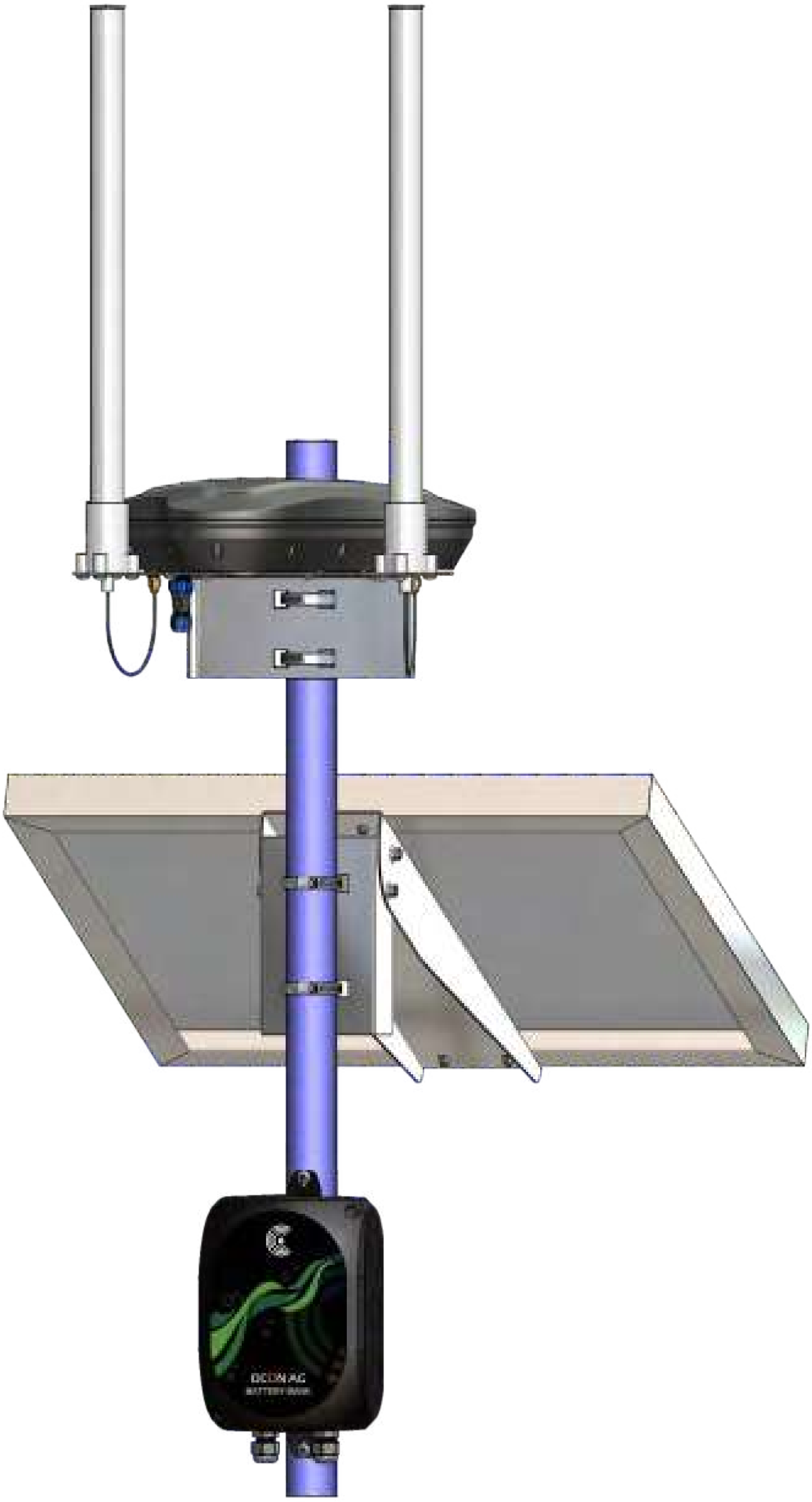
TECHNICAL DOCUMENT

2025 V 1.0

INDEX

Dcon_Ag_AIR

Field Installation Document

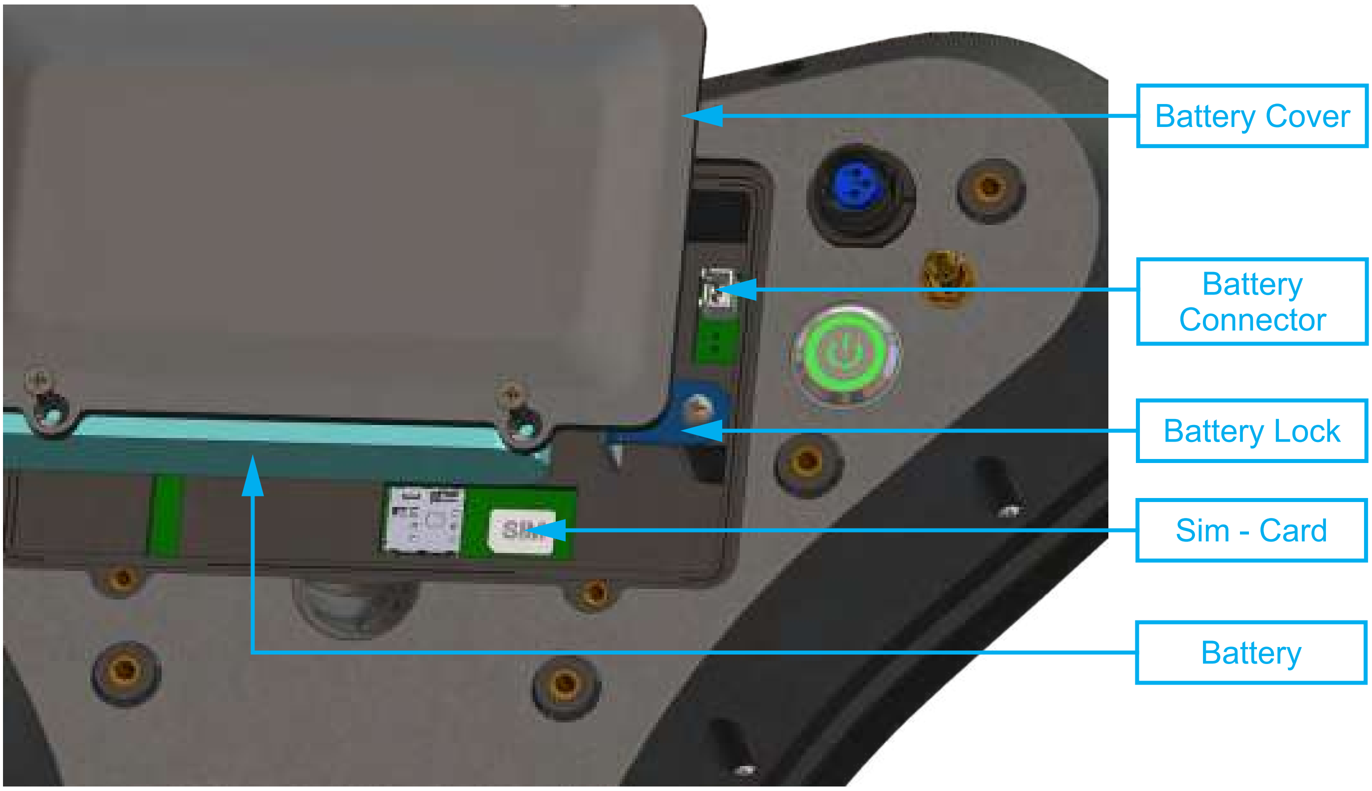


Technical Specification:

- Product Name : Dcon_Ag_Air
- Solar Panel : 12.5V/40W
- Battery Bank : 3.7V/15Ah
- Internal Battery : 3.7V/15Ah
- Backup Time : 96 Hours
- Communication : LORA (2 band) and Blue tooth 5.0
- GPS : Inbuilt
- Internal Storage : 1 year log backup

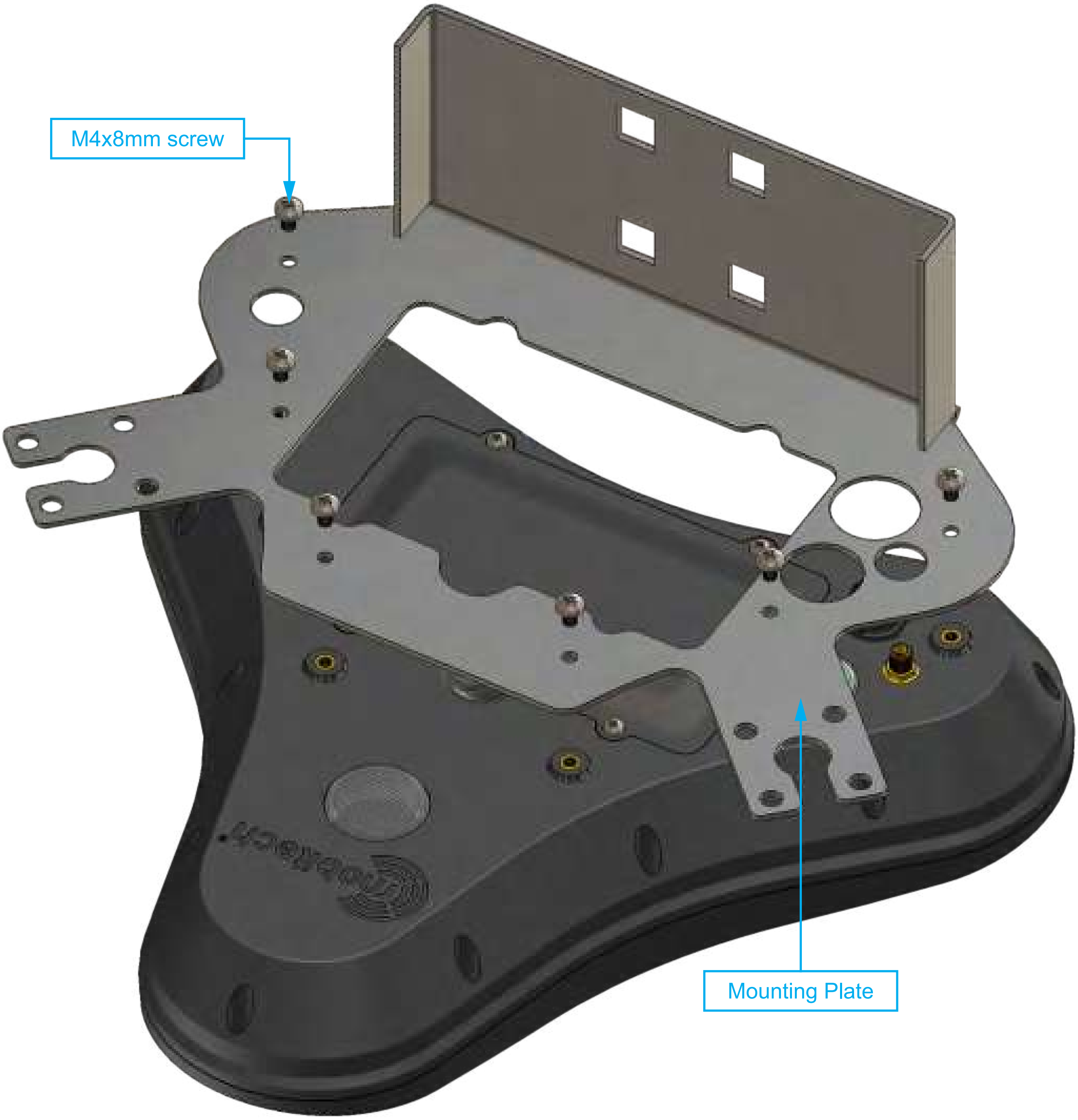
Assembly Procedure:
Sim-Card Installation:

- Open battery cover and loose battery lock.
- Remove 6-Cell battery insert sim card from the customer at the position marked.
- Connect battery and place battery with battery lock.
- Close battery cover properly.



Mounting Assembly:

- Place the mounting plate with M4 screws at marked positions.

