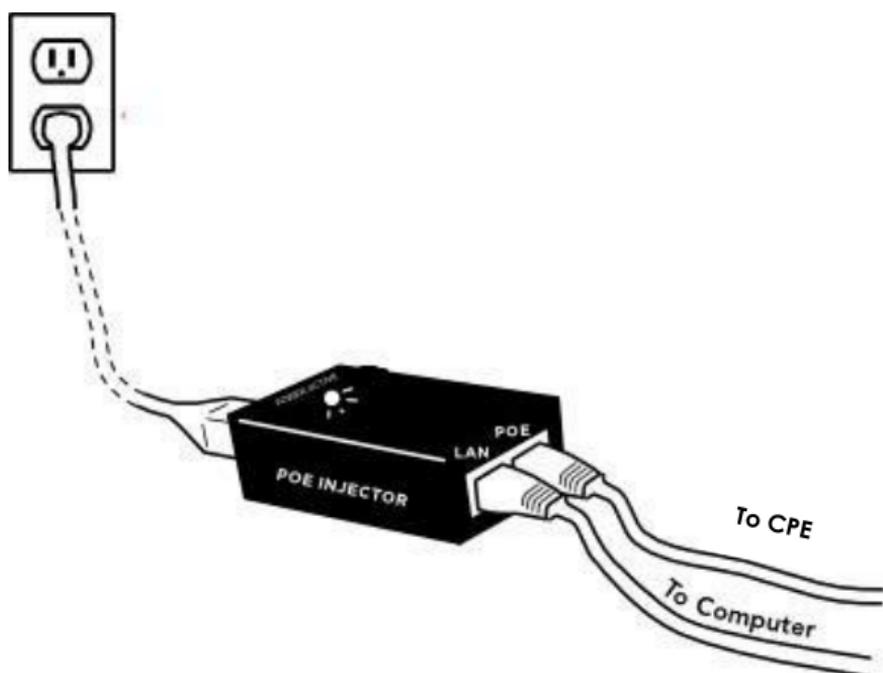
Note: If you want to remove the SIM card(s), press the SIM card(s) lightly; the SIM card(s) will pop out.

**Note:** The number of SIM cards to be used is dependent on the router installed in the CPE. If one SIM card is used, make sure you use the correct SIM extender connected to your router.

## Step 3 Powering your CPE

### Method 1: Using a PoE Adapter

- Connect the other end of the PoE Ethernet cable to the port labelled "PoE" on the PoE adapter.
- Connect another network cable to the port labelled "LAN" on the PoE adapter and connect the other end of the cable to a computer or to a WAN/LAN port of an access point or switch.
- Plug the PoE adapter into an electrical socket and check to see if the power light on the PoE adapter is ON.

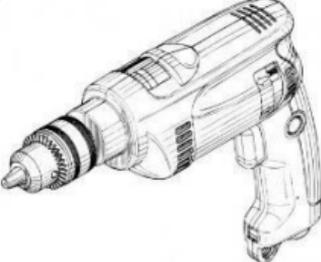
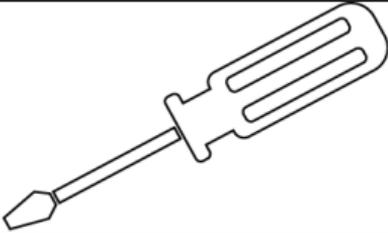


### Method 2: Using a Power Supply

Extend your router's power supply cable using 0.70/0.75mm cabtyre and route it along with your Ethernet cable through the Ethernet gland. Alternatively, the gland knock-out or an unused sim extender knock-out port may be used to add a separate, suitable cable gland.

