

# Installation Guide for PISCES P100

## Document Information

| Info     | Content                                                    |
|----------|------------------------------------------------------------|
| Keywords | Installation                                               |
| Abstract | This document describes how to install and use PISCES P100 |

## **1 Preface**

PISCES P100 is a kind of wireless device access equipment to receive WiFi/BT/Lora signal, which can replace wireless client terminal such as wireless network card. It can receive wireless signals from wireless router, wireless AP, radio base station and so on. It is a new type of wireless terminal access equipment.

This document targets to help installer to install the gateway in field easily but with high reliability. Please contact us at +8613777832769 for more information.

## 2 Intended Audience

This document describes hardware features of the PISCES P100 and provides basic installation methods.

This document is intended for:

- Network planning engineers
- Hardware installation engineer
- Commissioning engineers
- Onsite maintenance engineers
- System maintenance engineers

## 3 PISCES P100 appearance

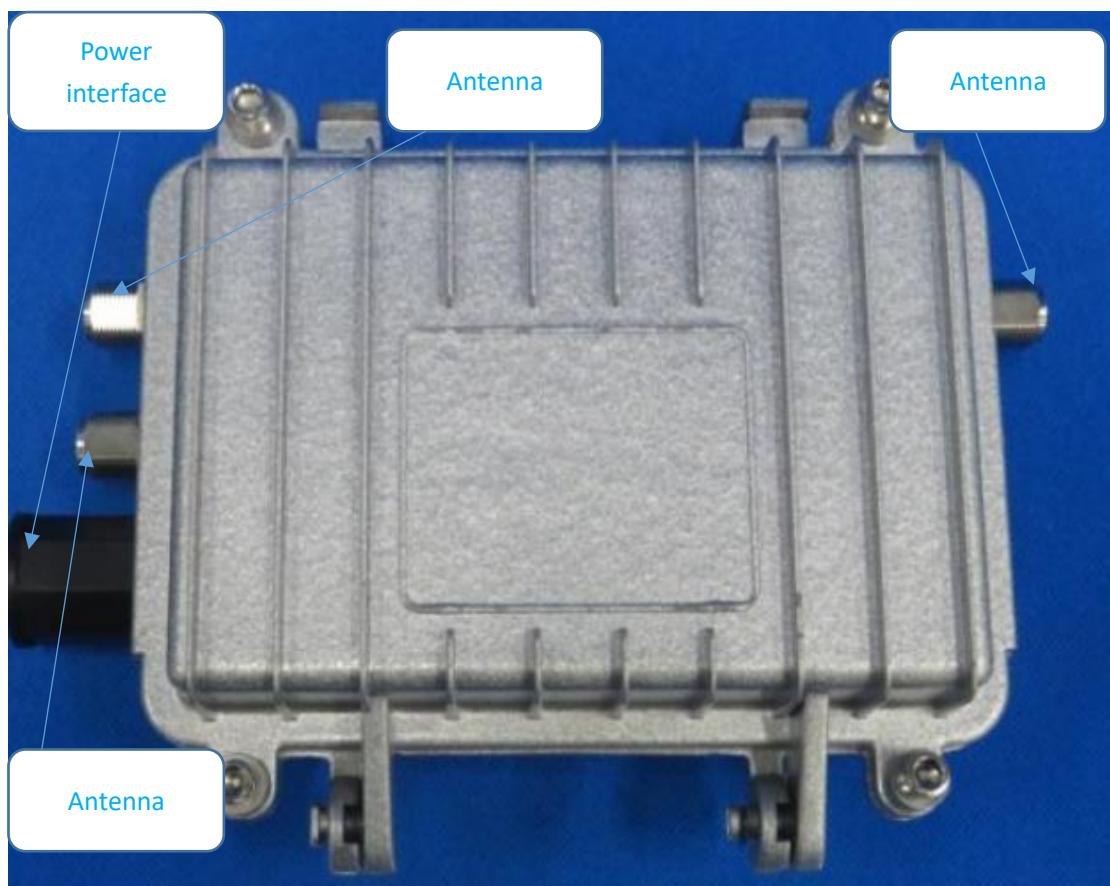


Figure 2-1 PISCES P100 appearance

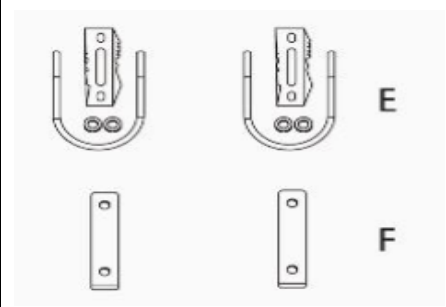
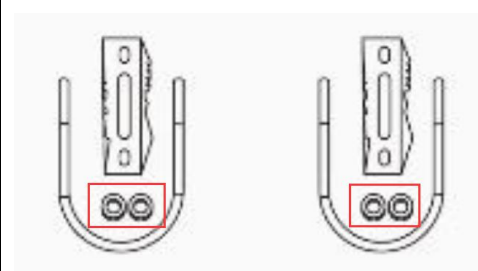
## 4 Installation

Before unpacking the carton, ensure that the packing carton is intact and not damaged or soaked. Stop unpacking if the equipment is rusted or soggy. Then, investigate causes and contact the supplier.

After unpacking, check items in the carton against the packing list. If any item is missing, contact the supplier or agent.

Usually, the packing carton contains all items listed in the packing list shown in Table 3-1.