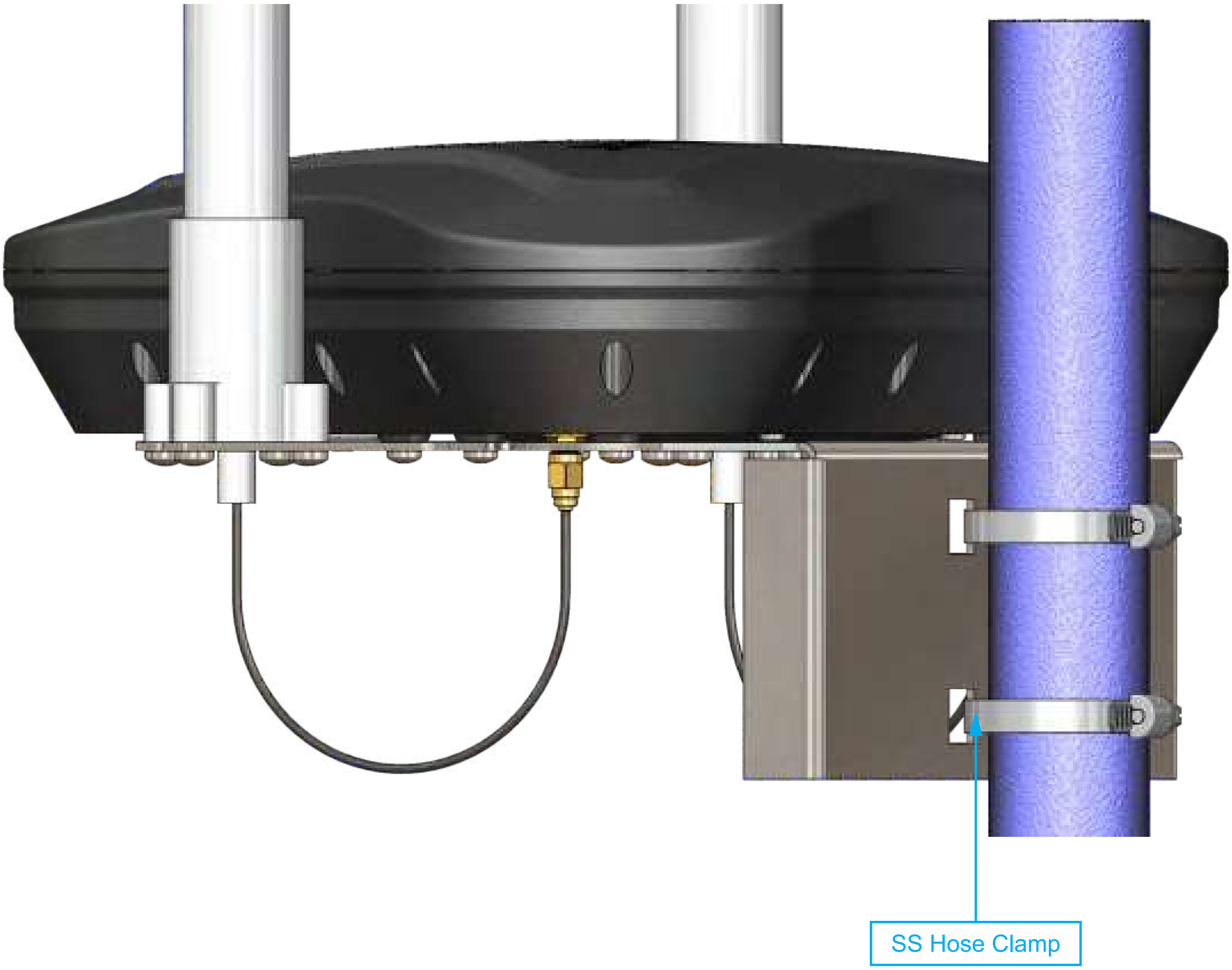


Antenna Assembly:

- Place the antenna on the mounting plate with M5 screws at marked positions.

Pole Assembly:

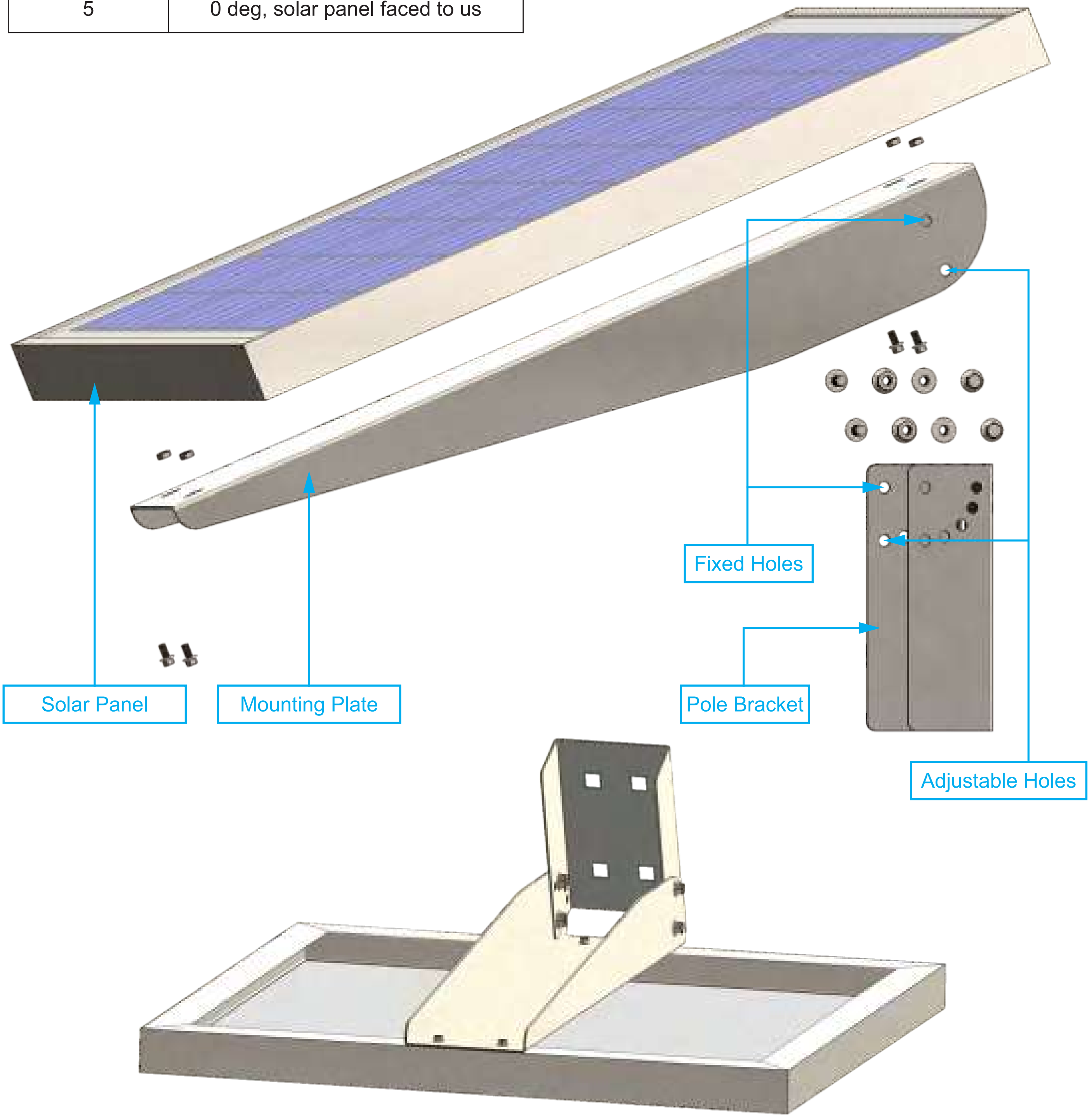
- Place the enclosure assembly on the pole at the height as per instructions.
- Pole mounting with Hose Clamp.



Pole Assembly:

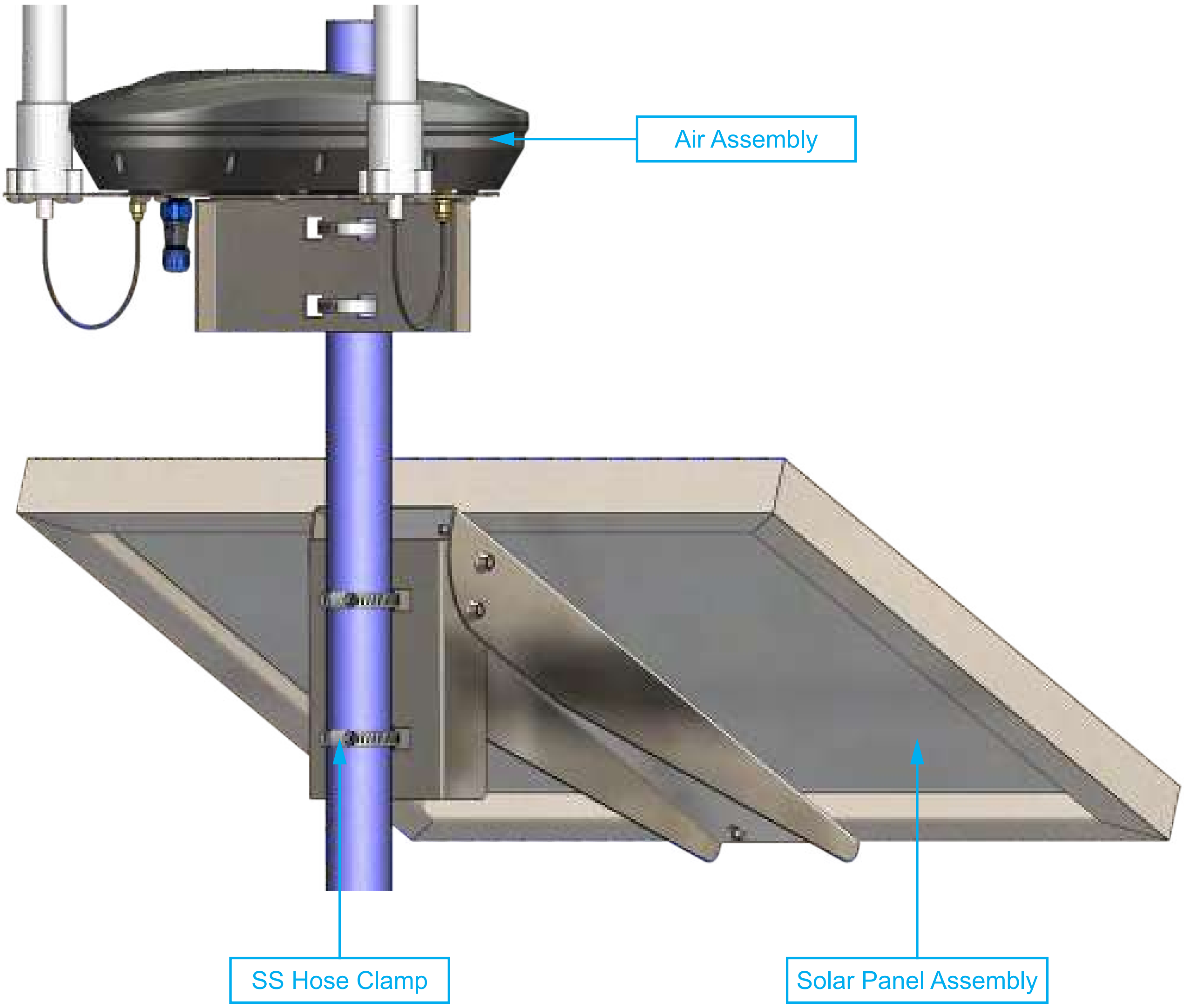
- Solar panel assembled with mounting plate with M4 bolt and nut.
- After assemble mounting plate, assemble pole bracket with M6 bolt and nut.
- Solar panel angle adjustments through holes in the pole bracket.

Hole Number	Description
1	90 deg, solar panel faced to sky
2	67.5 deg
3	45 deg
4	22.5 deg
5	0 deg, solar panel faced to us



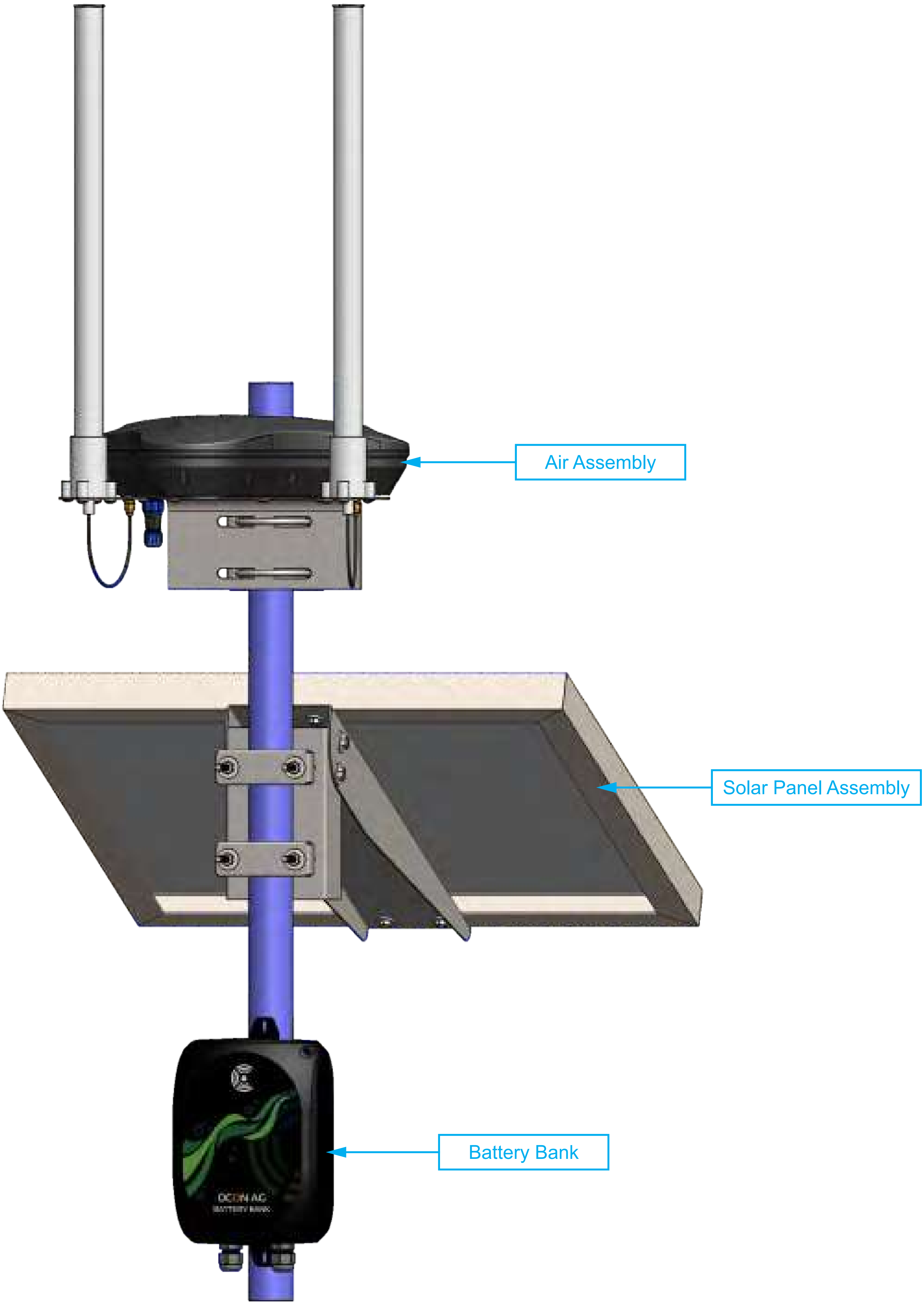
Solar Panel Assembly:

- Install solar panel on the same pole at shadow free position.
- Place the enclosure assembly on the pole at the height as per instructions.
- Pole mounting with hose clamp.