### 3. CPE Mounting Configurations

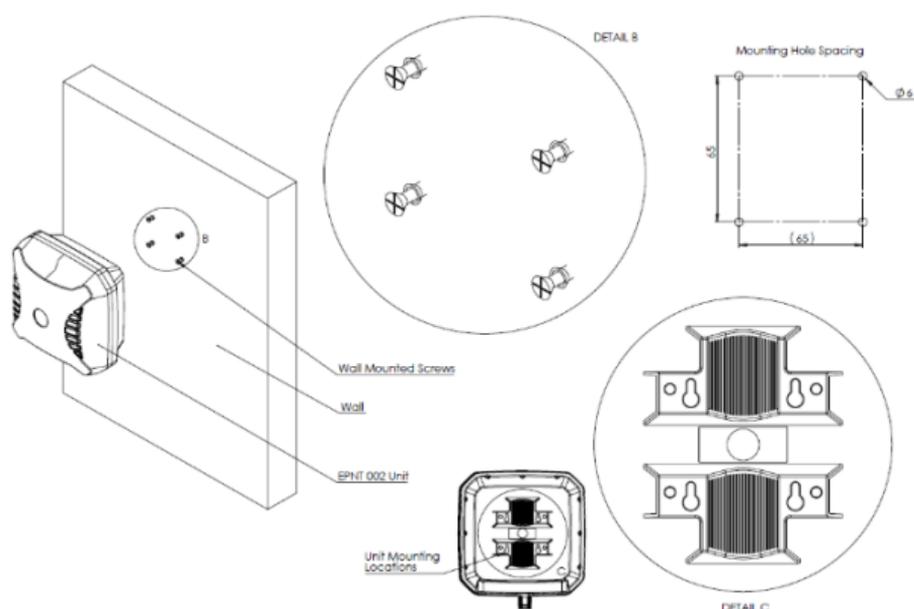
Tools which may be required
6mm Masonry drill bit

Impact drilling machine

Screwdriver- cross slot/Philips & flat

Hammer


1

## Wall Mounting

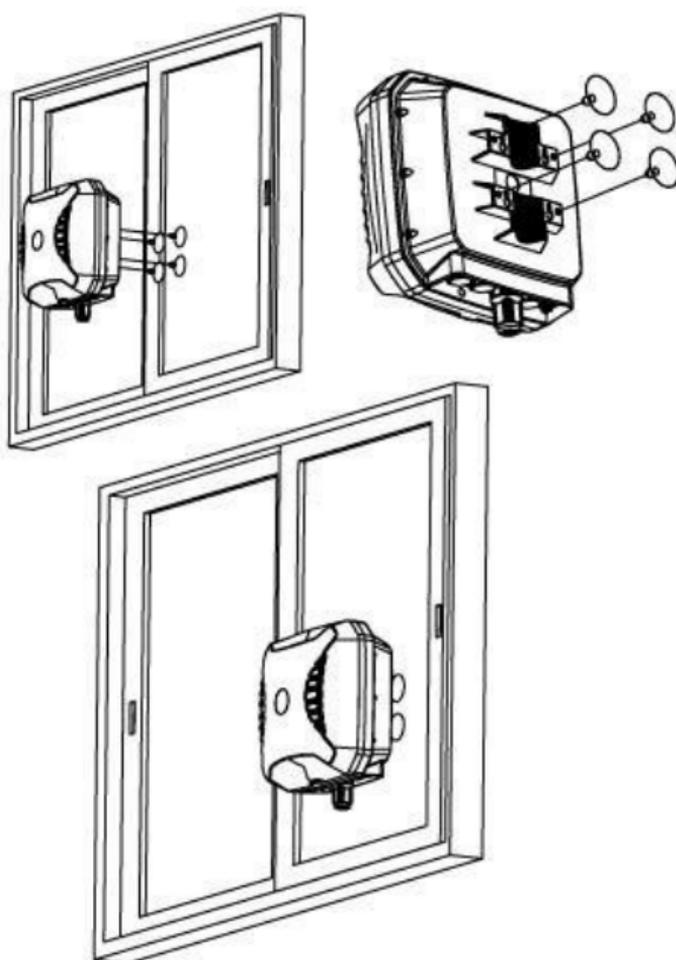
- Select a suitable place for mounting the CPE.
- Use a 6mm masonry drill bit to drill four holes into the wall. See the dimensions below.
- Insert the four knock-in screws to mount the CPE to the wall.
- Place the CPE over the four knock-in screws and align the holes in the CPE with the knock-in screws.



