

# Odge5000d

## User Manual



4T4R Digital Radios

High Output Power

5G NR Compliant

Outdoor Rated

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# General

The Odge5000d components are designed for maximum safety and reliability when they are installed, used, and maintained by trained and qualified technicians in accordance with the procedures and instructions contained in this manual. To

ensure the safe operation of your system, always follow the safety and operational recommendations in this manual.

## Warnings

- ☞ Odge5000d is not a consumer product. Please install and use Odge5000d in accordance with the instructions.
- ☞ Before installing or modifying any Odge5000d equipment, read and fully understand the entire instructions in this guide.
- ☞ Only qualified personnel are authorized to install and maintain the Odge5000d.
- ☞ Changes or modifications to the Odge5000d equipment not expressly approved by the manufacturer could void the product warranty and the user's authority to operate the equipment.
- ☞ Follow Electro Static Discharge precautions to avoid any damage to PCB, PSU, etc.
- ☞ Keep equipment powered-off during installing or modifying.
- ☞ Low path loss cables connected to antennas are highly recommended.
- ☞ Antenna gain should not exceed 14 dBi.

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.

**Note:** Only authorized person can enter the area where the antenna is installed. And the person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. Awareness of the potential for RF exposure in a workplace or similar environment can be provided through specific training as part of a RF safety program

## Site Considerations

- ☞ The system delay should be taken into consideration when there are neighboring BTS sites with overlapping in coverage.
- ☞ Pick an ideal easy-to-reach location for installation convenience.
- ☞ Verify that there is a minimum of a 200cm radius of space around Odge5000d system equipment for the convenience of maintenance and on-site inspection.

## Environmental

Humidity and temperature have adverse effects on the reliability of the Odge5000d system. Therefore, it is highly recommended to install the equipment in locations with stable humidity, temperature, and ventilating.

The equipment has to operate within the following humidity level and temperature range:

Maximum humidity: 100%

Temperature range: -40 to 55°C

## Warning Marks

The warning marks on the equipment shell should be kept clean, readable and identifiable.

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**ALWAYS disconnect all lines and power connections before servicing or disassembling this equipment.**

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**NEVER touch the surface after the devices power on.**

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**For performance and safety reasons, NEVER disassemble and remodel the devices.**

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# Preparation

## Unpacking and Inspection

Unpack and inspect the packages as follows:

1. Open the shipping packages carefully for each unit from the protective packing sponge.
2. Ensure that all equipment and accessories have been delivered.
3. Ensure that all equipment and accessories have no damage. If there is any damage, contact your BTI service agent.

## Tools

Electric drill, cross head screwdriver, side cutters, ladder, and other tools are needed for Odge5000d installation which is not offered from BTI for now. Customers to provide these tools themselves.