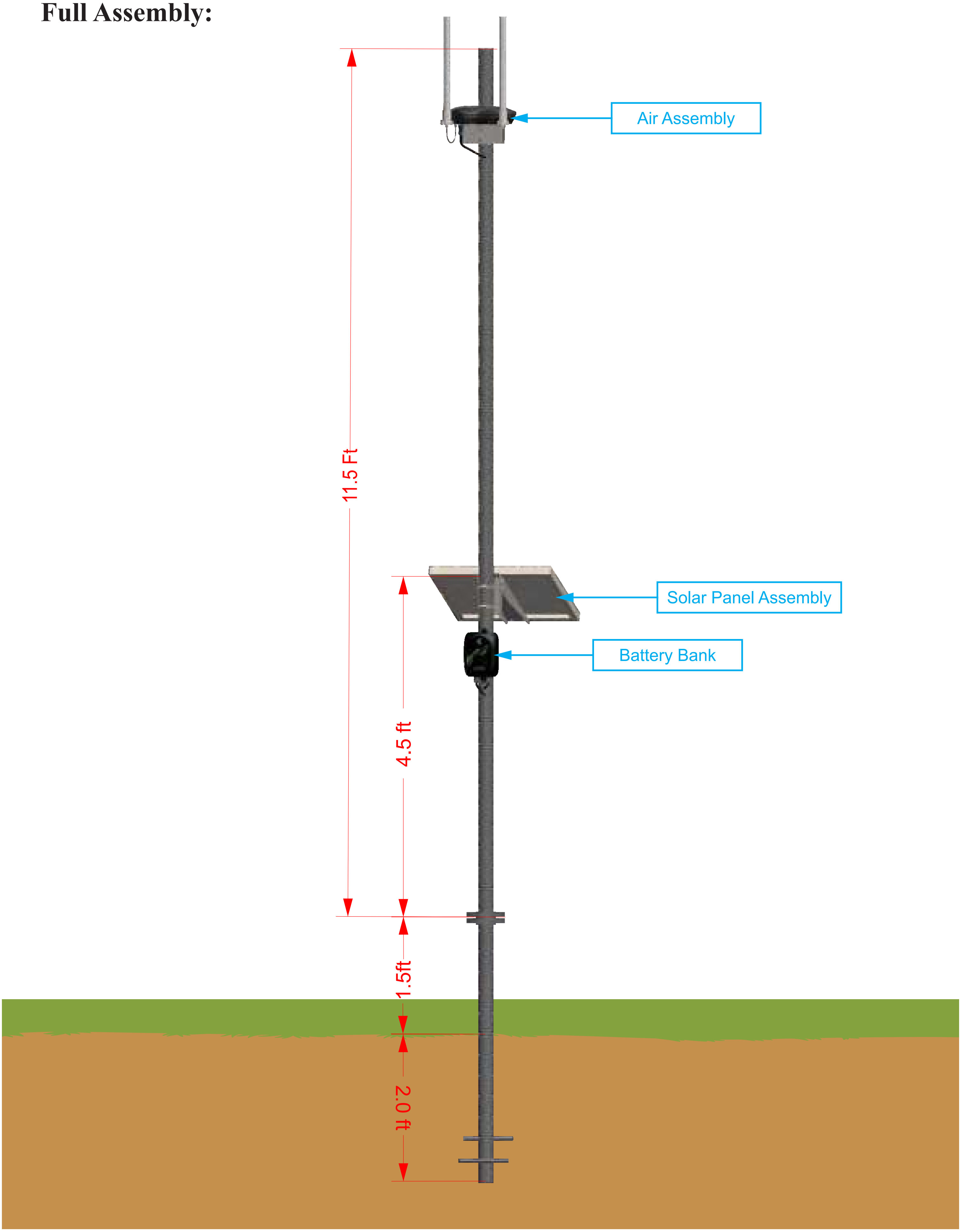


Battery Bank Assembly:

- Place the battery bank under the solar panel assembly and connect the power plug to air assembly unit.

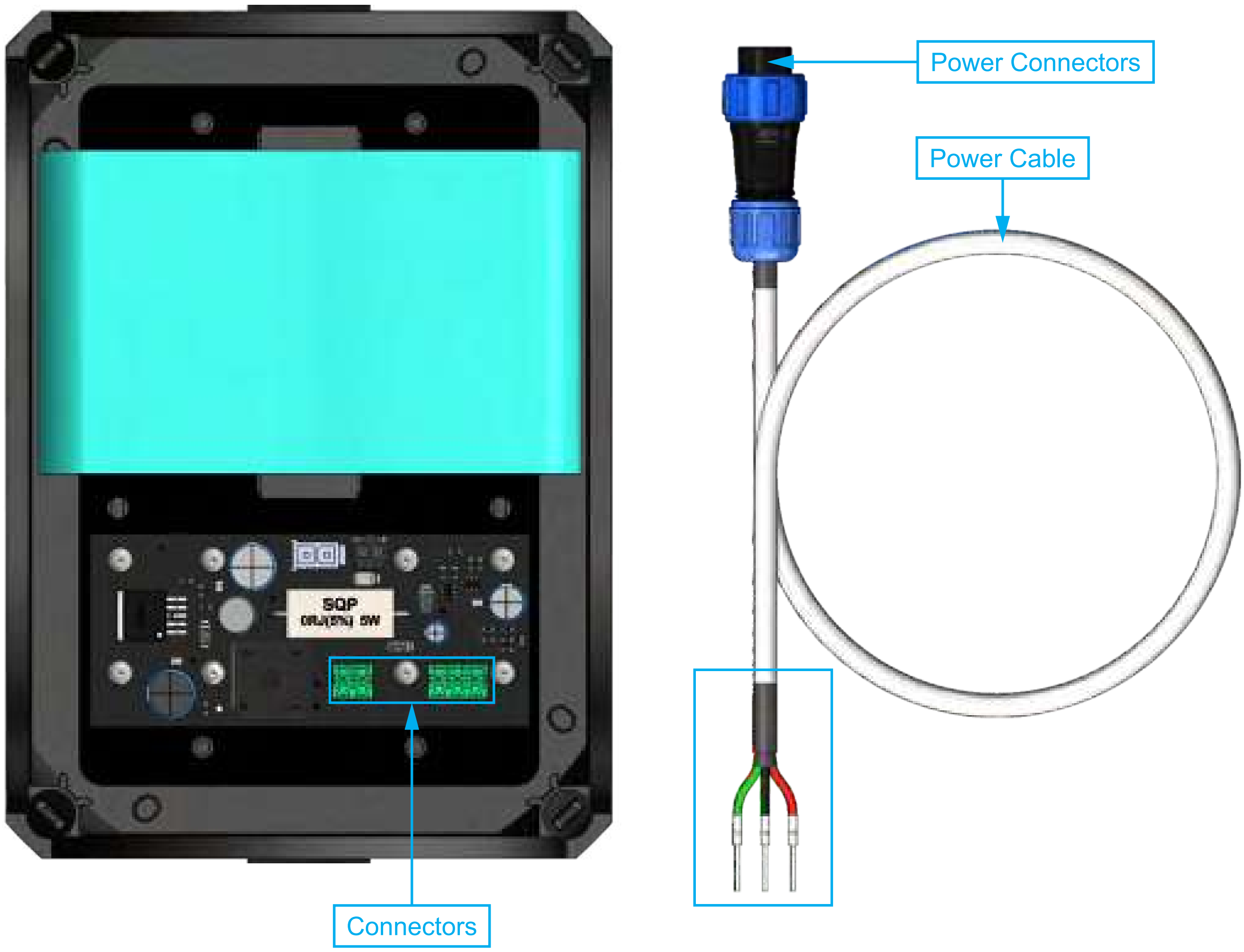


Full Assembly:



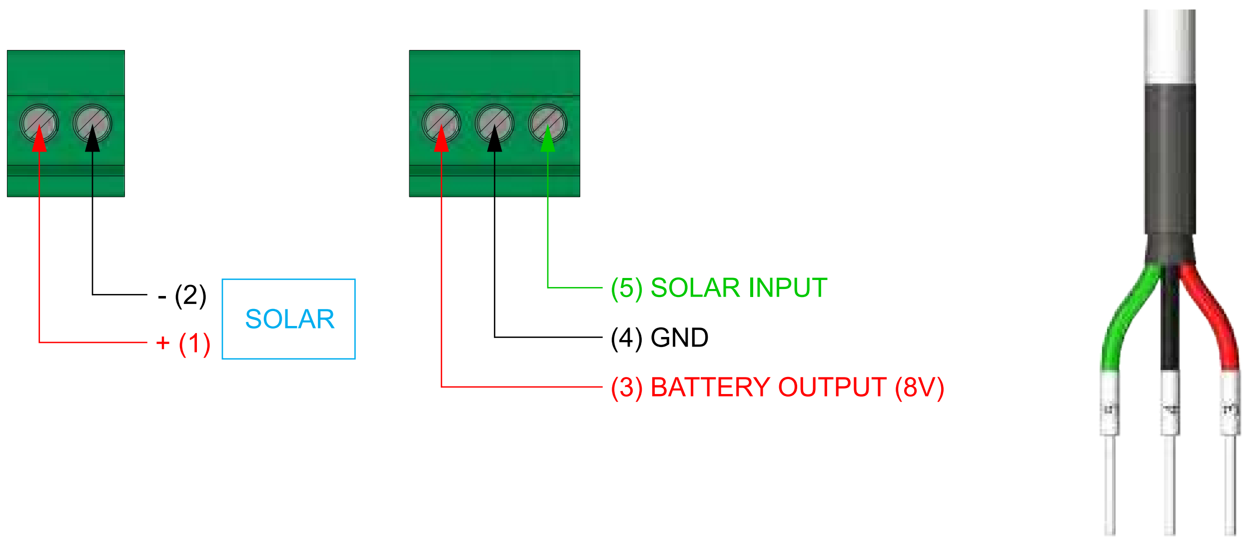
Battery Bank Wiring:

- Connect solar output to battery bank input and connect battery bank output with power connector to air.