2

## Window Mounting

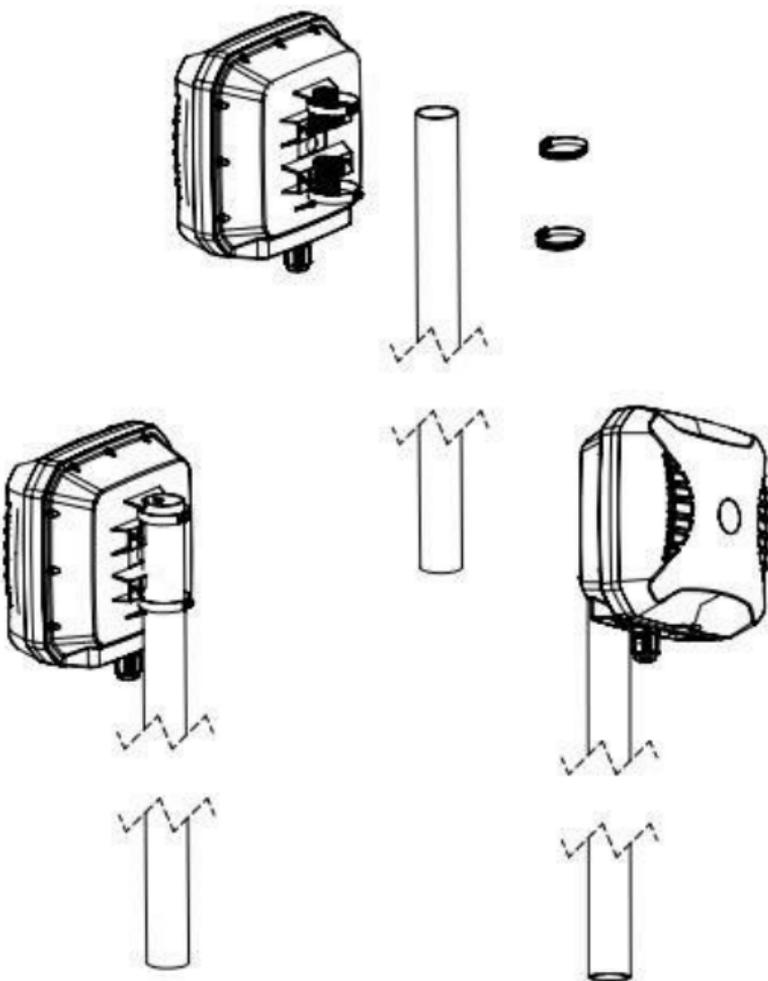
- Select a suitable place for mounting the CPE.
- Clean the selected area to remove dirt.
- Place each of the four suckers through the holes in the bracket.
- Insert the sucker mounting pins into the holes at the back of the suckers.
- Carefully press the antenna suckers against a window, taking caution not to damage or break the window.



3

## Pole Mounting

- Lay the CPE out at the installation site and assemble the CPE on the ground.
- Place the pipe clamps through the bracket as shown below.
- Place the pipe clamps around the pole and tighten the screw on the pipe clamps until the bracket is secured to the pole.
- Mount the CPE so that there is at least 1 meter of clearance in all directions around it and unobstructed line of sight to a cell tower.