Drilling Machine

Pen

Allen Wrench T5

Combination

Spanner 17mm

Nut M10 and M12

# Installation of the Odge5000d

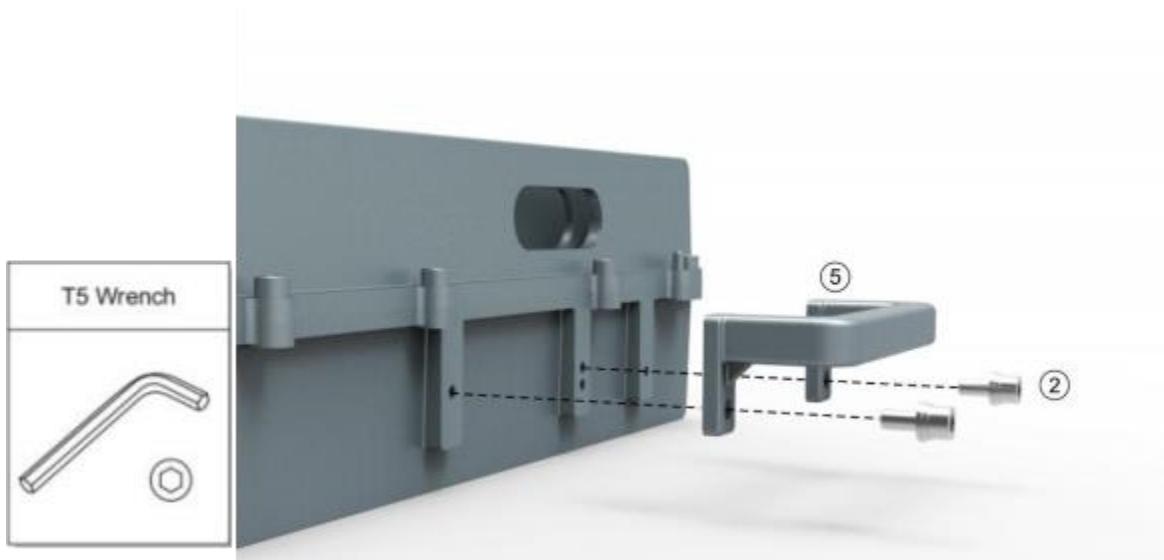
## Odge5000d Accessories

M2RU Accessories List		① Nut M10	② Screw M6×14	③ Flat Washer M10	④ Spring Washer M10
⑤ Handle	⑥ Expansion Bolt M10×90				
⑦ HPRU Mounting Bracket I	⑧ Optical Transceiver A11200801841 Optical Transceiver A11200801831				
⑨ HPRU Mounting Bracket II	⑩ Nut M12				
⑪ Flat Washer M12	⑫ Spring Washer M12			⑬ Bolt M12	
⑭ DC Power Lead 2m	⑮ Ground Wire 2m				
					

Figure 1. Odge5000d Accessories

**Wall Installation (Back on the Wall)**

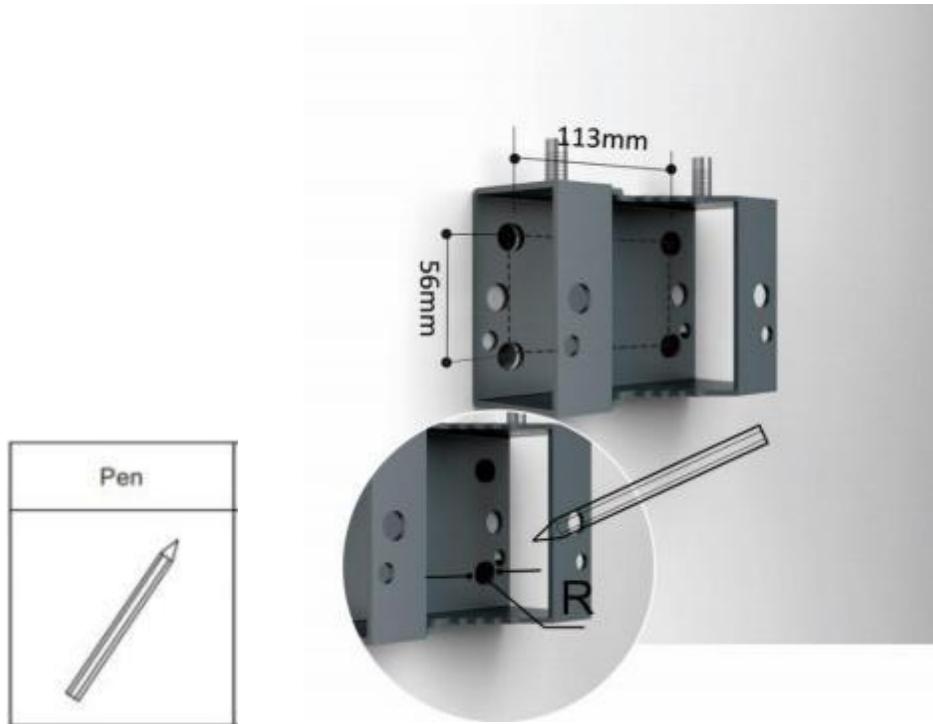
1. Attach and fasten the handle to the side of Odge5000d with screws M6×14 using T5 Wrench.



