Dcon_Ag_AWS
(Advance Weather Station)
### Field Installation Document

Technical Specification:

- Product Name : AWS (Advance Weather Station)
- Solar Panel : 12V/12W
- Battery : 7.4V/2.6AH
- Backup Time : 72 Hours
- Communication : LORA and Blue tooth 5.0
- GPS : Inbuilt
- Sensors : Wind speed (Anemometer), Wind Direction, Rain Gauge, Air Pressure, UV Index, Light Index, Temperature and Humidity.

Assembly Procedure:
Mounting Assembly:

- Place V slot mounting at top side.
- Place H slot mounting at bottom side.

Mounting - V

SOM Unit
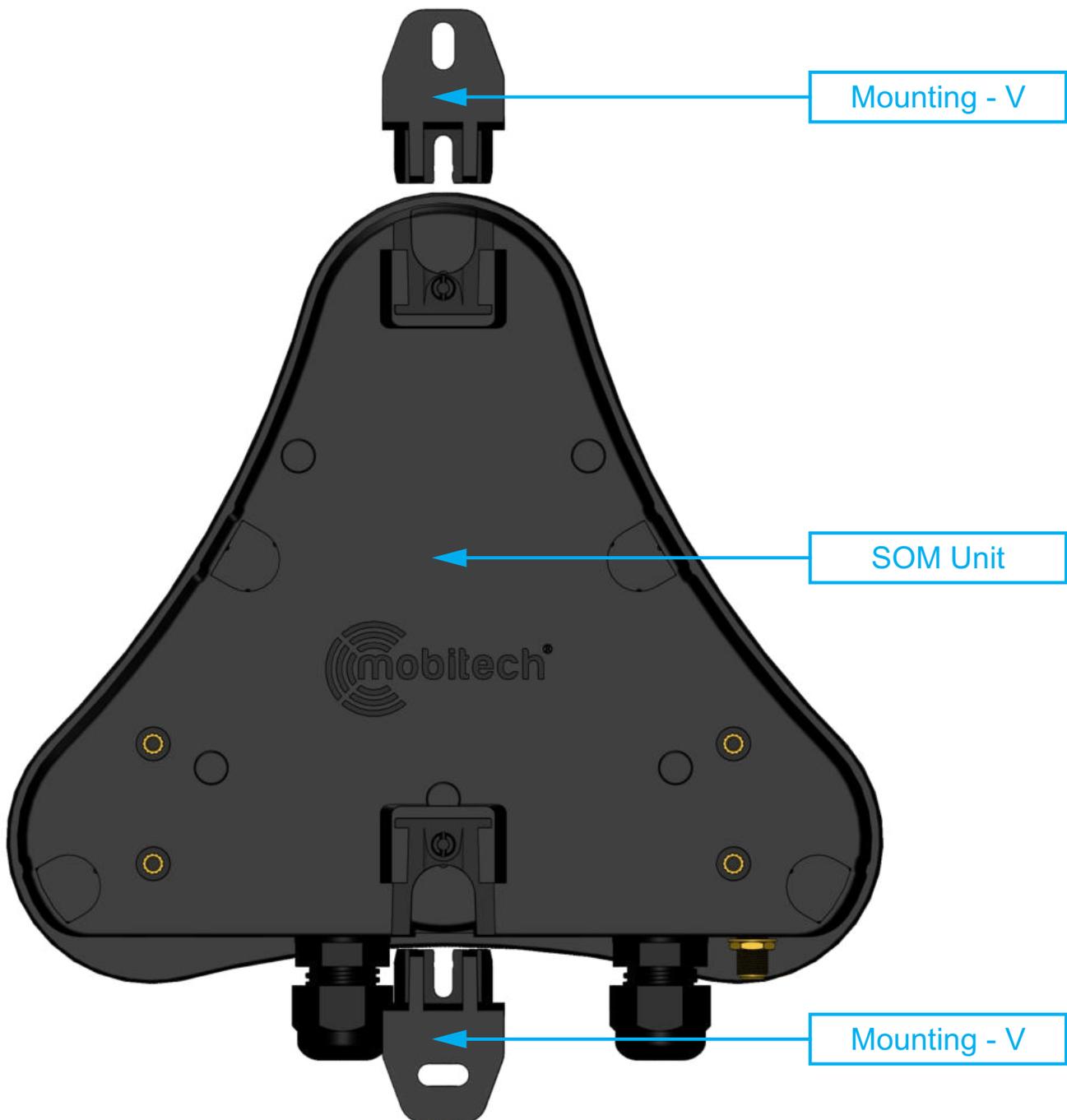
Mounting - V

Antenna Assembly:

- Place the L-bracket for antenna mounting and screw with M3x6mm screw.
- Place the antenna on the mounting plate with M5x8mm screw.
- Connect antenna connector to SMA connector in AWSunit.

