mobitech

wireless solution

IRRIGATION AUTOMATION

Dcon Ag

AWS

[Advance Weather Station]

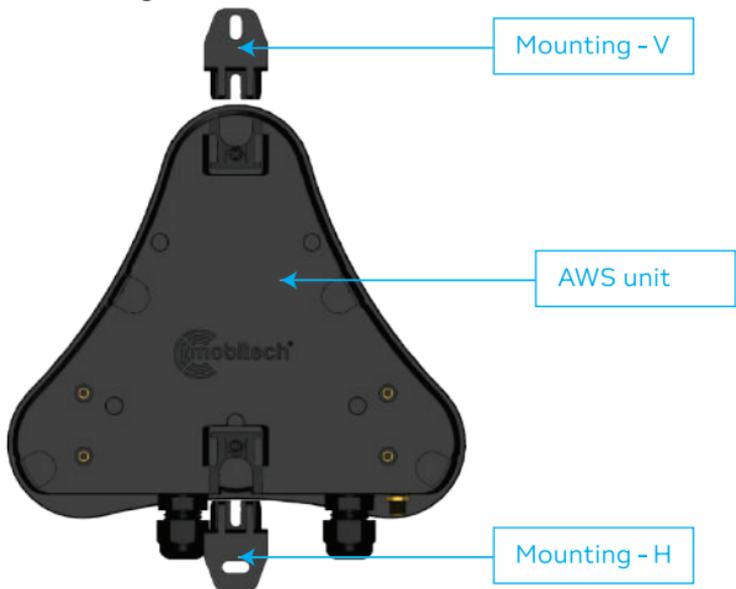Field Installation Document

Technical Specification

Product Name	:	AWS (Advance Weather Station)
Solar Panel	:	12V/13W
Battery	:	7.4 V / 2600 mAh
Backup Time	:	72 Hours
Communication	:	LORA and Bluetooth 5.0
GPS	:	Inbuilt
Sensors	:	Wind Speed (Anemometer), Wind Direction, Rain Guage, Air Pressure, UV Index, Light Index, Temperature and Humidity.

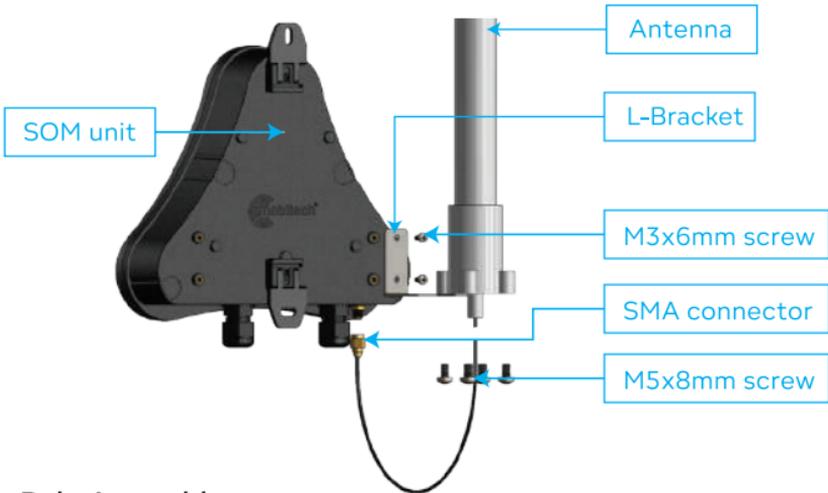# ASSEMBLY PROCEDURE

Mounting Assembly

Place V slot mounting at top side.

Place H slot mounting at bottom side.

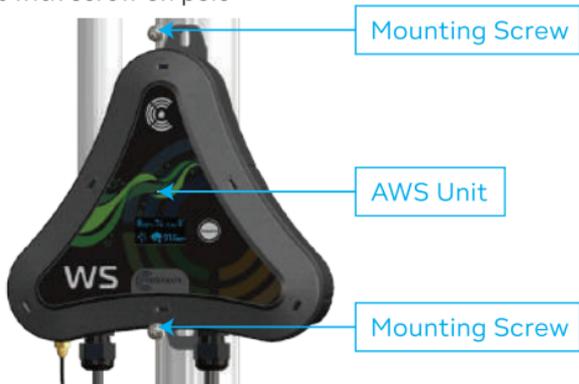Mounting - V

AWS unit

Mounting - H

Antenna Assembly

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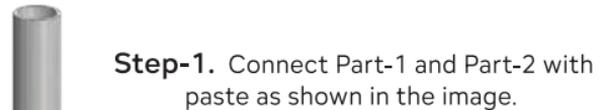- Connect antenna connector to SMA connector in AWS unit.