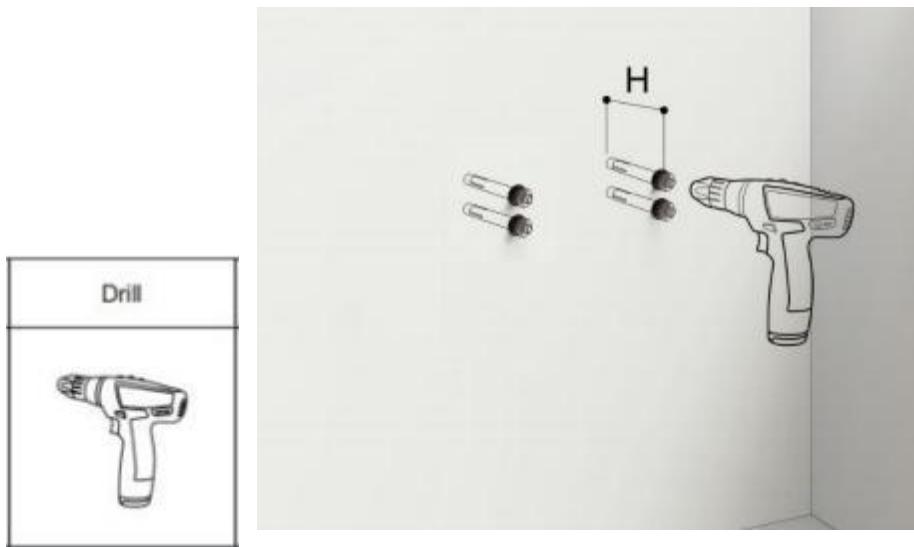
2. Attach and fasten the Bracket I to the back of Odge5000d with screws M6×14 using T5 Wrench.