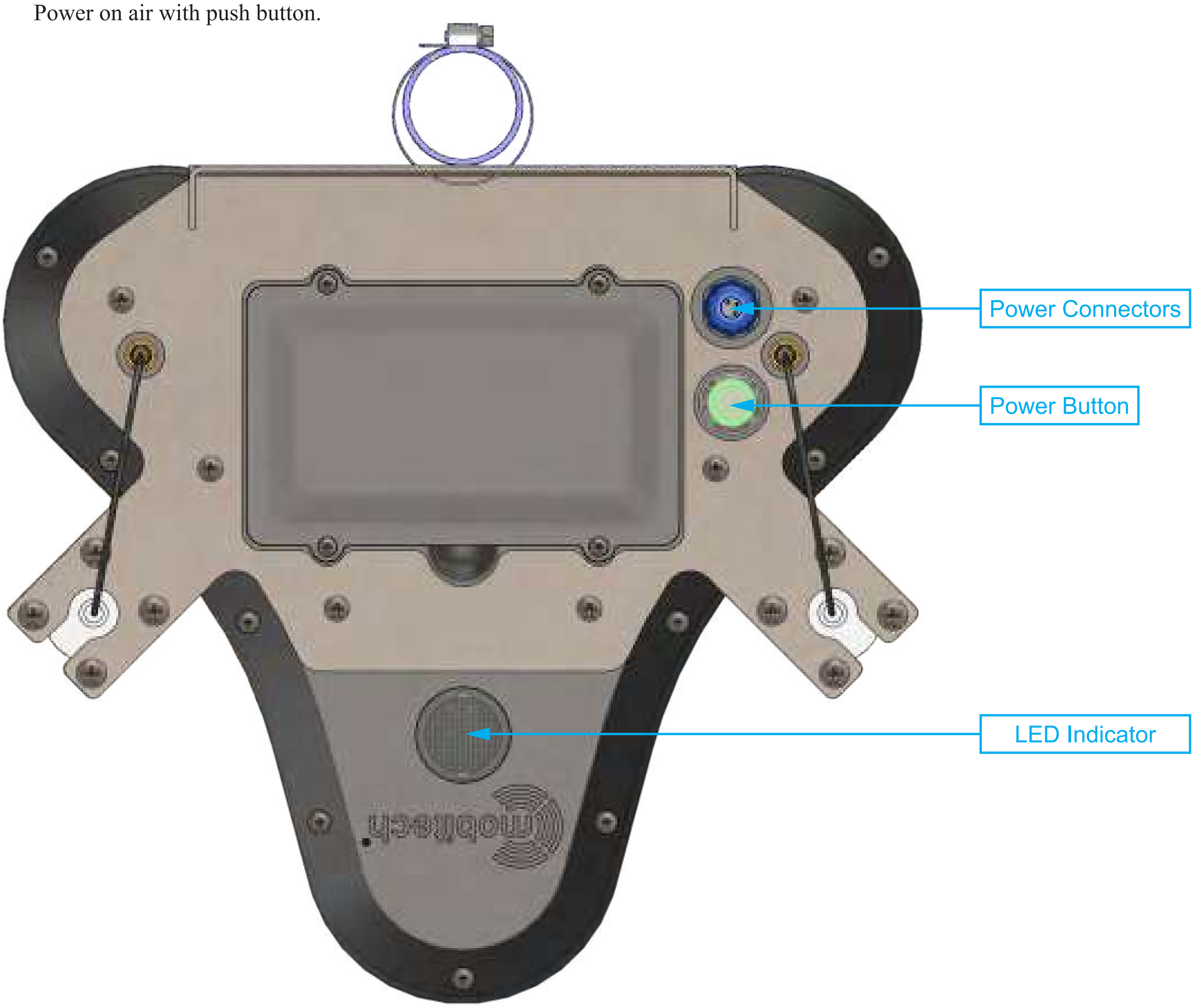
Battery Bank Wiring:

- Connect solar output to battery bank input and connect battery bank output with power connector to air.



Installation:

- Connect power connector from battery bank to air.
- Power on air with push button.



Led Color Indications:

LED Color	Blink Count	Interval time	Description
Green & Red	Continuous	1 sec	Power ON
WITH BATTERY BANK			
Green	1	1 sec	Network not connected
Green	1	5 sec	Network connected
Green	2	5 sec	GPRS connected
WITHOUT BATTERY BANK			
Red	1	1 sec	Network not connected
Red	1	5 sec	Network connected
Red	2	5 sec	GPRS connected

mobitech®
wireless solution
IRRIGATION AUTOMATION

Dcon_Ag_SMART

Field Installation Document

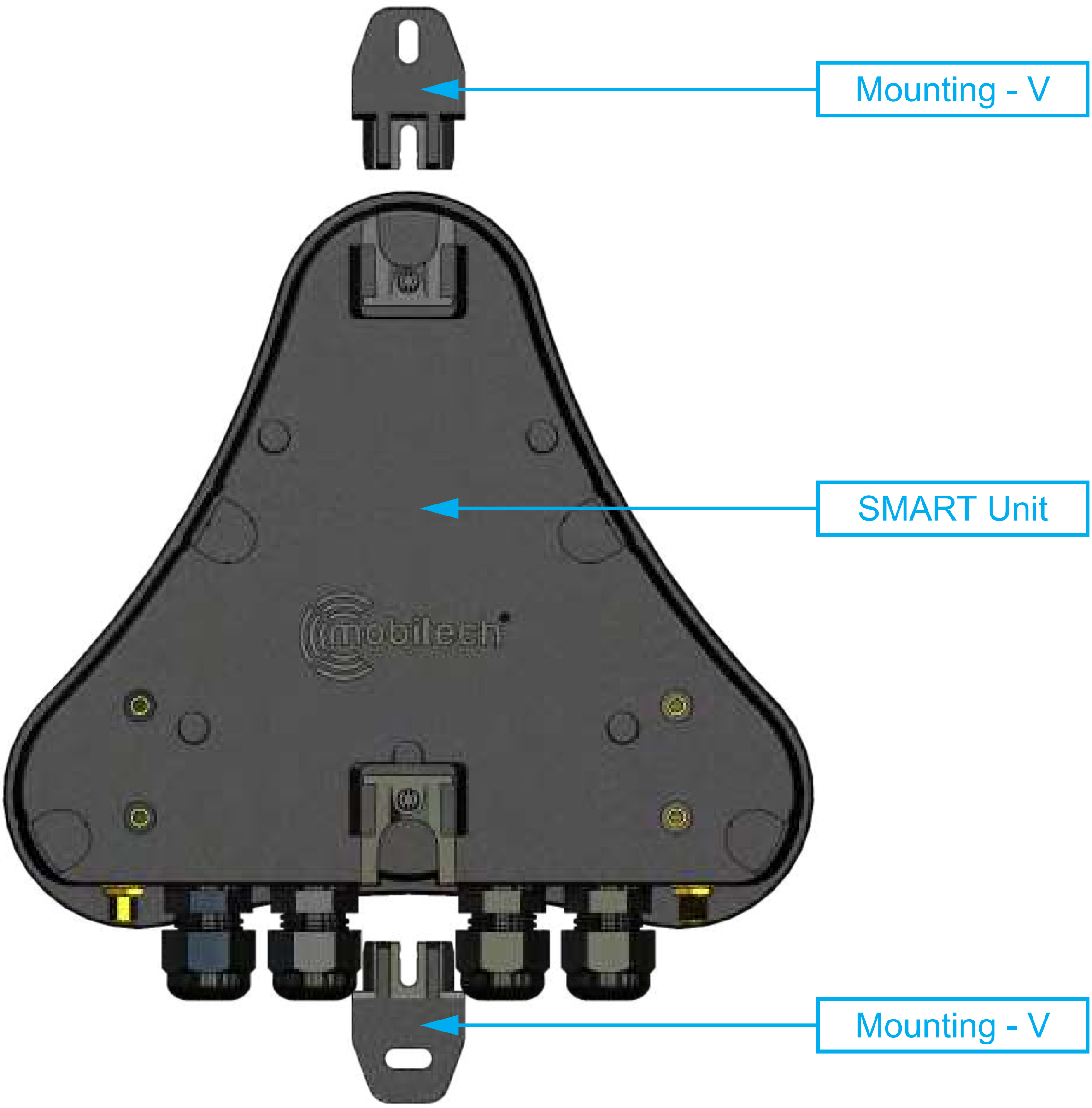
Technical Specification:

- Product Name : SMART
- Solar Panel : 9V / 6W
- Battery : 3.7V / 5.2Ah
- Backup Time : Up to 24 Hours
- Input Voltage 3 Phase : 360V - 450V AC
- Input voltage 1 Phase : 180V - 240V AC
- CT Coil : 50A (Default)
  : 500A (Supports Externally)
- Phase Protection : 3 - phase fuse protection (one fuse per phase)
- Cloud Communication : GSM / WiFi
- Communication : LoRa and BLE 5.0
- Compatibility : Suitable for all types of Starters and Panels.
- GPS : Inbuilt

Assembly Procedure:

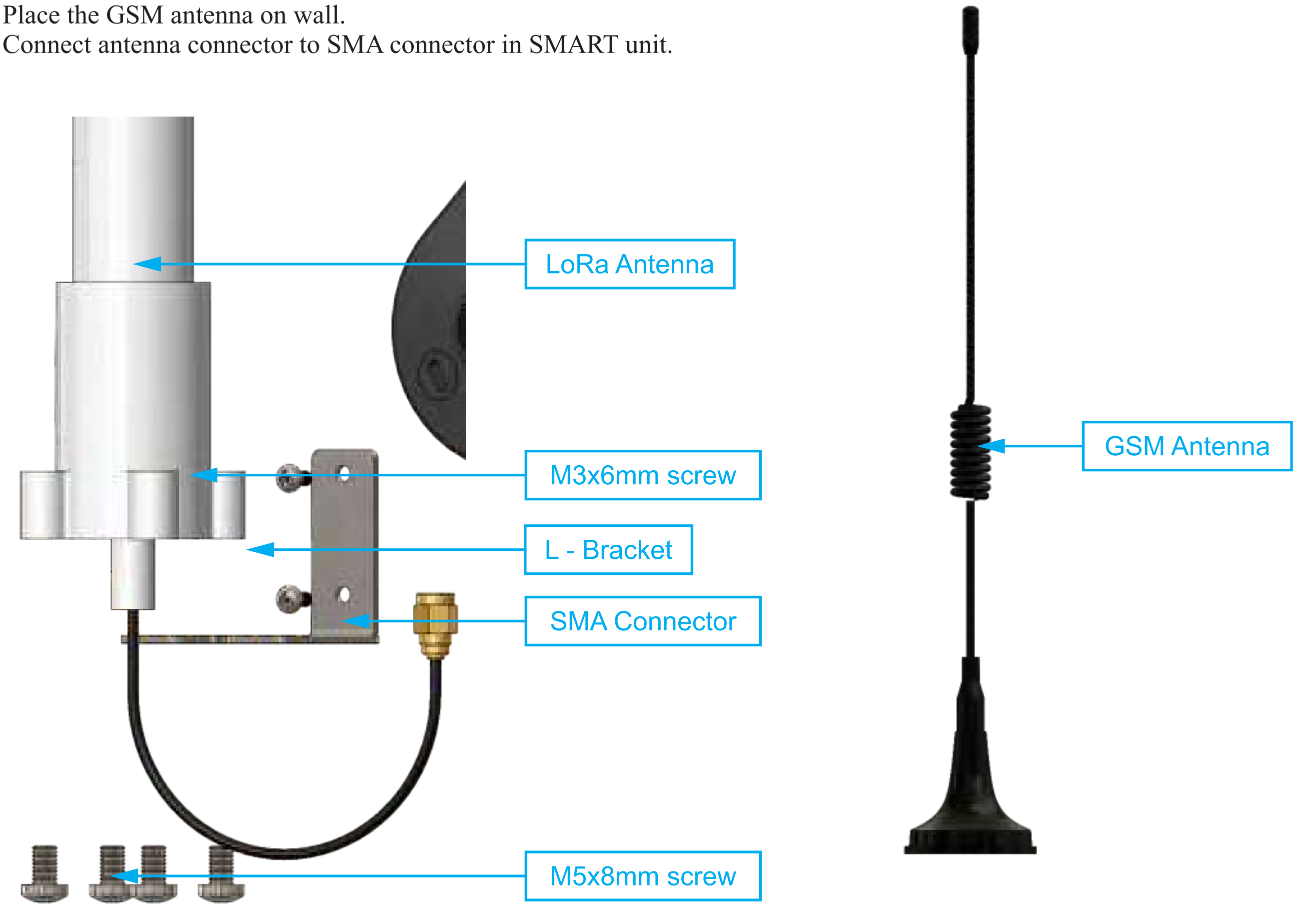
Mounting Assembly:

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



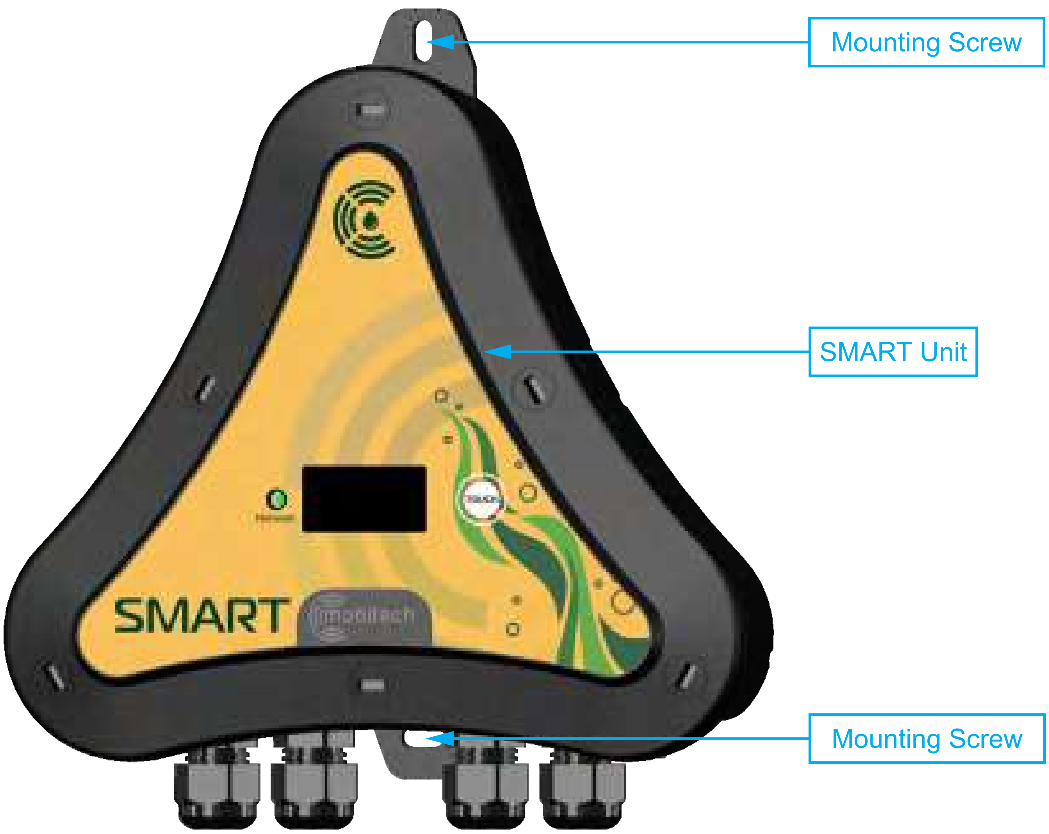
Antenna Assembly:

- 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 SMART unit.
- Place the GSM antenna on wall.
- Connect antenna connector to SMA connector in SMART unit.



