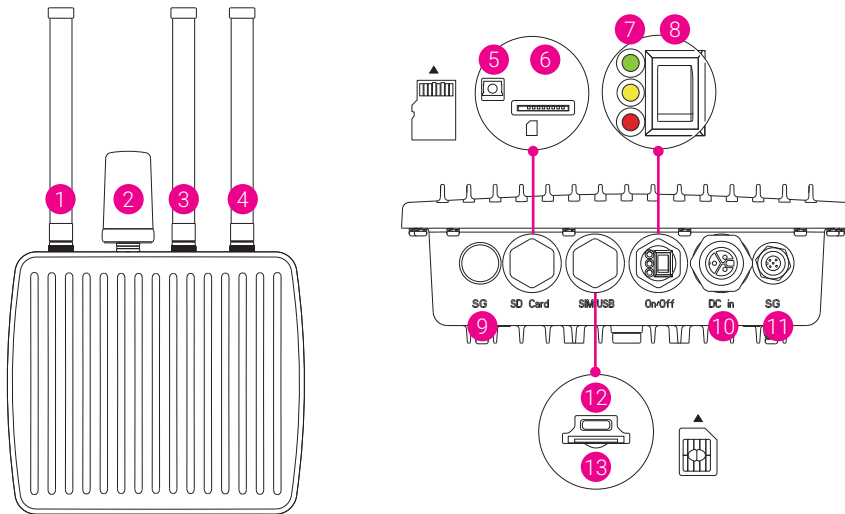


RN-30 Data Acquisition System

RN-30-EG/ND Series Physical Features



1. LoRa antenna
2. GPS antenna
3. NB-IoT antenna
4. Wi-Fi antenna (RN-30-EG01 only)
5. Press to reboot the system and directly update the firmware
6. SD card slot*
*Insert the SD card with the golden fingers facing upward
7. LED indicators

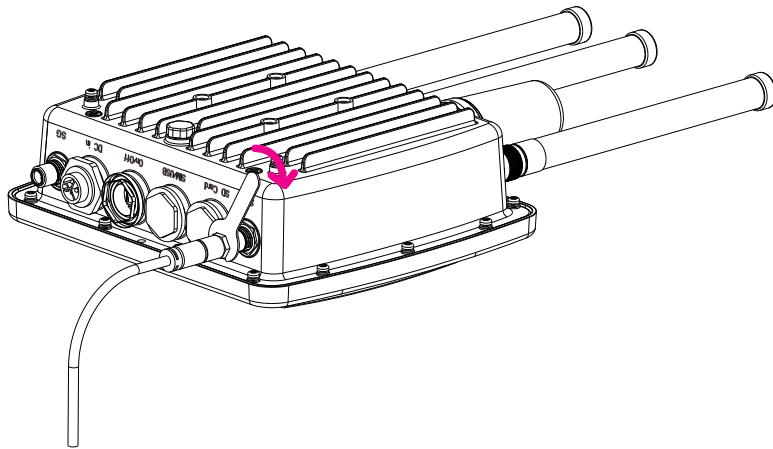
Green	OFF	NB-IoT Disconnected / Sleeping Mode
	Blinking	Searching NB-IoT
	ON	NB-IoT Connected
Yellow	OFF	LoRa Disconnected / Sleeping Mode
	Blinking	Searching LoRa
	ON	LoRa Ready for Connecting
Red	Blinking	Searching Staff Gauge RN-30-SG01 or RN-30-SG02
	OFF	Connected Staff Gauge

8. Power button
9. Sensor port 1 for RN-30-SG01 or RN-30-SG02
(M12 A-coded, 5-pin female connector)
10. 12V DC power input
11. Sensor port 2 for RN-30-SG01 or RN-30-SG02
(M12 A-coded, 5-pin female connector)
12. USB Type-C connector (reserved)
13. SIM card slot*
*Insert the SIM card with the chip facing upward