3. Mark the position of the drilling holes in the mounting Bracket II. Note:  $R=13\text{mm}$ .

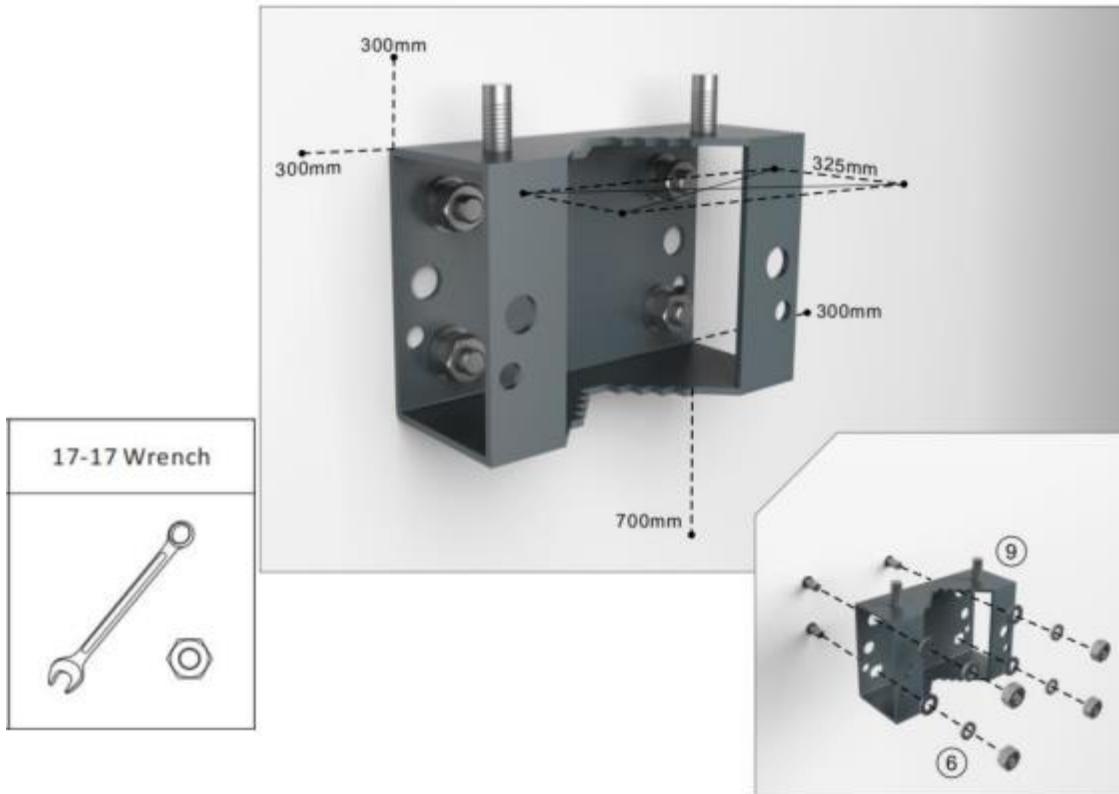


4. Drill 4 holes at the marked positions. Note:  $H=70\text{mm}$

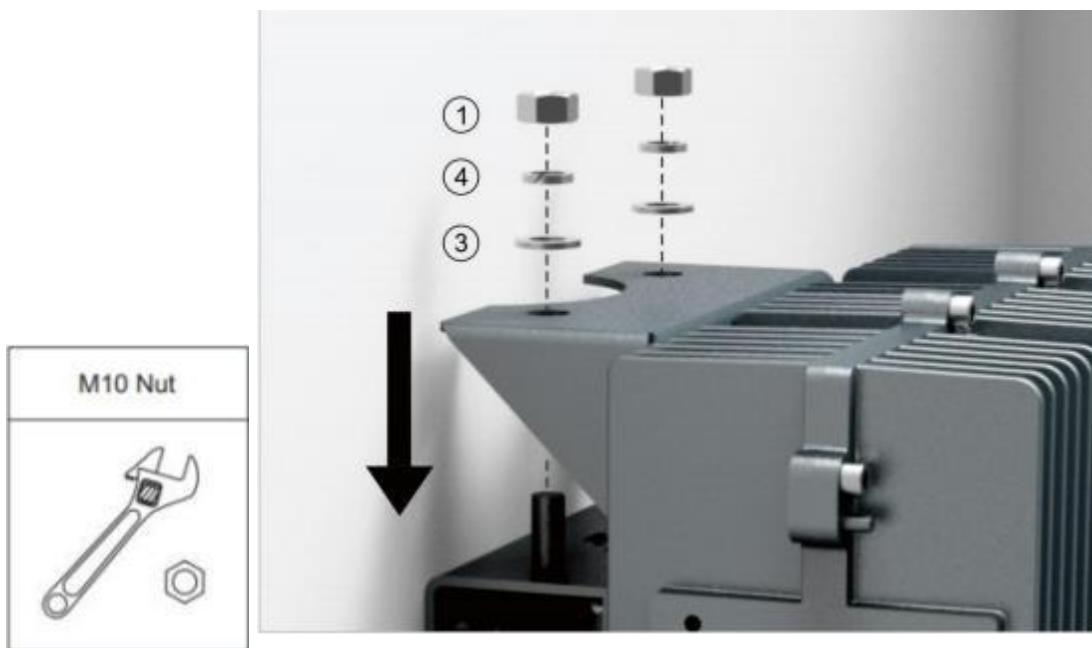


5. Attach the dowels, expansion screws or the like and fasten the Bracket II to the wall.

Tips: use Bracket II as a reference to control each devices' separation distance before hanging and locking Odge5000d up.