Antenna

AWSUnit

M3x6mm screw

L - Bracket

SMA Connector

M5x8mm screw
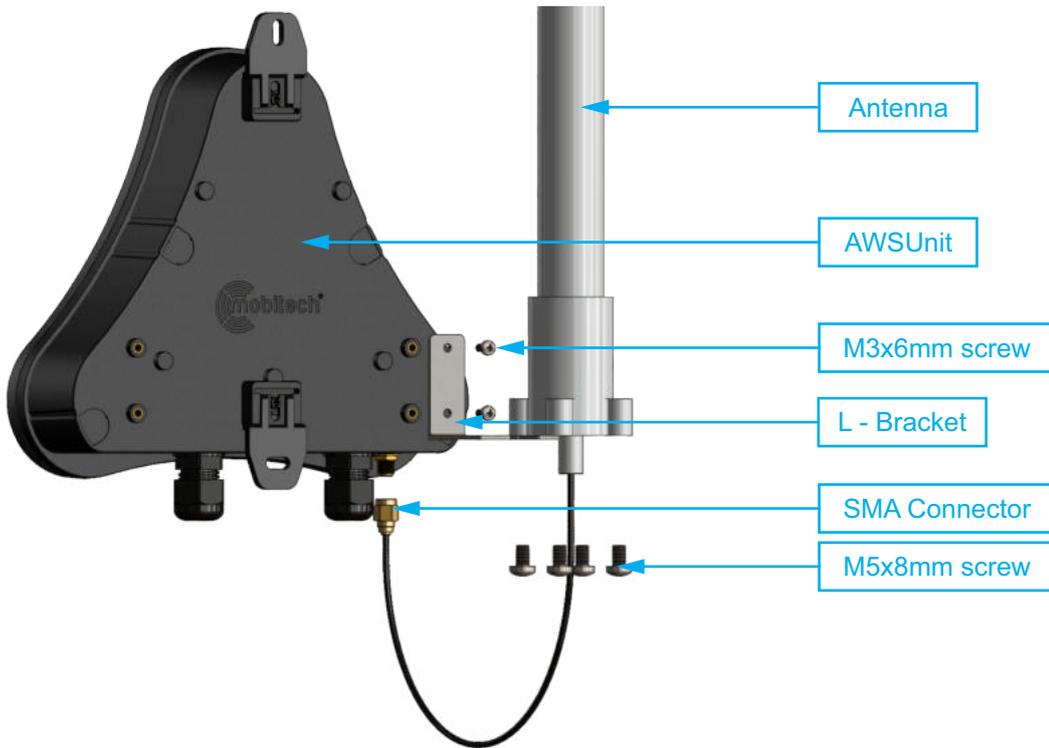
Pole Assembly:

- Mount AWS unit with screw on pole.

Mounting Screw

AWS Unit

Mounting Screw

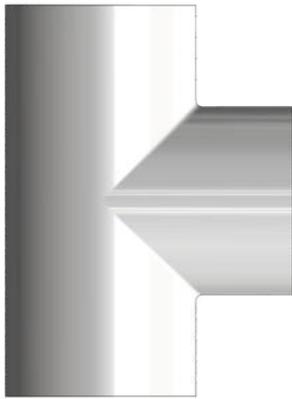## Weather station and solar panel pole assembly:

- Prepare mounting assembly before mounting on base pole.
- Inside the packing found three parts for mounting weather station and solar panel.
  - Step - 1: Connect Part - 1 and Part - 2 with paste as shown in the image.
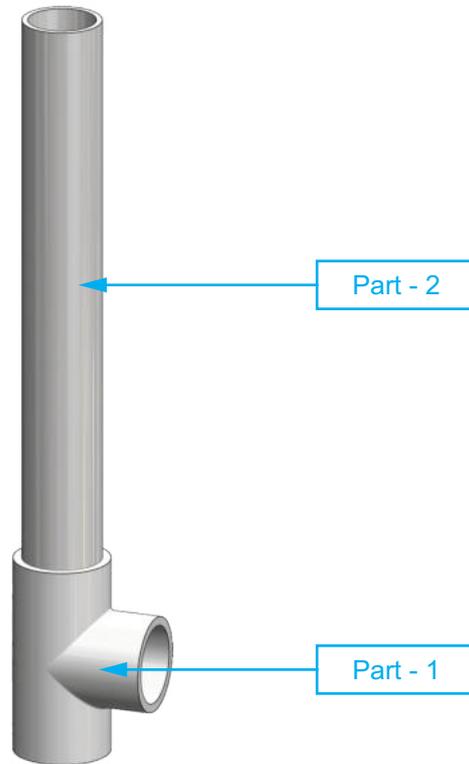
Part - 2