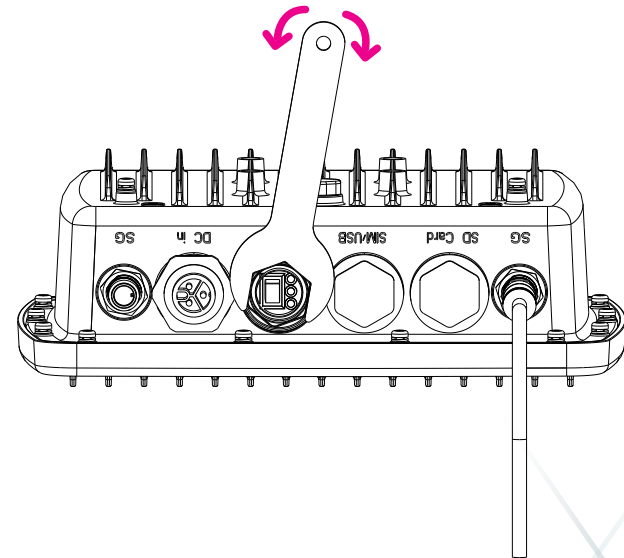
RN-30 Data Acquisition System

RN-30 System Installation

Using Wrenches with the RN-30 EG/ND Series



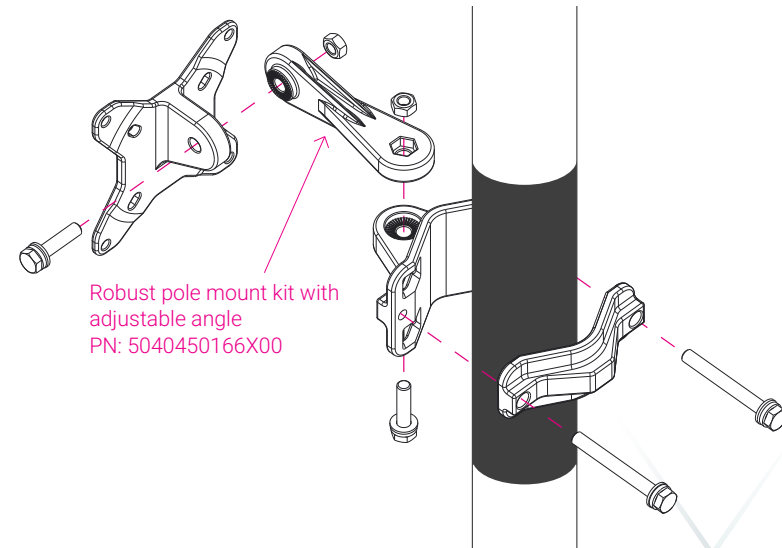
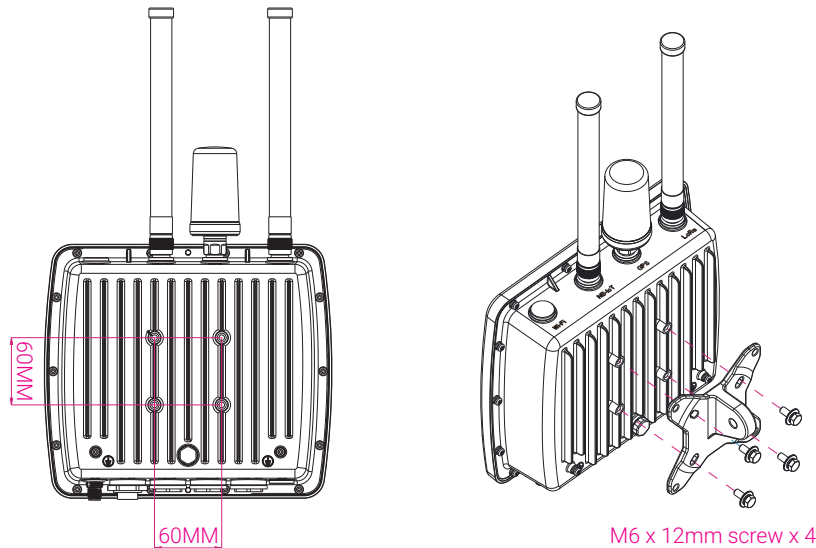
- Use a 14 mm wrench and turn clockwise to tighten the staff gauge cable.



- Use a 25 mm wrench to open or tighten the waterproof caps.