6. Hang the Odge5000d on the mounting bracket II and fasten with nuts M10.



7. Fasten the Bracket I and II with screws M6×14.



8. Connect and lock the power cable at the Odge5000d rear side



9. Connect and screw the ground cable at the Odge5000d's left side



**Wall Installation (Side on the Wall)**

1. Attach and fasten the handle to the side of Odge5000d with screws M6×14 using T5 Wrench.

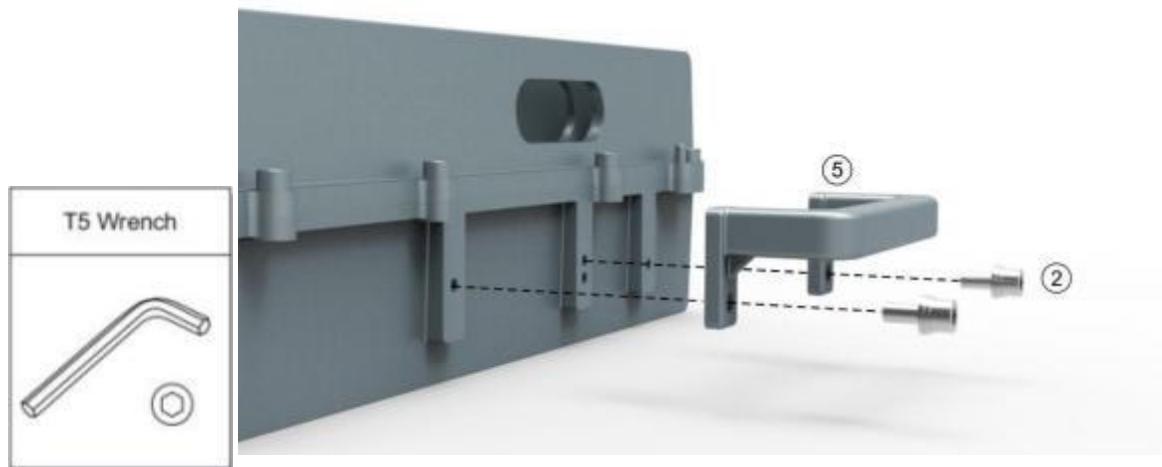
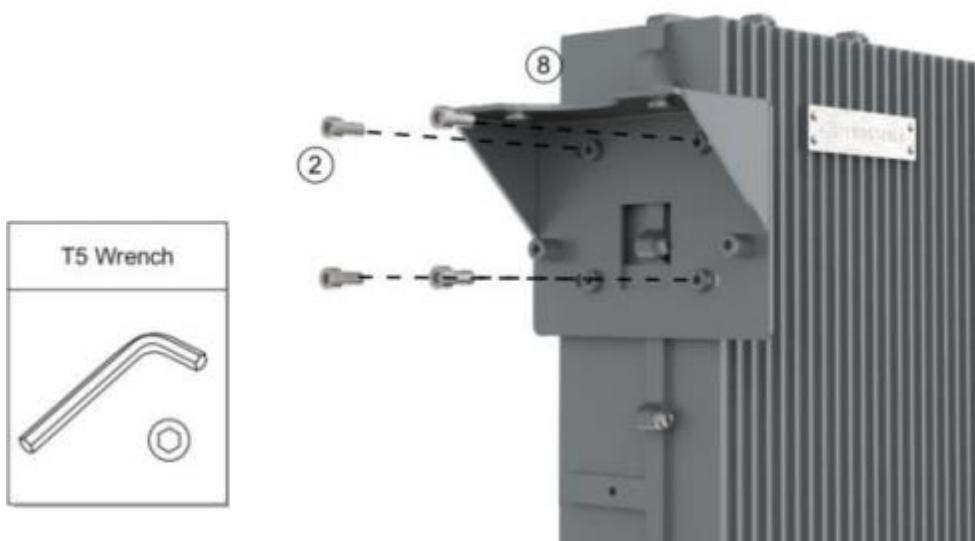
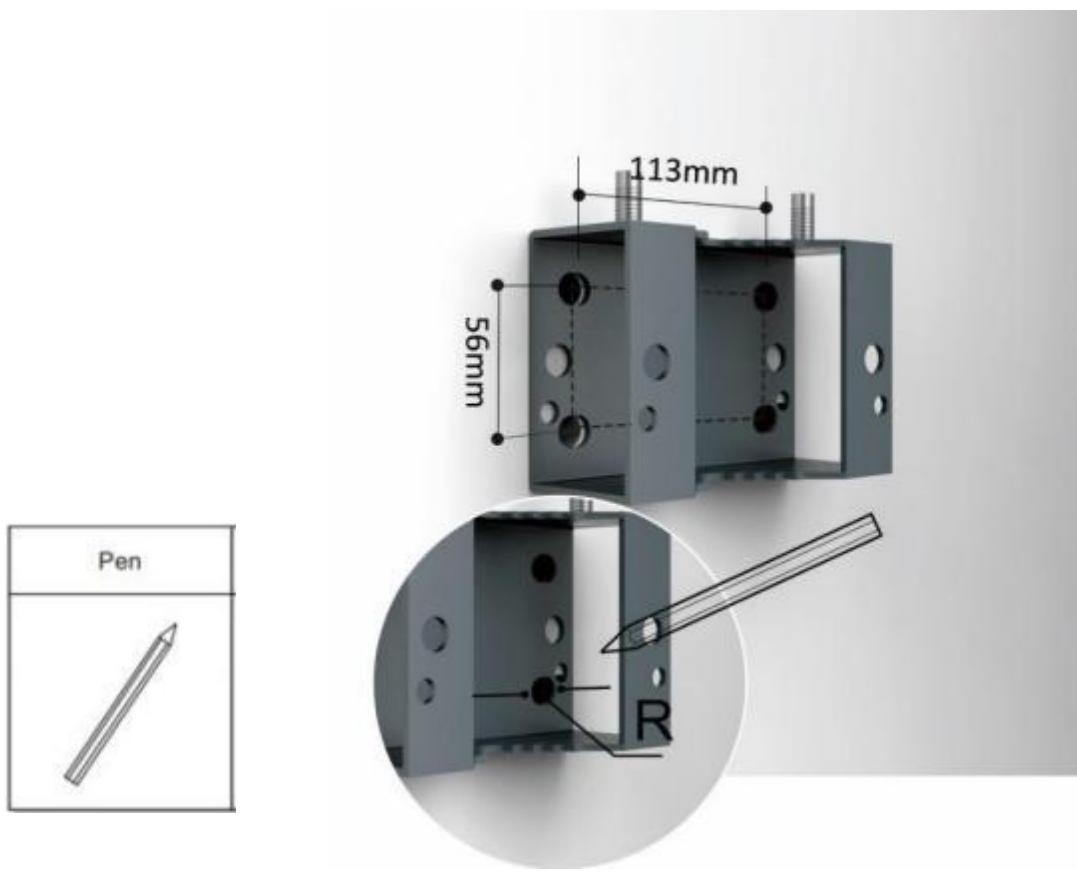