Table 3-1 package list

| Material               | PN                                                                                   | Qty        |
|------------------------|--------------------------------------------------------------------------------------|------------|
| Pisces outdoor gateway | PISCES P100                                                                          | 1          |
| BT/WIFI Antenna        | SG00852-A003                                                                         | 1          |
| Lora Antenna           | SG00852-A006                                                                         | 1          |
| Power cable            | 1.5m                                                                                 | 1          |
| Power Adapter          | TL-SG1005P                                                                           | 1          |
| Net Wire               | 0.6m                                                                                 | 1          |
| Fixed components E&F   |  | E*2<br>F*2 |
| Screw for ground       |  | 4          |

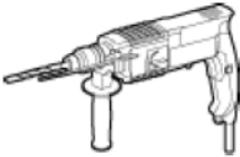
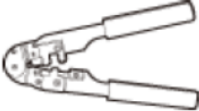
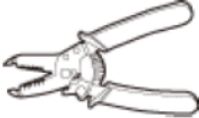
4.1 Mechanical size

Dimensions 275X215X95MM (inside diameter).

4.2 Tool Preparation

To install the PISCES P100, prepare tools listed in Table 3-2.

Table 3-2 Tools

|                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <div>Phillips screwdriver (M4)</div> <div></div> | <div>Torque screwdriver</div> <div></div> <div></div> <div>3mm/5mm</div> <div> </div> <div>(M3-M6)</div> | <div>Torque socket (M6)</div> <div></div> |
| <div>Hammer drill (φ8)</div> <div></div>       | <div>Utility knife</div> <div></div>                                                                                                                                                                                                                                                                                                                      | <div>Cable cutter</div> <div></div>     |
| <div>Diagonal pliers</div> <div></div>         | <div>RJ45 crimping tool</div> <div></div>                                                                                                                                                                                                                                                                                                                 | <div>Wire stripper</div> <div></div>    |

|                                                                                                                                                        |                                                                                                               |                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Network cable tester</b><br>                                       | <b>Multimeter</b><br>        | <b>Inner hexagon wrench (M6)</b><br> |
| <b>Ladder</b><br>                                                     | <b>Adjustable wrench</b><br> | <b>Rubber mallet</b><br>             |
| <b>ESD gloves</b><br>                                                | <b>Level</b><br>             | <b>Marker</b><br>                    |
| <b>Torque wrench</b><br><br>(Use an N-type open-end torque wrench.) |                                                                                                               |                                                                                                                        |

## 4.3 Preparing for Installation

This section describes safety precautions and tool preparations for PISCES P100 installation.

### Safety Precautions

- Take proper measures to prevent injuries and device damage.
- Place the device in a dry and flat position away from any liquid and prevent the device from slipping.
- Keep the device clean.
- Do not put the device and tools in the aisles.



## CAUTION

Only the qualified personnel are permitted to install and remove the device and its accessories. Before installation and operation, read the safety precautions carefully.

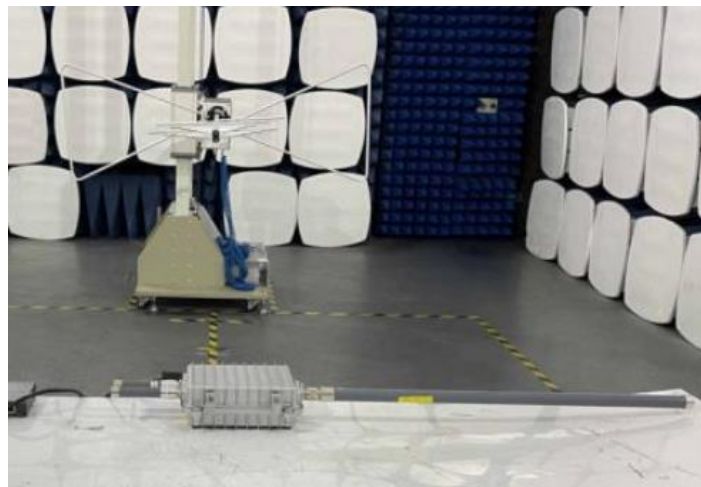
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## 4.4 Install

### 4.1.1 Connect power interface and Data port



### 4.1.2 Connect power interface and Data port



the antennas must be installed in such manner that the 21 dBm eirp cannot be exceeded outside 30 degrees horizontal window

## 4.5 Lightning Protection Cautions

Lighting protection include direct lighting protection and indirect lighting protection. We should avoid fix the device to face the direct lighting protection. Below we just list some essential and useful methods to protect from indirect lighting, induction lighting or surge.

- 1.The lightning rod should be fixed above the tower with device or gateway. And the gateway should be in the protection area of the lightning rod.
- 2.When the gateway is fixed to the building, the gateway should be in the protection area of the lightning rod which is on the top of the building. If there is no lightning rod on the top of the building, please make sure that the gateway would not be in the influence area of the lightning, or you must fix a lightning rod above the antenna and connect to the ground of the building or lightning protection network.
- 3.The small lightning rod should be made of circular steel tube with diameter more than 16mm. The lightning rod should be higher than the top of the antenna 1m or more.
- 4.Lightning rod ground down lead should be no less than 8 mm diameter galvanized round steel or cross-sectional area not less than 48 mm squared multi-strand copper wire. When using multiple strands of copper wire for grounding, please make steel tube to prevent the mechanical damage.
- 5.When the gateway is put nearby the lightning protection area, please make sure all the device include antenna put below the lighting protection area.
- 6.Don't put or fix the cable to the lightning protection line or area.
- 7.Please ground the fixture of the gateway.