RN-30 Data Acquisition System

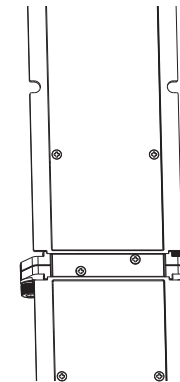
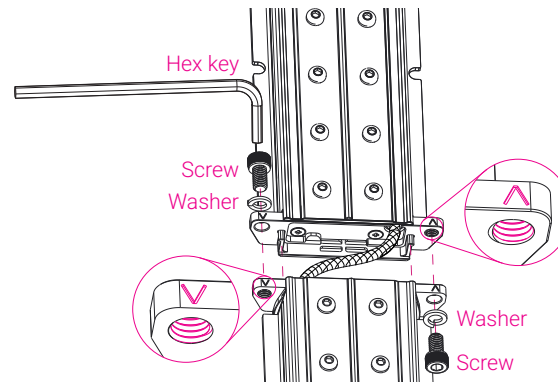
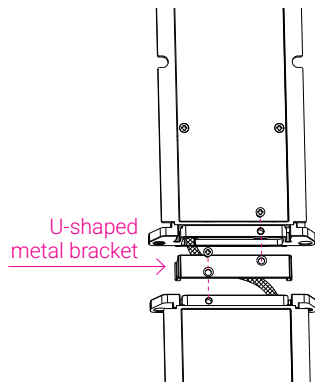
Installing the RN-30 EG/ND Series



1. Secure the support bracket to the RN-30 EG/ND series unit using the screws.
2. After completing the previous step, attach the RN-30 EG/ND series unit to the metal post. Insulate the metal post to ensure that the main unit is isolated from earth ground. Wrap 4 inches of electrical tape around the metal post to provide electrical insulation.

RN-30 Data Acquisition System

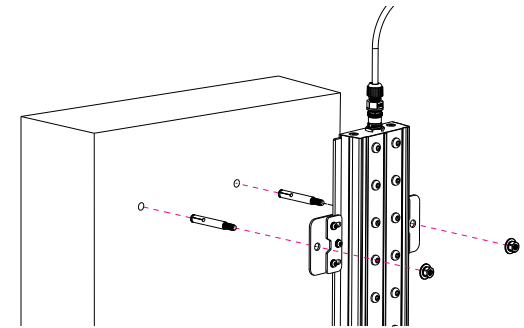
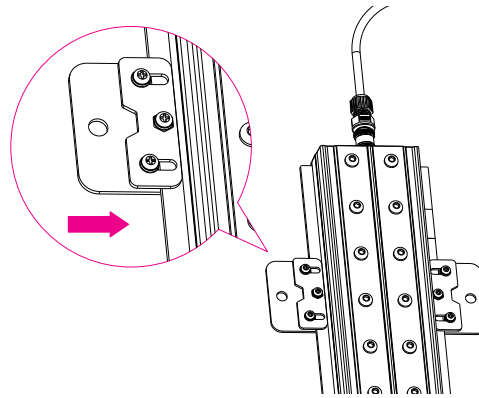
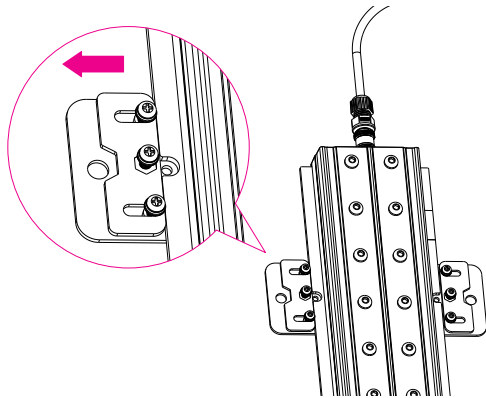
Assembling the Smart Staff Gauges (RN-30 SG02 160cm)



1. Join the two staff gauge sections using a U-shaped metal bracket, secured in place with two screws.
2. After completing Step 1, turn the staff gauges over. Align the mounting holes of both fixed locking brackets. Insert a screw with a washer. Before tightening the screw, note the arrow markings and the position of the threaded hole on the fixed locking brackets. Tighten the screw using a hex key. Repeat for the opposite side.
3. Once installation is complete, it will appear as shown in the above image.

RN-30 Data Acquisition System

Mounting the Smart Staff Gauge



1. Slide the bottom plate outward and align the notch with the position on the staff gauge. Loosen the screws if they are tightened.
2. Slide the bottom plate inward until the bracket engages with the staff gauge, then tighten the screws. Repeat the same procedure on the opposite side.
3. Mount the smart staff gauge onto the surface wall.