Figure 2.

2. Attach and fasten the Bracket I to the left side of Odge5000d with screws M6×14 using T5 Wrench.



3. Mark the position of the drilling holes in the mounting Bracket II. Note: R=13mm.

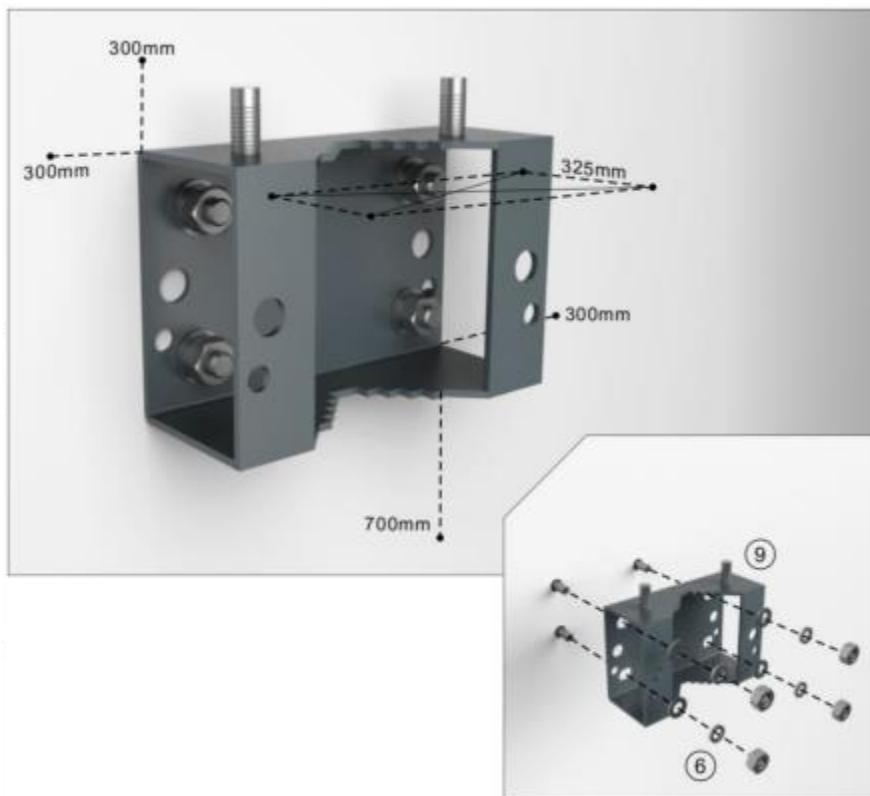
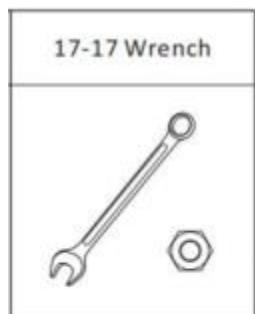


4. Drill 4 holes at the marked positions. Note: H=70mm.



5. Attach the dowels, expansion screws or the like and fasten the Bracket II to the wall.

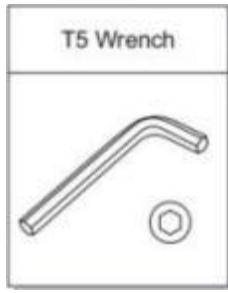
Tips: use Bracket II as a reference to control each devices' separation distance before hanging and locking Odge5000d up.