Antenna

SOM unit

L-Bracket

M3x6mm screw

SMA connector

M5x8mm screw

Pole Assembly

- Mount AWS unit with screw on pole

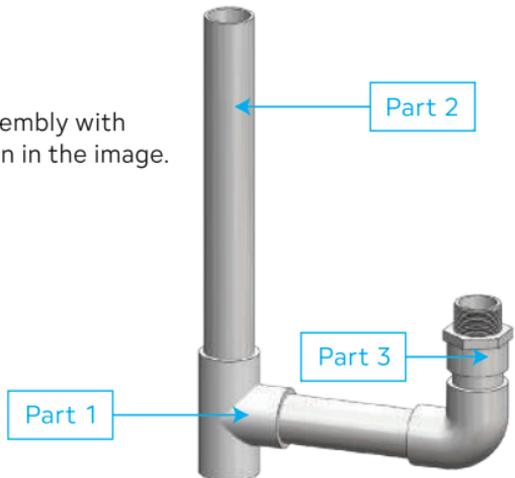Mounting Screw

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.
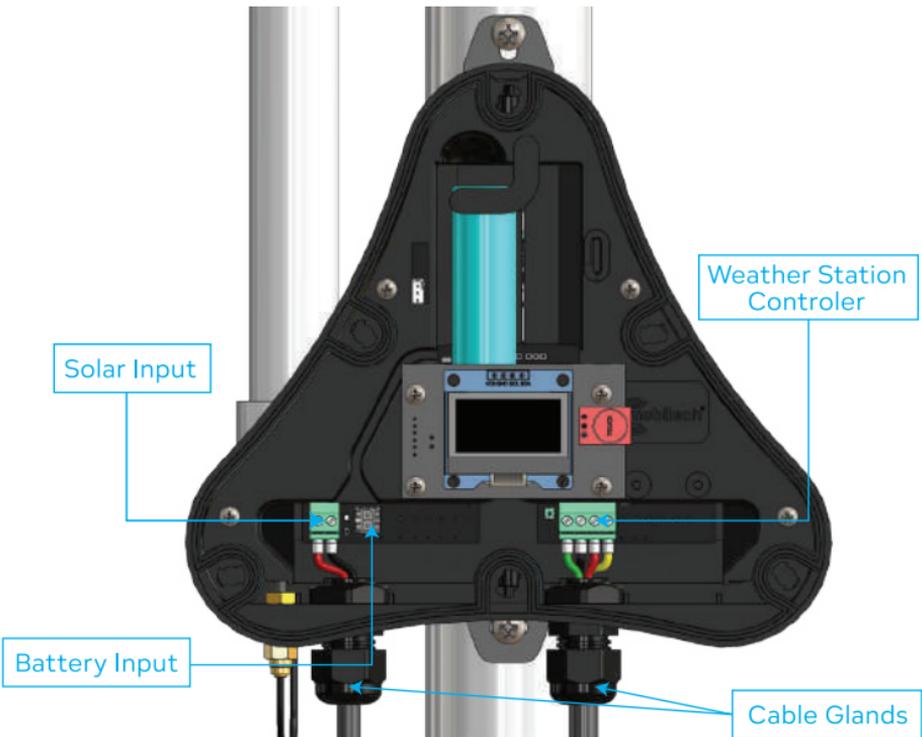

Image-1   Image-2   Image-3

Full Assembly

Weather Station

Part 2

Solar Panel Assembly

Part 3

Part 1

Antenna

Base Pole

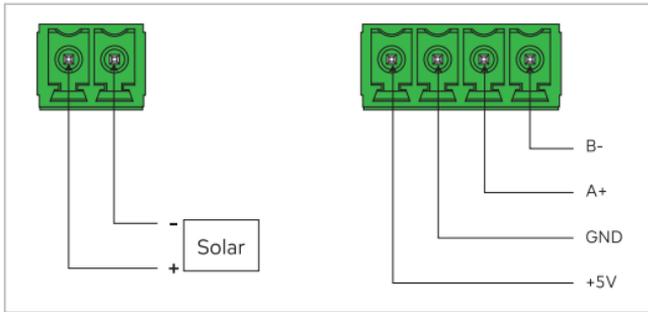AWS Unit

![Dcon Ag AWS logo]