Part - 1

  - Step - 2: Connect first assembly with next Part - 3 with paste as shown in the image.
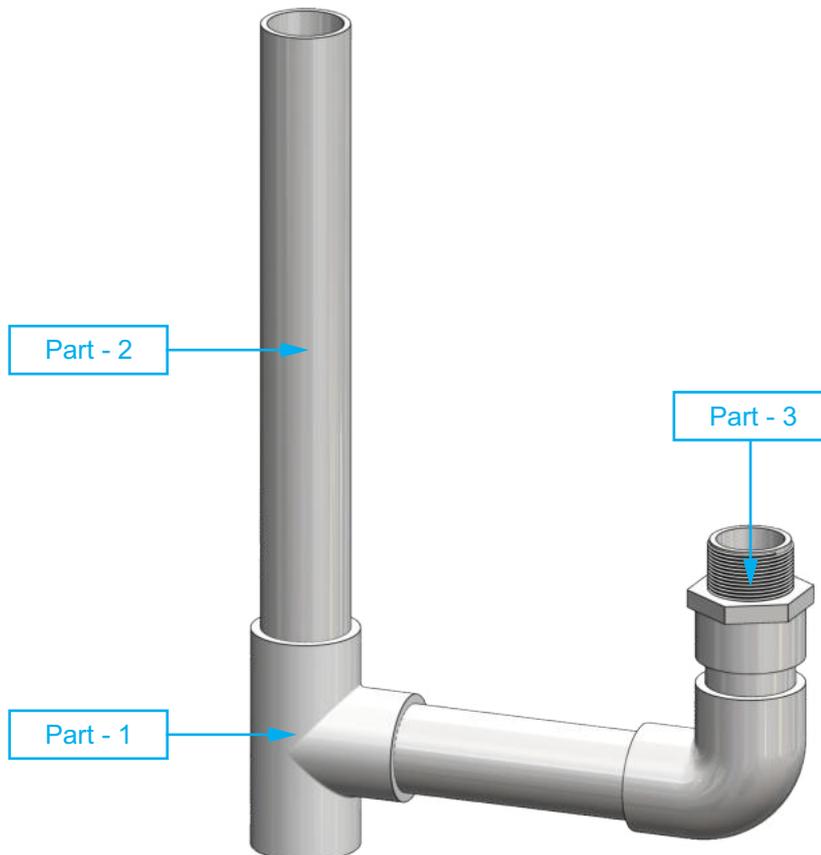
Part - 2

Part - 3

Part - 1

Part - 1

Part - 2

Part - 3

- Mount previous assembly on the base pole as shown in the image - 1.
- Mount Weather station on top of the assembly as shown in the image - 2.
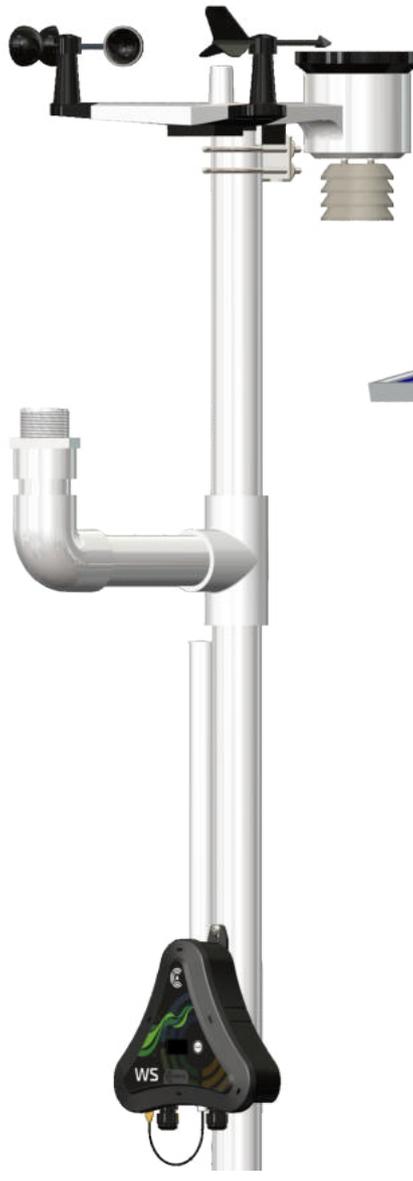- Mount solar panel as shown in the image - 3.