Wall Mount:

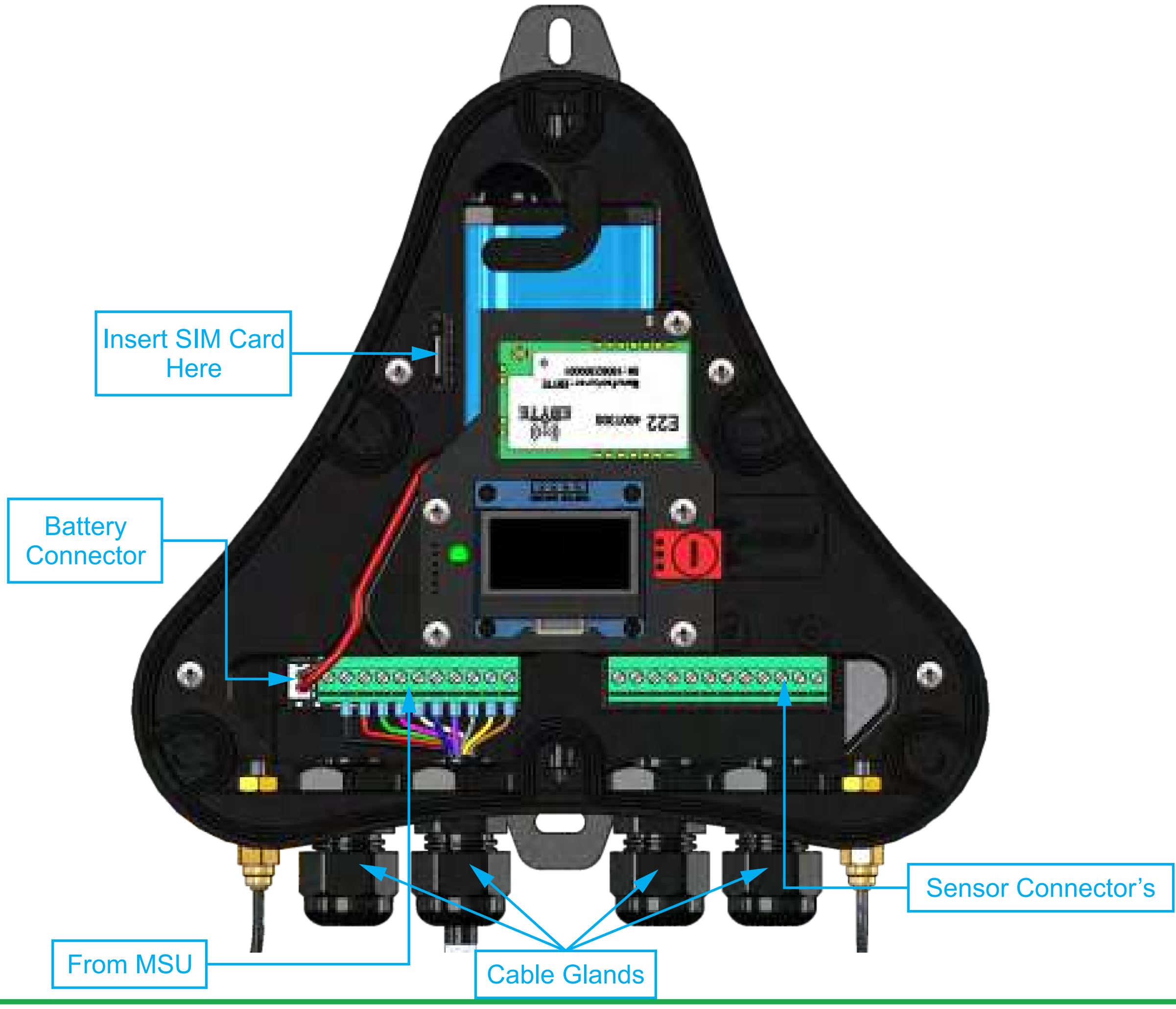
- Mount SMART unit with screw on wall.



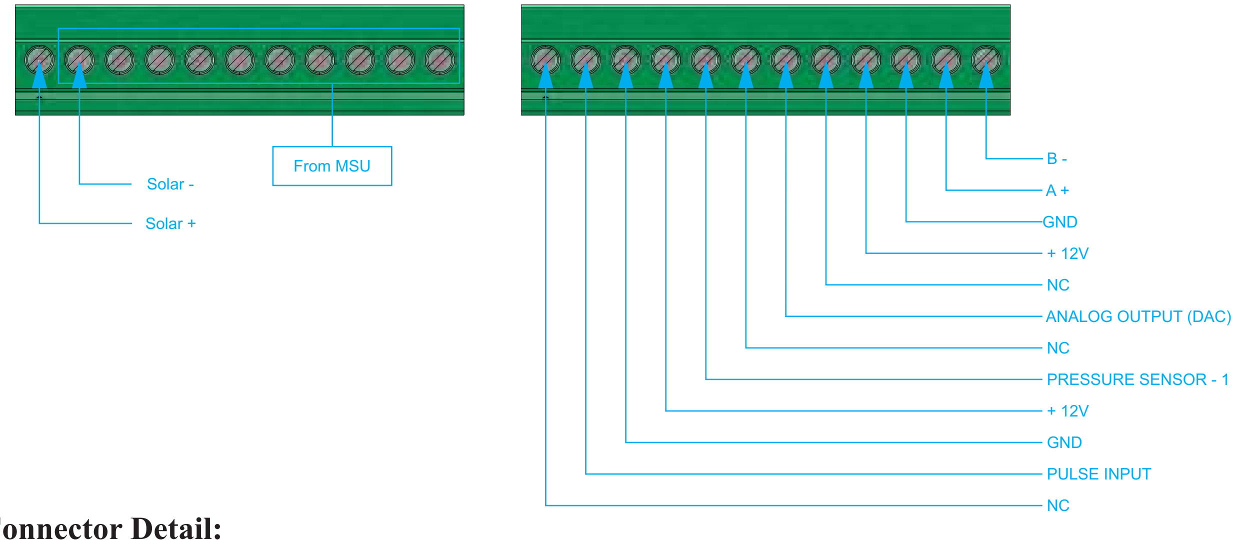
- Mount MSU unit with screw on wall using marking template given with unit.

Wiring Drawing:

- Open top cover.
- Open cable gland 2, insert sensor cable's 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.



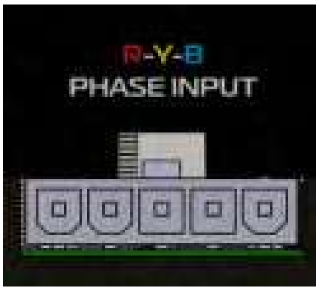
Connector Detail:



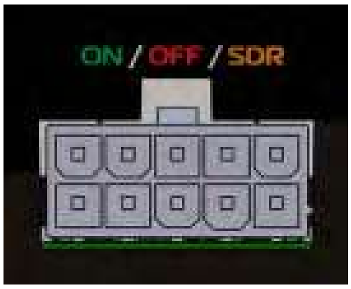
MSU Connector Detail:

Fuse:

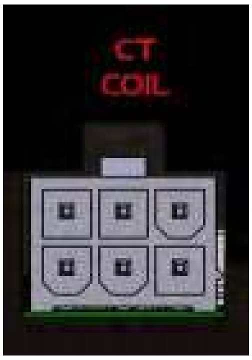
Power Input:



9-Pin Connector:



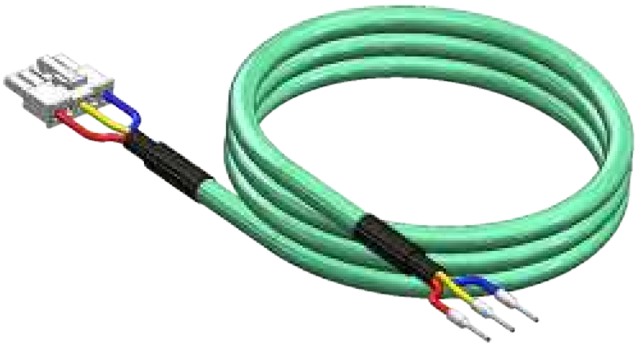
CT Coil:



Phase Preventer:

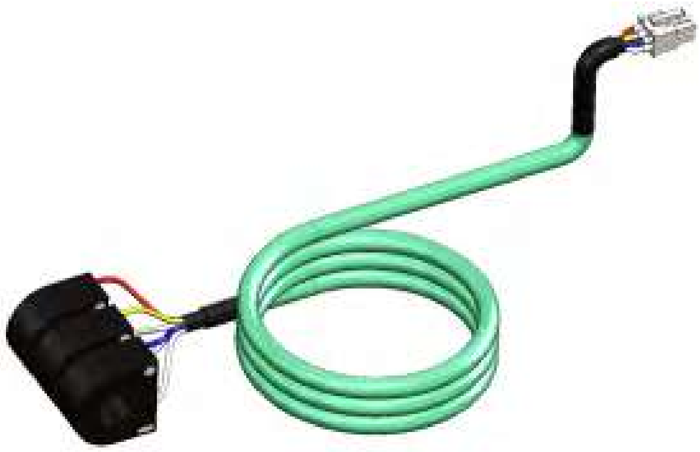
10-Pin Connector:

3 - Core Cable:



9 - Core Cable:

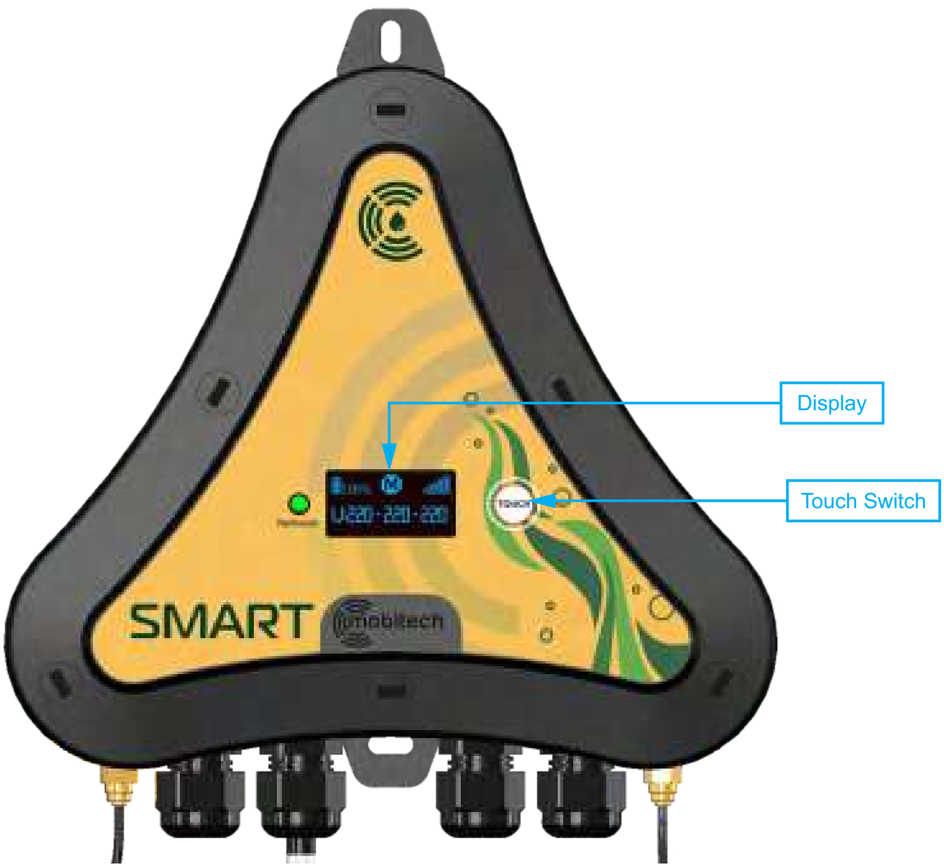
CT Coil 6 - Core Cable:



10 - Core Cable:

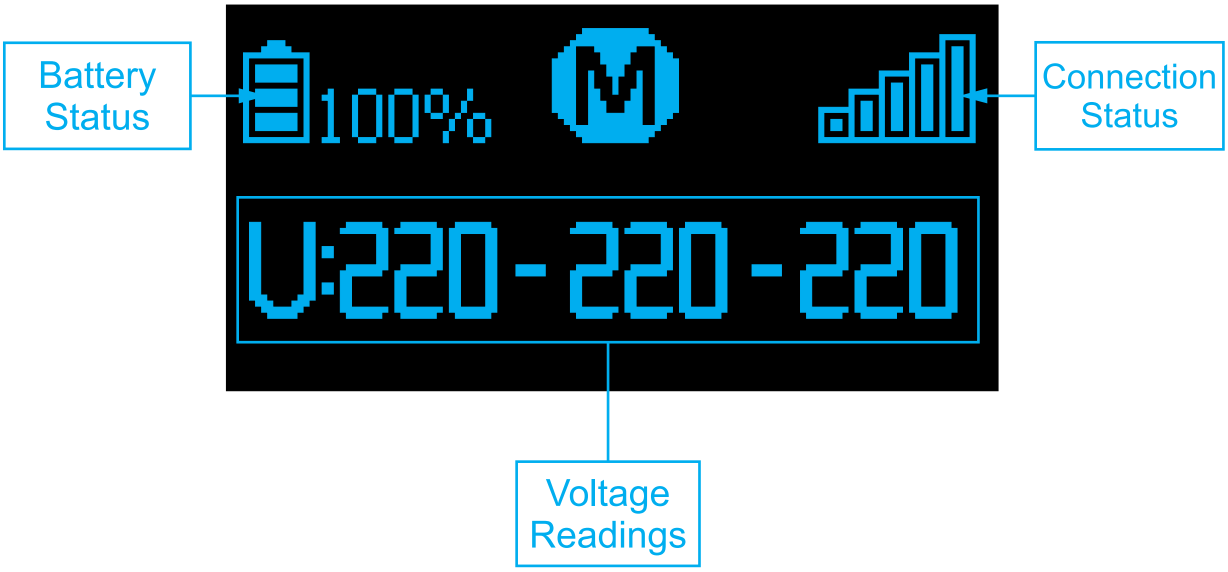
Configuration:

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

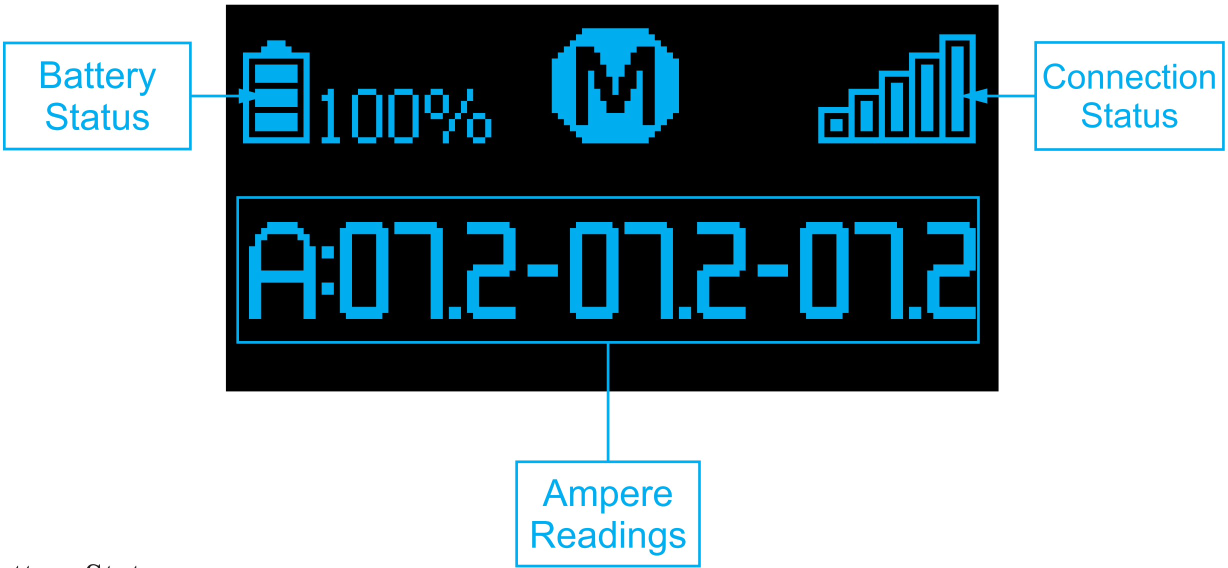


Display Screens:

Display - 1:



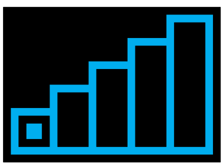
Display - 2:



Battery Status:

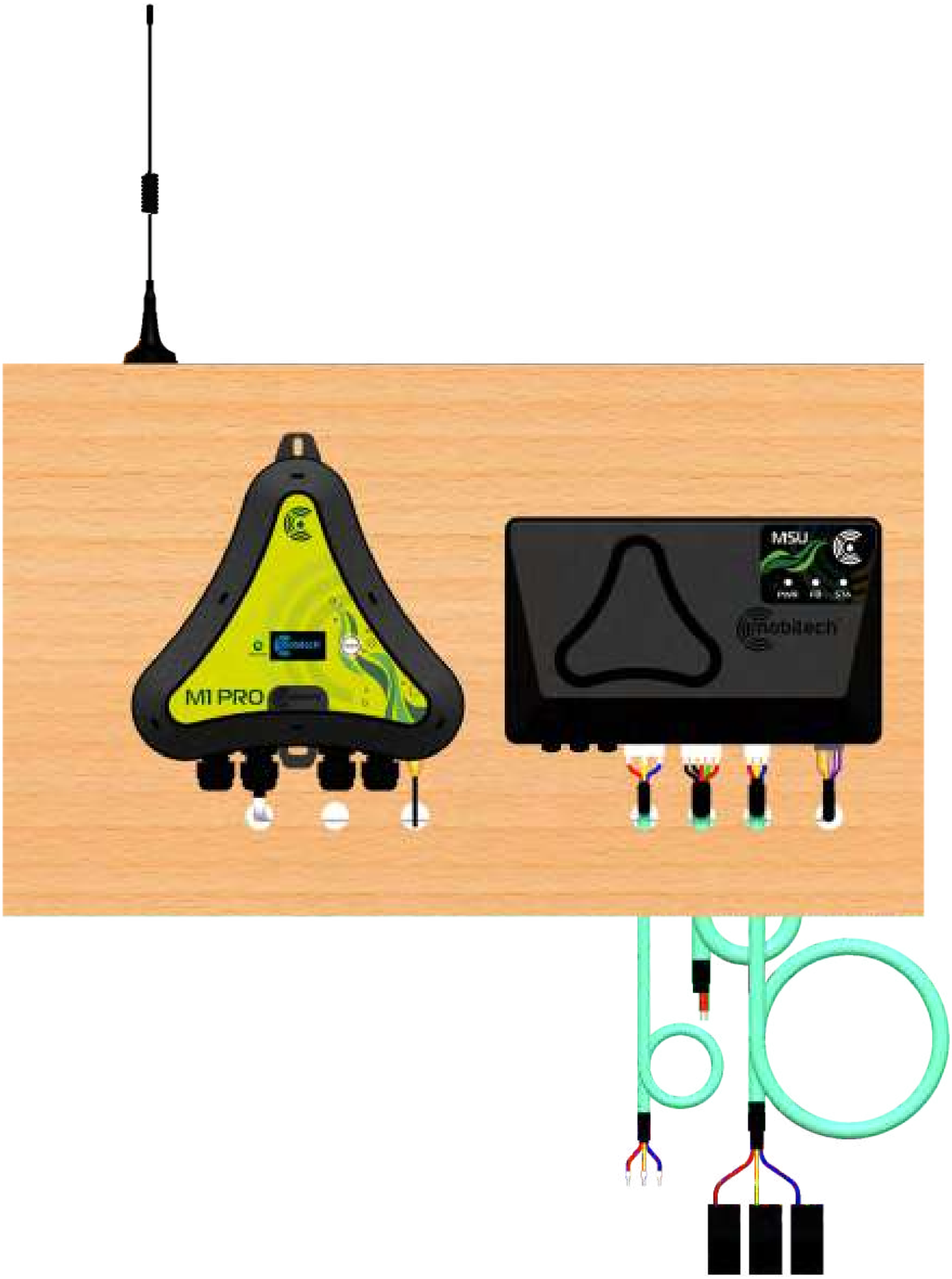
- It shows Internal Battery Percentage.

Connectivity:



- It shows Signal Strength.

Dcon_Ag_M1PRO
(Motor Control Unit)
Field Installation Document



Technical Specification:

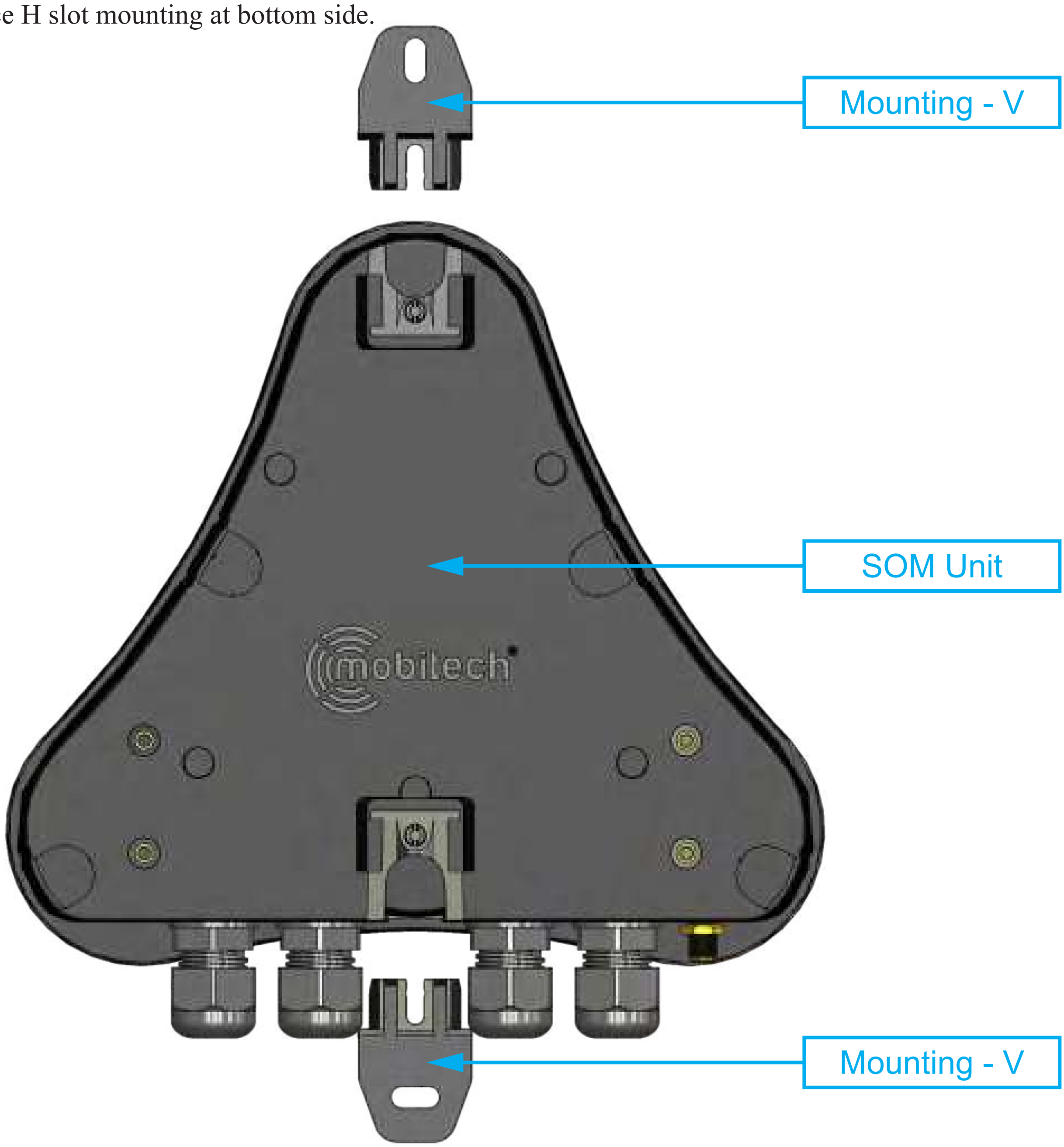
- Product Name : M1PRO
- Input Voltage 3 Phase : 360V - 450V AC
- Input voltage 1 Phase : 180V - 240V AC
- Default CT Coil : 50A
- External CT Coil : 500A
- Battery : 3.7V / 5.2Ah
- Backup Time : 8 Hours
- Communication : Blue tooth 5.0
- Compatibility : Suitable for all types of Starters and Panels.
- GPS : Inbuilt
- Fuse Protection for each Phase

Assembly Procedure:

- Panel Board Size : 2.0 x 1.5 Feet

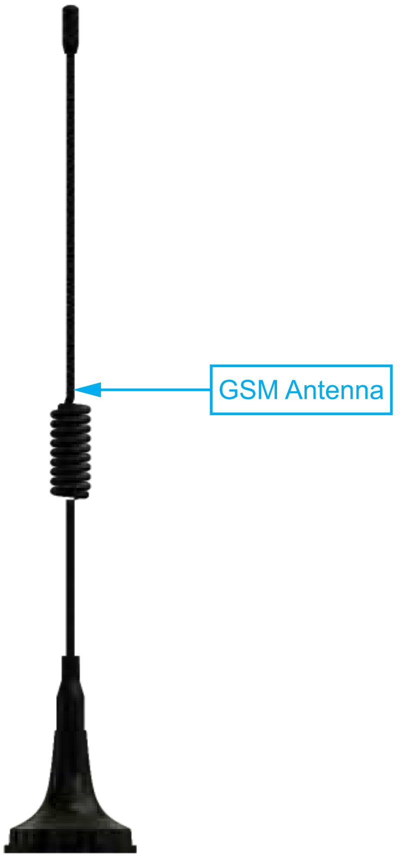
Mounting Assembly:

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



Antenna Assembly:

- Place the GSM antenna on wall.
- Connect antenna connector to SMA connector in M1PRO unit.