Wiring Drawing

- Open top cover.
- Open cable gland 1, insert solar cable in to 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.
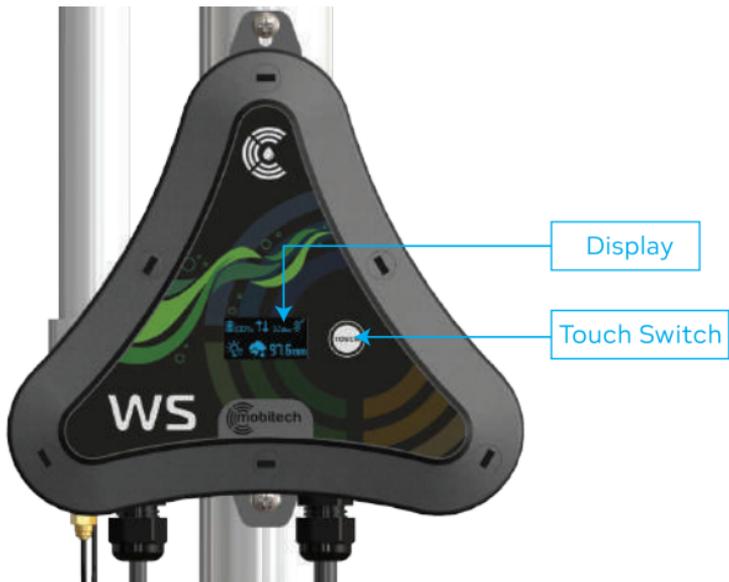

Weather Station Controler

Solar Input

Battery Input

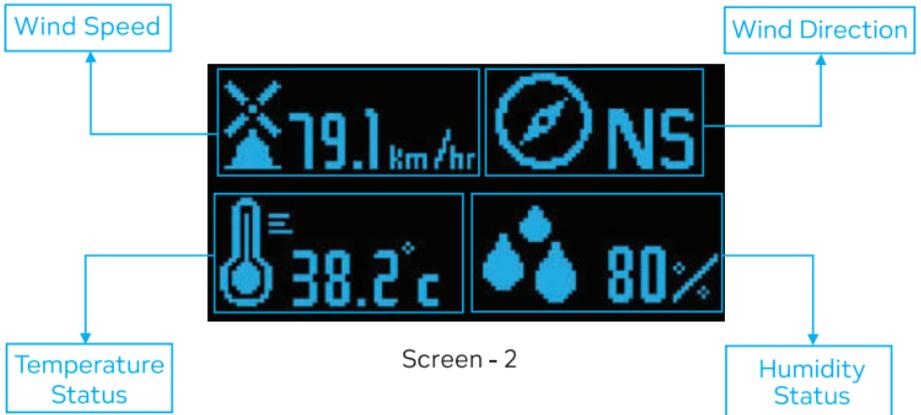Cable Glands

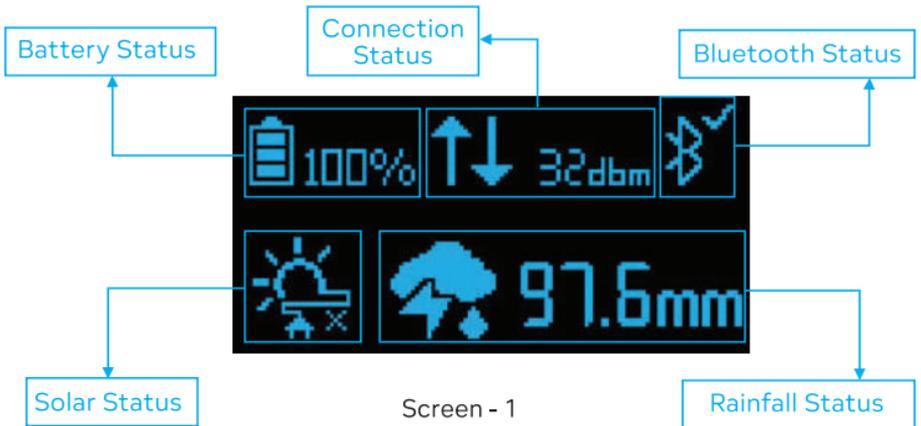## Connector Detail

Solar
+
-

B-
A+
GND
+5V

Configuration

- After finishing wiring, touch the touch switch, it will wake-up display.
- Long touch (3sec) to connect Bluetooth for configuration.

Display

Touch Switch

Display Screens

Battery Status

Connection Status

Bluetooth Status

Solar Status

Screen - 1

Rainfall Status

Wind Speed

Wind Direction

Temperature Status

Screen - 2

Humidity Status

Battery Status

- It shows Internal Battery Percentage

Connectivity

- It shows Connectivity Strength

Bluetooth Status

- Bluetooth Disconnected

- Bluetooth Stand-by (Blink)

- Bluetooth Connected

Solar Status

- Solar Not Connected

- Solar Connected (Blink)

Rain Level

It shows level of rainfall.

Wind Level

- It shows speed of wind.

Wind Direction

&

It shows direction of the wind.

Temperature

- It shows temperature value
  of the surroundings.

Humidity

- It shows water content present
  in the surrounding.