Image - 1

Image - 2

Image - 3

Full Assembly:

Weather Station

Part - 2

Solar Panel Assembly

Part - 1

Part - 3

Base Pole

Antenna

AWS Unit

Wiring Drawing:

- Open top cover.
- Open cable gland 1, insert solar cable gland 1 and connect cable as shown in wiring diagram.
- Open cable gland 2, insert Weather Station Cable in to cable gland 2 and connect cable as shown in wiring diagram.
- Connect battery connector as shown in picture.
- Check all connections and ensure tight of cable gland before closing top cover.
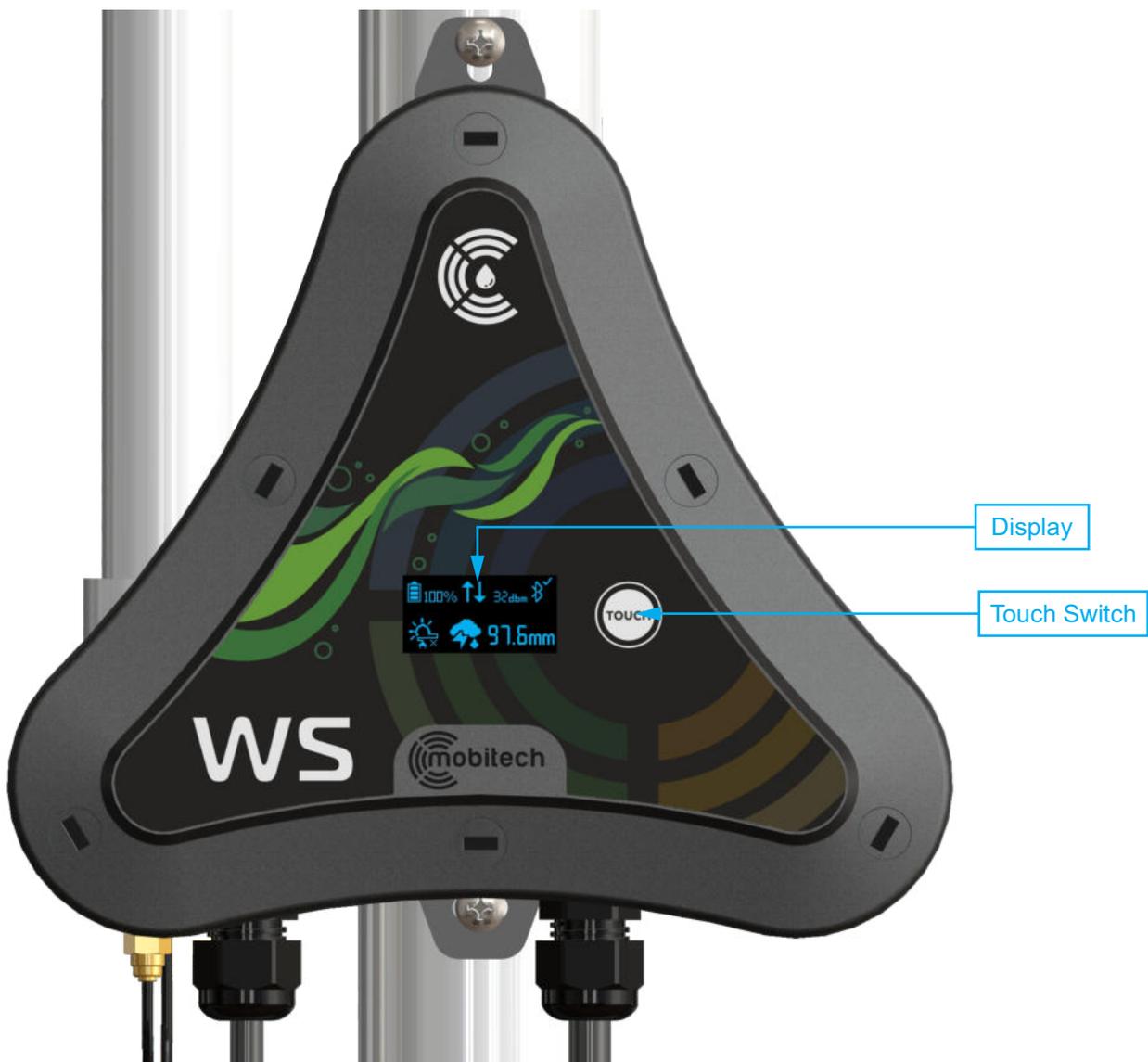
Connector Detail:
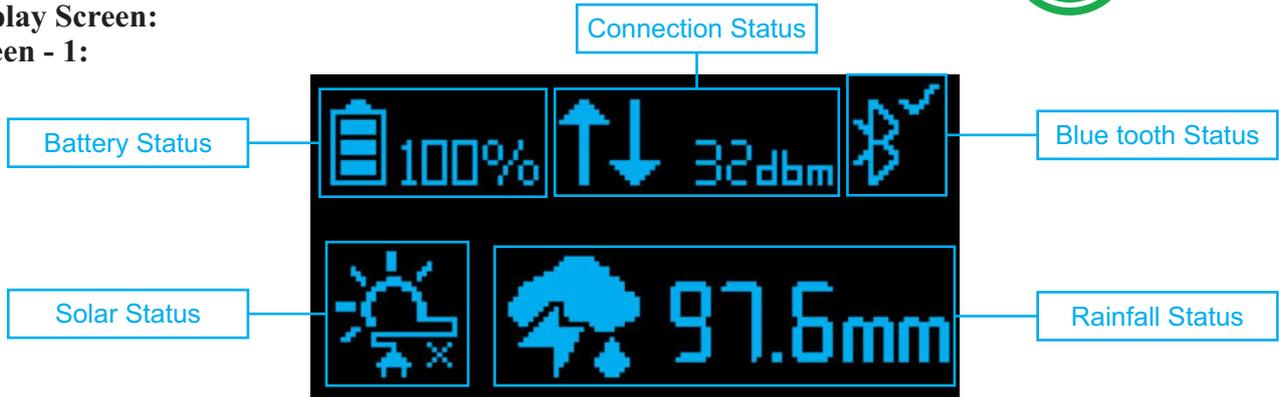