## 4. CPE Mounting Precautions

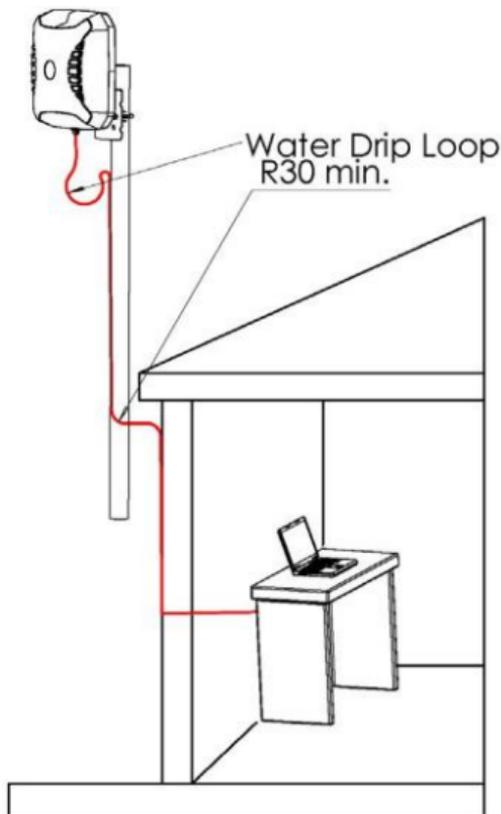
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- Place the CPE at the highest point possible and ensure that there aren't any surrounding obstructions.
- In order to avoid communication interference, ensure that the CPE is placed at least 0.5m away from other antennas and metal objects.
- Avoid installing the CPE near a chimney, as the smoke and soot emitted by the chimney can obstruct the signal level achieved by the CPE's antenna.
- Install the CPE away from heat sources and flammable gases.

## 5. Cable Routing

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- If the CPE is mounted on a pole, avoid wrapping the Ethernet cable around the pole. Route the cable straight down the inside of the pole to avoid using extra equipment such as cable ties.
- Never pull on the cable connectors; pull only on the cable ensuring the cable is not under tension.
- Cover connectors with insulation tape before threading them through a hole.



**Note:** The water drip loop is for preventing water from running down from the CPE along the cable into the house and possibly the PC.

## 6. Safety

- If you are installing the CPE for the first time or unsure about how to install your CPE, obtain the help of a professional installer.
- Carefully survey the installation site before installation to locate secure handholds, dangerous conditions (such as power lines and weak roofs) and the safest and most convenient placement for ladders if necessary.
- When installing your CPE, remember:
  1. Do not install near power lines as they can electrocute you.
  2. Do not install on a wet or windy day or when lightning or thunder is in the area.

3. Wear shoes with rubber soles and heels, protective clothing (long sleeve shirt or jacket) and rubber gloves.
  4. Avoid installation while under the influence of drugs, alcohol or medication.
  5. Make sure that any loose-fitting jewellery or clothing is secured and tie back long hair as they can get caught in moving parts during installation.
  6. If the CPE assembly starts to fall, get away from it and let it fall to avoid harming yourself.
- When drilling, remember:
    1. Use safety goggles when drilling the holes.
    2. Avoid using bits that are dull, bent or damaged.
    3. Be aware of where your fingers are in relation to the drill bit when using the drilling machine.
    4. To stop the drilling machine, let the drill chuck come to a complete stop on its own. Do not grasp the chuck in an attempt to stop the drill bit.
    5. Avoid awkward hand positions where a sudden slip could cause a hand to move into the drill bit or cutting tool.

**CAUTION:**

Antennas must be installed to provide a separation distance of at least 20cm from all persons so as to comply with SAR (Specific Absorption Rate) RF Exposure requirements. This applies to this CPE too.



European Waste Electronic Equipment Directive  
2002/96/EC

Please ensure that old waste electricals and electronics are recycled.



Directive 2011/65/EU (RoHS 2)

This product is fully compliant with the RoHS 2 directive.

## 7. Basic Troubleshooting

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### 1. The CPE does not power ON.

- Make sure that the PoE adapter is fully plugged into the electrical socket and that the PoE power light is ON.
- If the PoE's power light does not turn ON, check the electrical outlet with another electrical device that you know works or try a different outlet. If the power outlet works, then the PoE adapter may be damaged and needs to be replaced.
- If the PoE adapter has power but the CPE does not, the problem maybe the PoE network cable. Try a different network cable. Check that the network cable is securely plugged in between the PoE adapter and the CPE.
- If the CPE still does not power ON, unplug and re-plug the PoE adapter to restart the adapter and CPE. If this does not solve the issue, then there could be a problem with the router which may require replacement.

### 2. Problems logging into the router's web management page.

- Make sure that the CPE is ON.
- Verify that the CPE is correctly connected to the computer through a working network cable.
- Enable the computer to automatically obtain an IP address.