6. Hang the Odge5000d on the mounting bracket II and fasten with nuts M10.



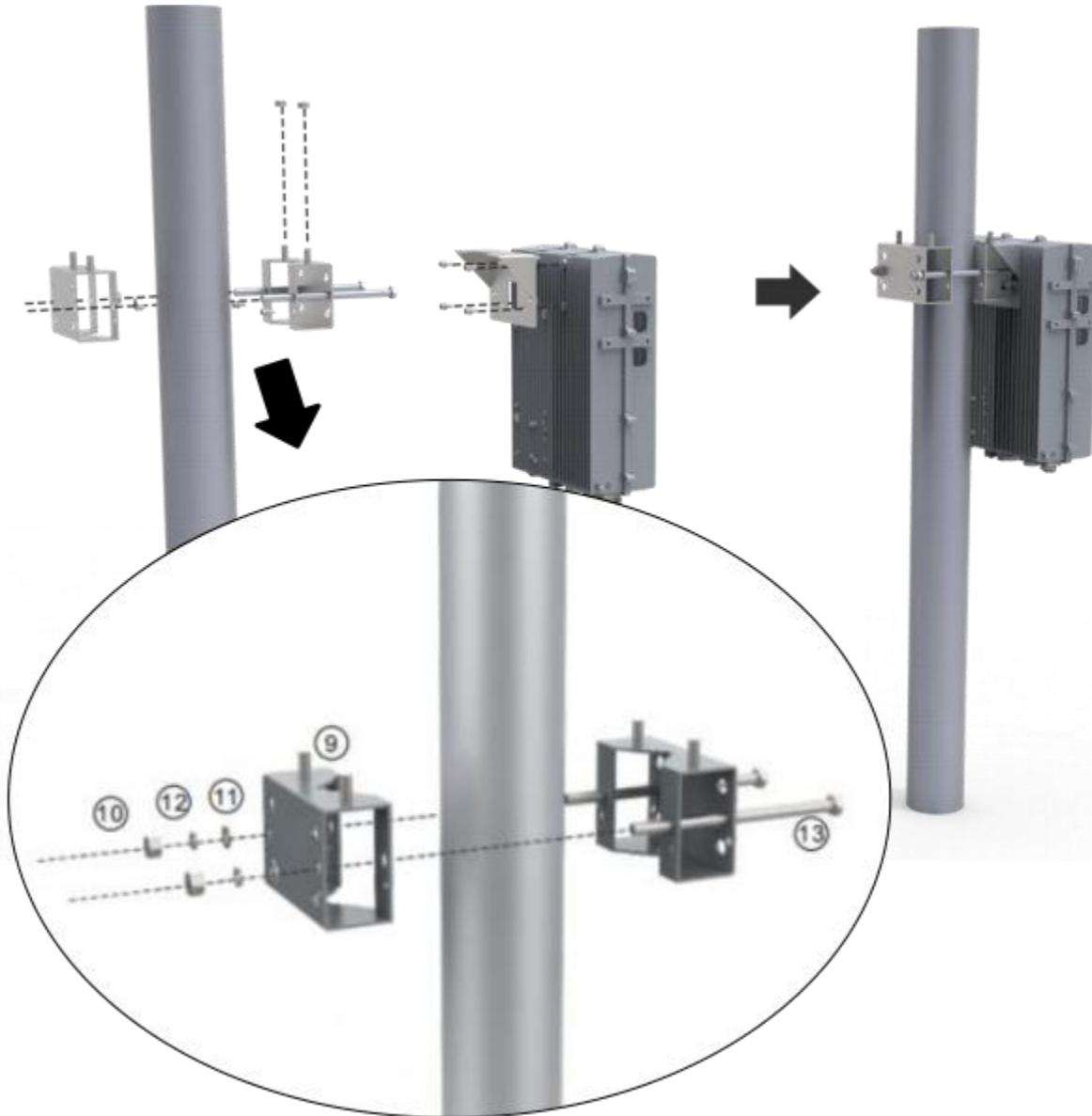
7. Fasten the Bracket I and II with screws M6×14.



### Pole Installation

1. Install the handle and Bracket I to the back of Odge5000d.
2. Install the bracket II and Bracket III to the pole.
3. Hang the Odge5000d on the mounting bracket and fasten with nuts M10.
4. Connect the ground cable and power cable.

Note: The diameter of Pole shall not be over 110mm or less than 55mm.



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

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.

Note: This product 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 product 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 product 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.

**WARNING:** This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 80 inches (200 cm) between the radiator and your body. Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.