SOLAR

-
+

B-
A+
GND
+5V
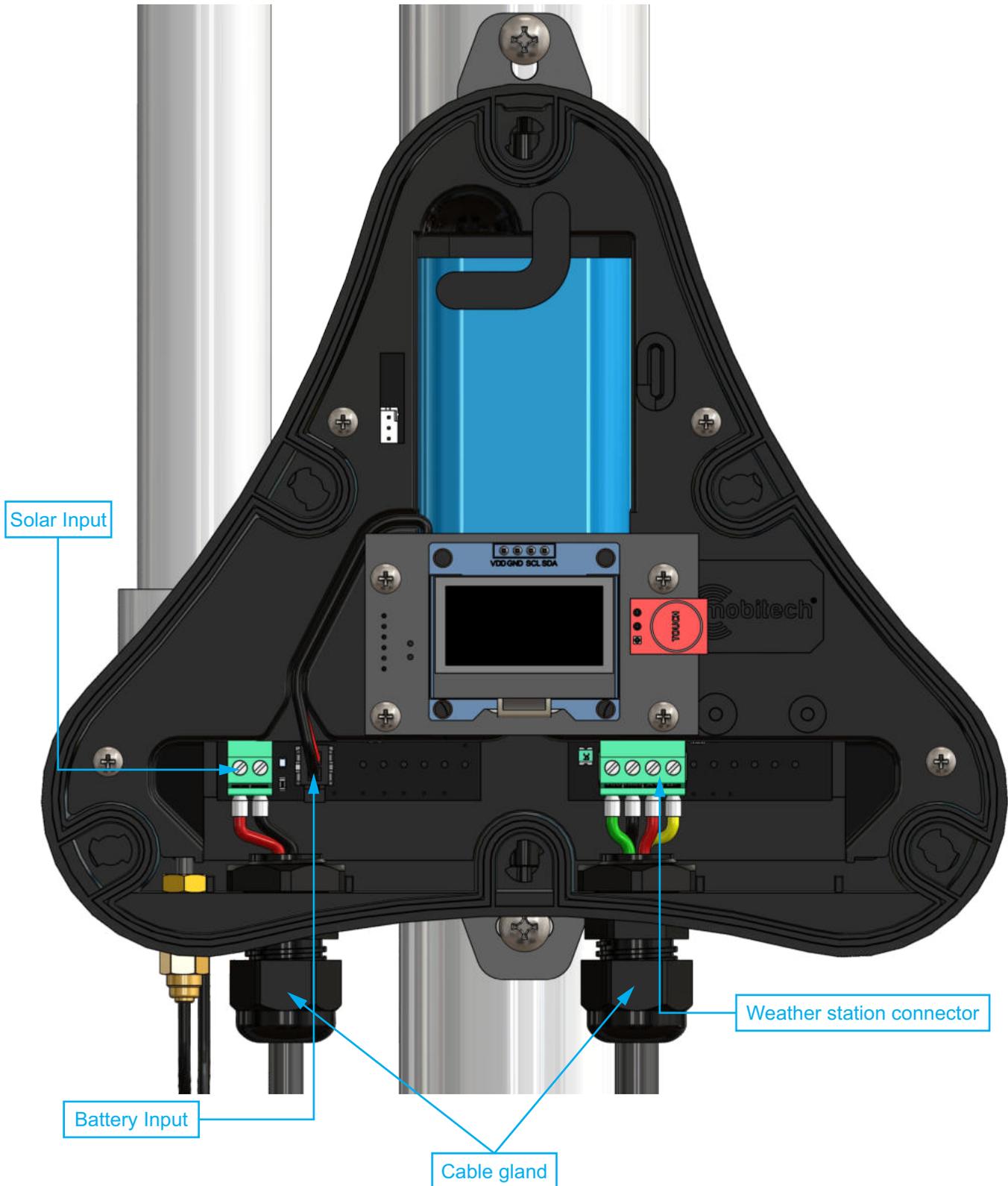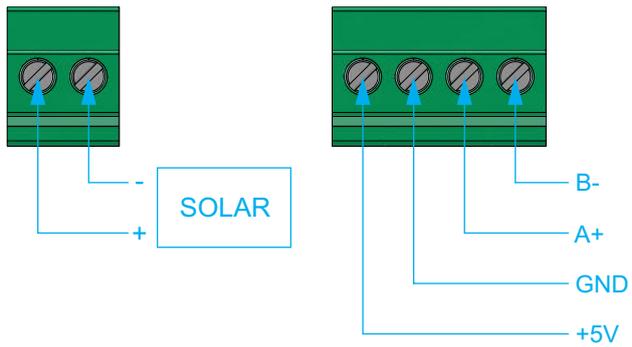
Configuration:
- After finishing wiring, touch the touch sensor, it will wake-up display.
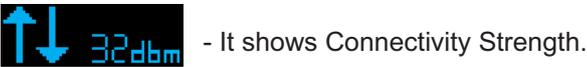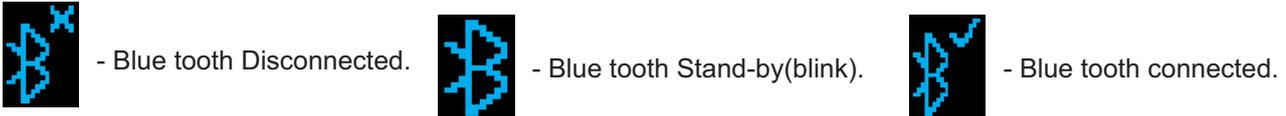- Long touch (3sec) to connect Blue tooth for configuration.

Display

Touch Switch

Dcon_Ag_AWS

Display Screen:
Screen - 1:

Connection Status

Battery Status

Blue tooth Status

100%   32dbm

Solar Status

Rainfall Status

97.6mm

Screen - 2:

Wind Speed

Wind Direction

79.1 km/hr   NS

Temperature Status

Humidity Status

38.2°c   80%

Battery Status:

100% - It shows Internal Battery Percentage.

Connectivity:

32dbm - It shows Connectivity Strength.

Blue tooth Status:

- Blue tooth Disconnected.   - Blue tooth Stand-by(blink).   - Blue tooth connected.

Solar Status:

- Solar Not Connected.   - Solar Connected (Blink).

Rain Level:

97.6mm - It shows level of rainfall.

Wind Speed:

79.1 km/hr - It shows speed of wind.   NS & WE - It shows direction of wind.

Temperature:

38.2°c - It shows temperature value of the surroundings.

Humidity:

80% - It shows water content present in the surroundings.