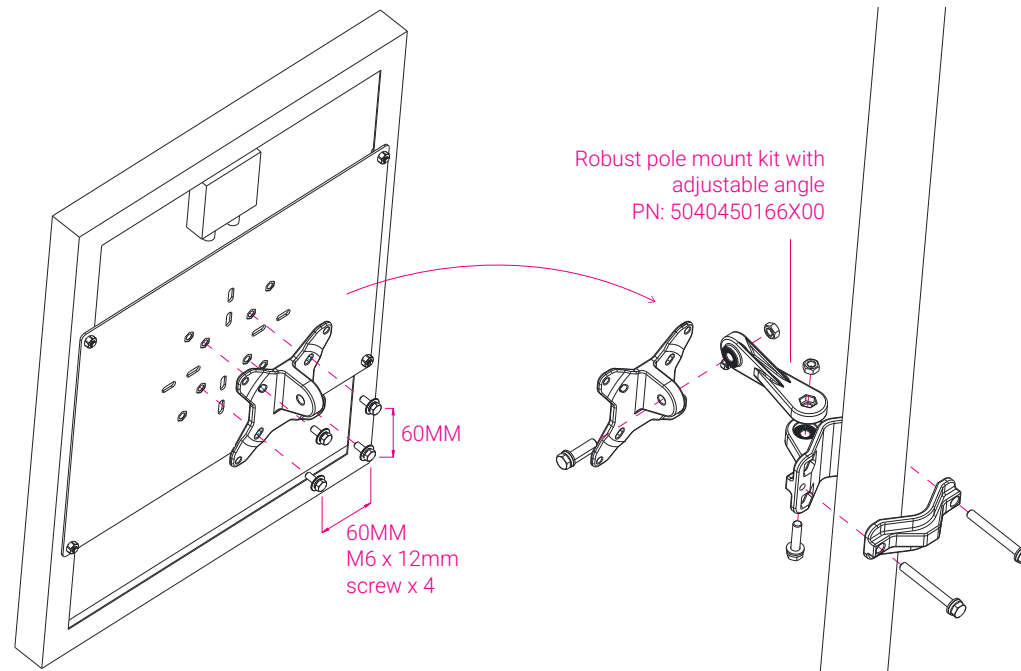


Steps 1 to 3 apply only to the upper bracket kit. Repeat these steps to install the other bracket kits for the smart staff gauge.

RN-30 Data Acquisition System

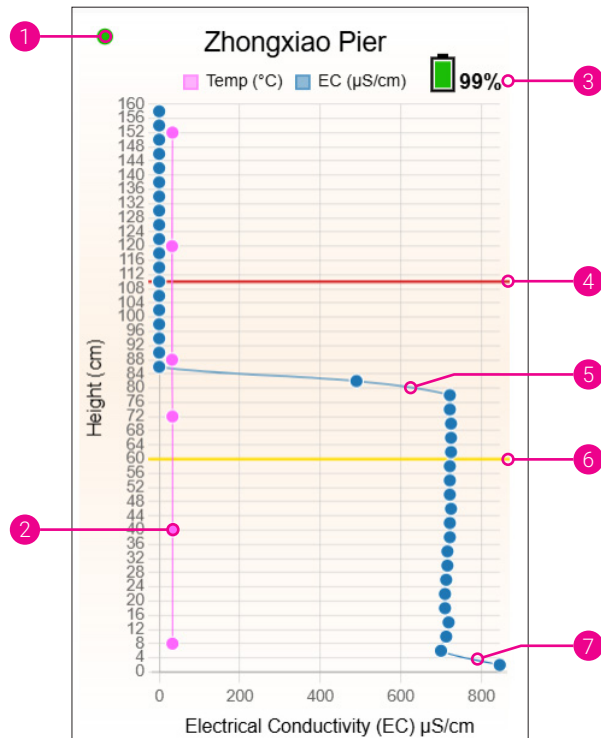


Installing the Solar Panel



RN-30 Data Acquisition System

Basic RN-30 System Operation



To access the Profile page, enter the pre-defined shipping address (customized per user and may vary) into the browser's address bar.

1. Status indicator
Green: device working
Red: Sensor exception
2. Temperature
3. Battery level
4. High water level alarm
5. Water level
6. Low water level alert
7. Mud level