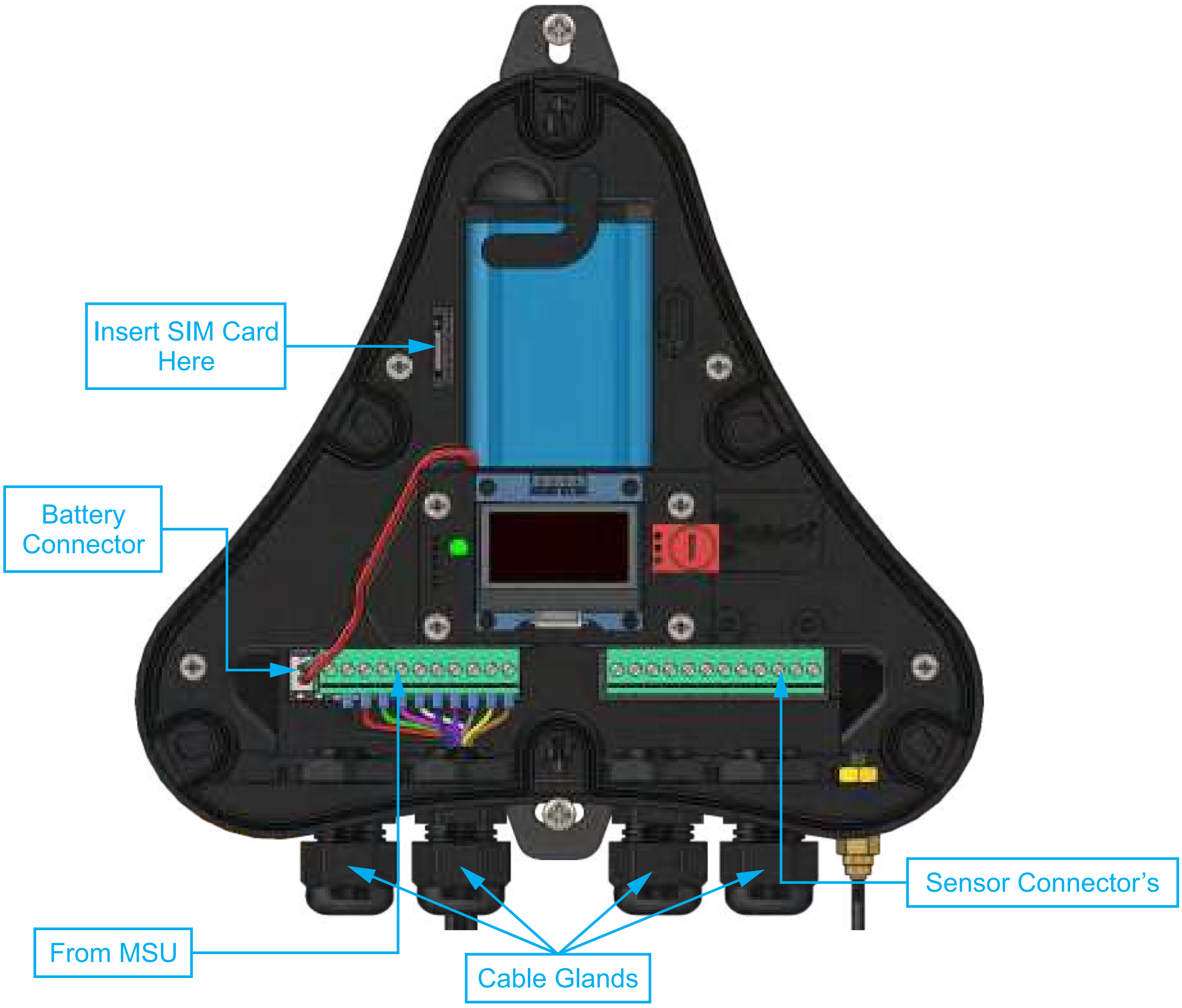
Wall Mount:

- Mount M1PRO unit with screw on pole.

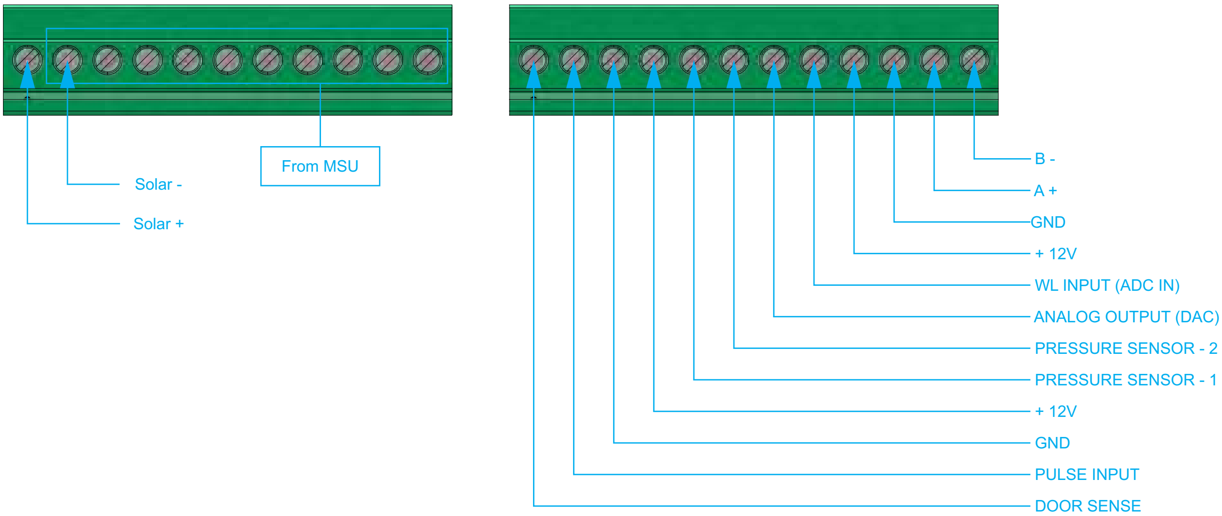
- Mount MSU unit with screw on wall using marking template given with unit.

Wiring Drawing:

- Open top cover.
- Open cable gland 2, insert sensor cable's 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.



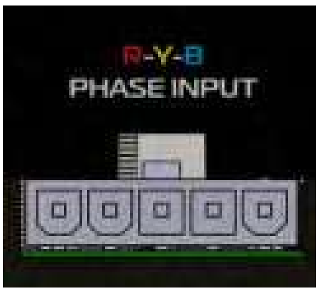
Connector Detail:



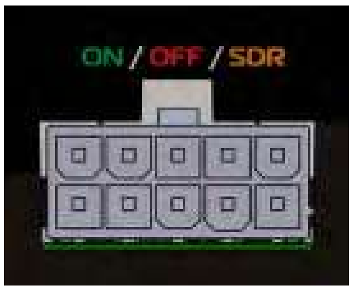
MSU Connector Detail:

Fuse:

Power Input:



9-Pin Connector:

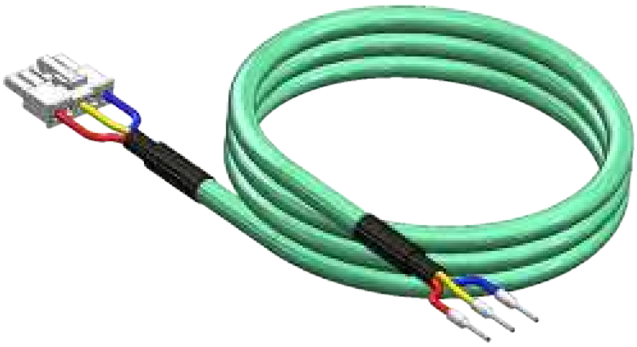


CT Coil:

Phase Preventer:

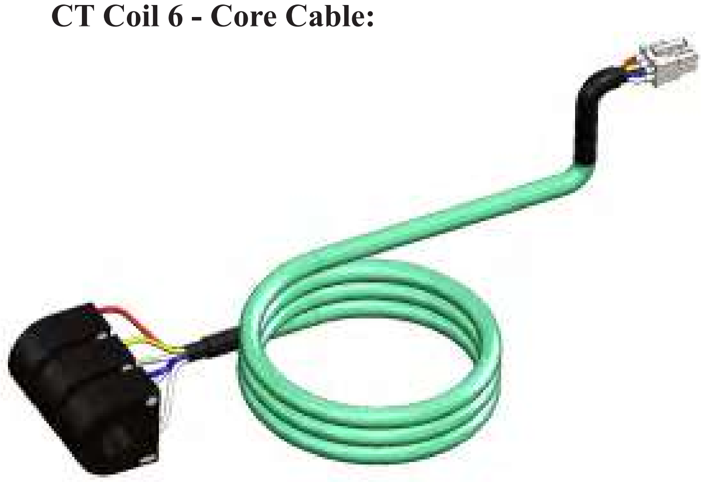
10-Pin Connector:

3 - Core Cable:

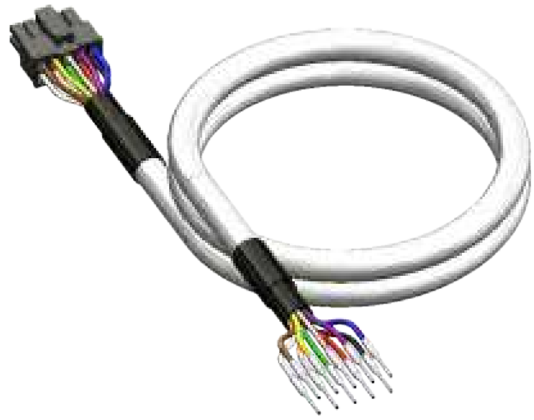


9 - Core Cable:

CT Coil 6 - Core Cable:



10 - Core Cable:

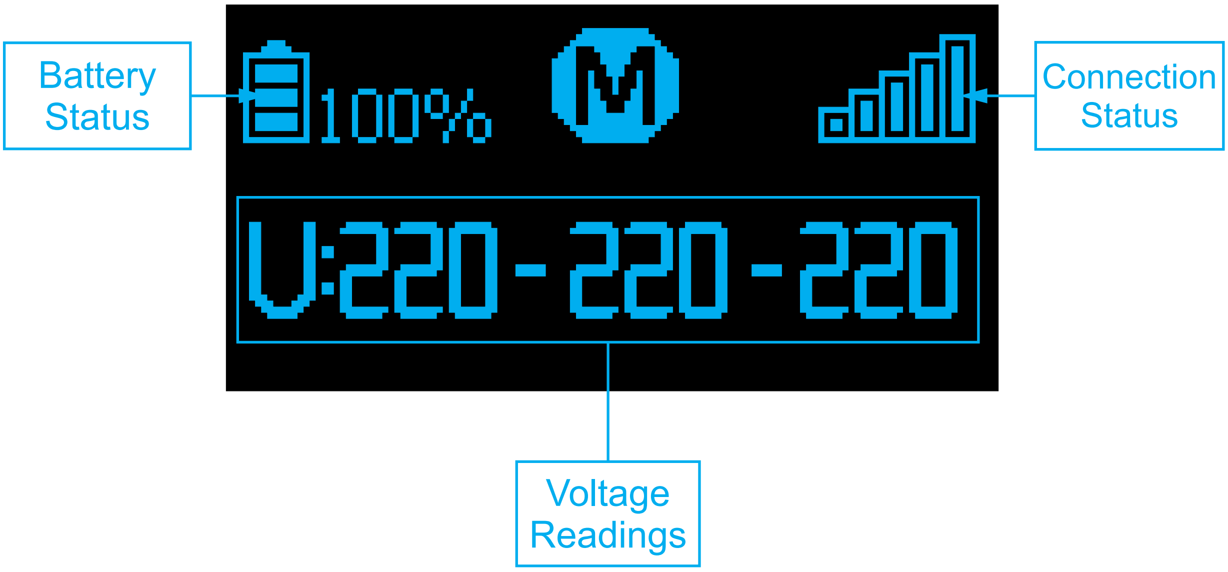


Configuration:

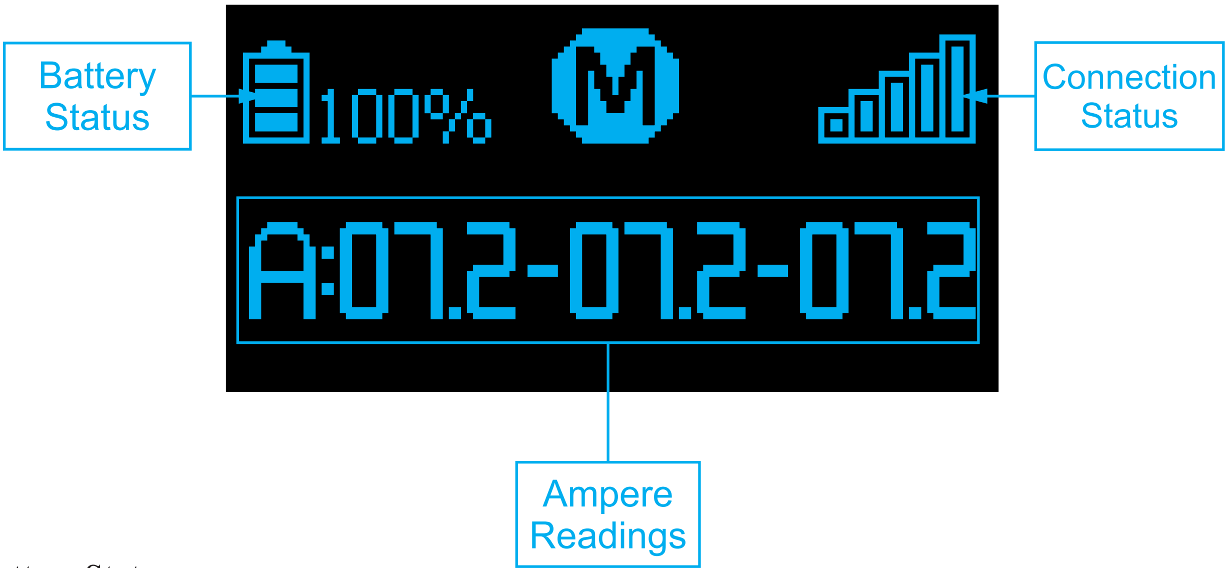
- After finishing wiring, touch the touch sensor, it will wake-up display.
- Long touch (3sec) to connect Blue tooth for configuration.

Display Screens:

Display - 1:



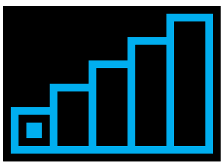
Display - 2:



Battery Status:

- It shows Internal Battery Percentage.

Connectivity:



- It shows Signal Strength.

Dcon_Ag_MCU

(Motor Control Unit)

Field Installation Document

Technical Specification:

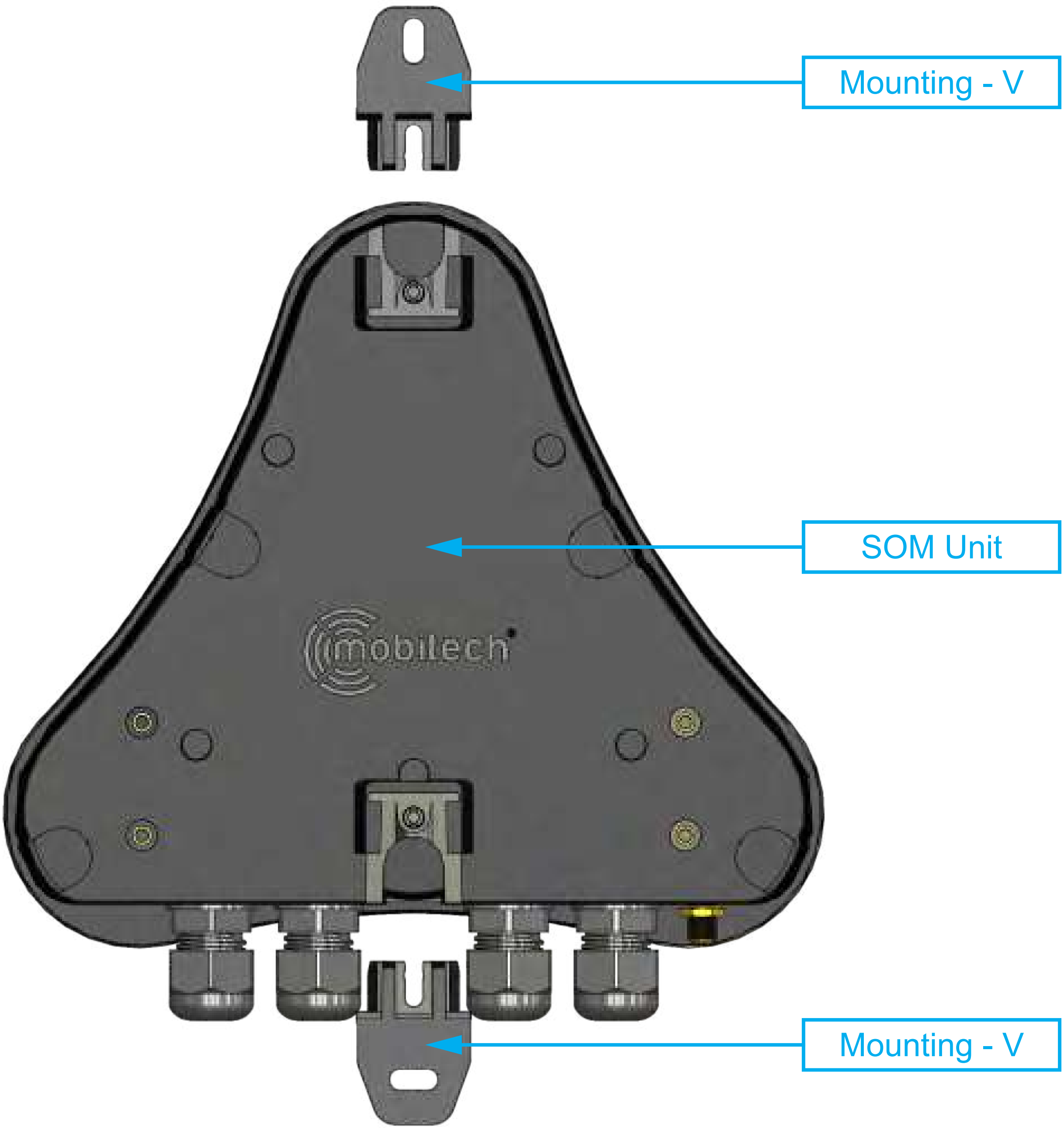
- Product Name : MCU (Motor Control Unit)
- Input Voltage 3 Phase : 360V - 450V AC
- Input voltage 1 Phase : 180V - 240V AC
- Default CT Coil : 50A
- External CT Coil : 500A
- Battery : 3.7V / 5.2Ah
- Backup Time : 24 Hours
- Communication : LORA and Blue tooth 5.0
- Compatibility : Suitable for all types of Starters and Panels.
- GPS : Inbuilt
- Fuse Protection for each Phase

Assembly Procedure:

- Panel Board Size : 2.0 x 1.5 Feet

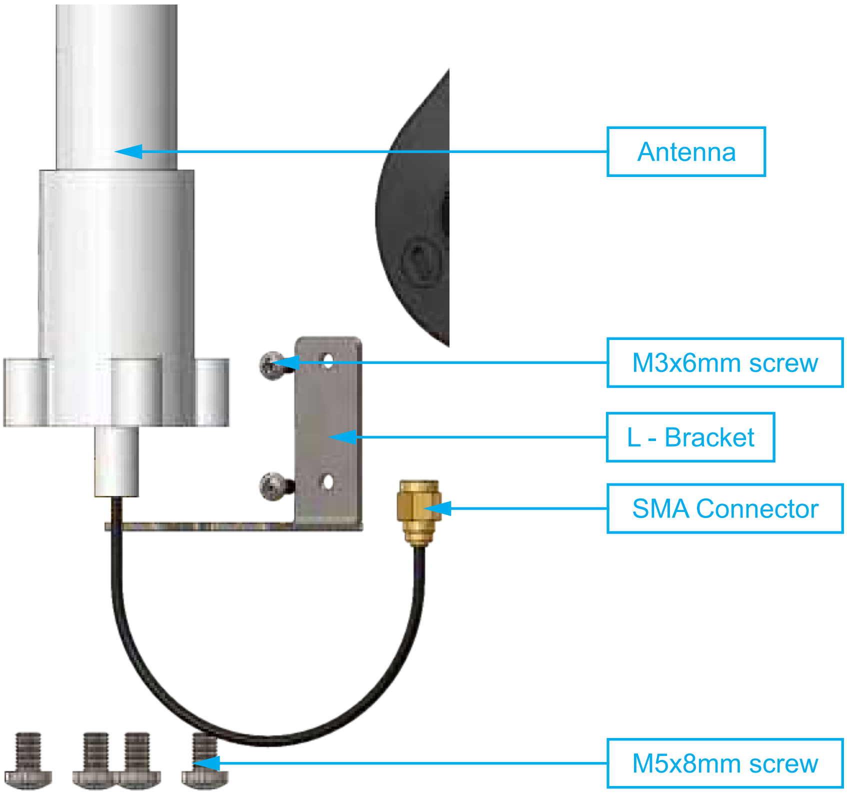
Mounting Assembly:

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



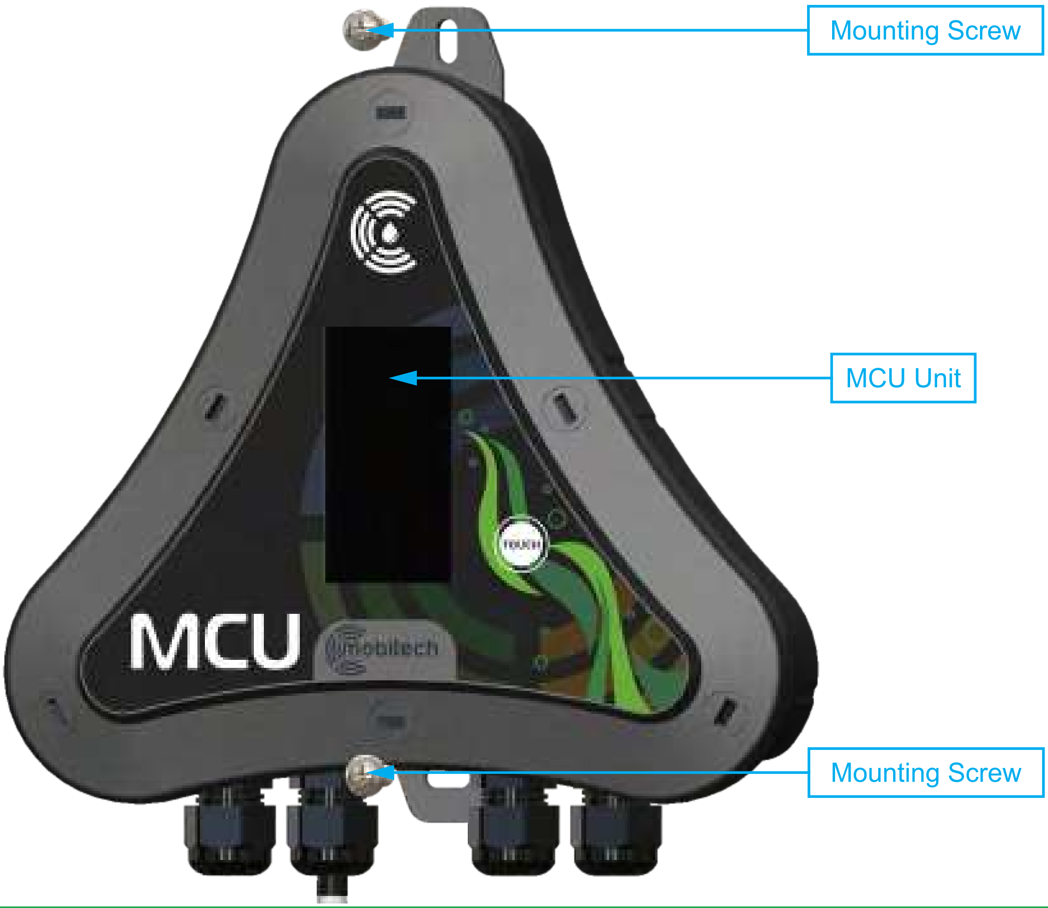
Antenna Assembly:

- 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 MCU unit.



Wall Mount:

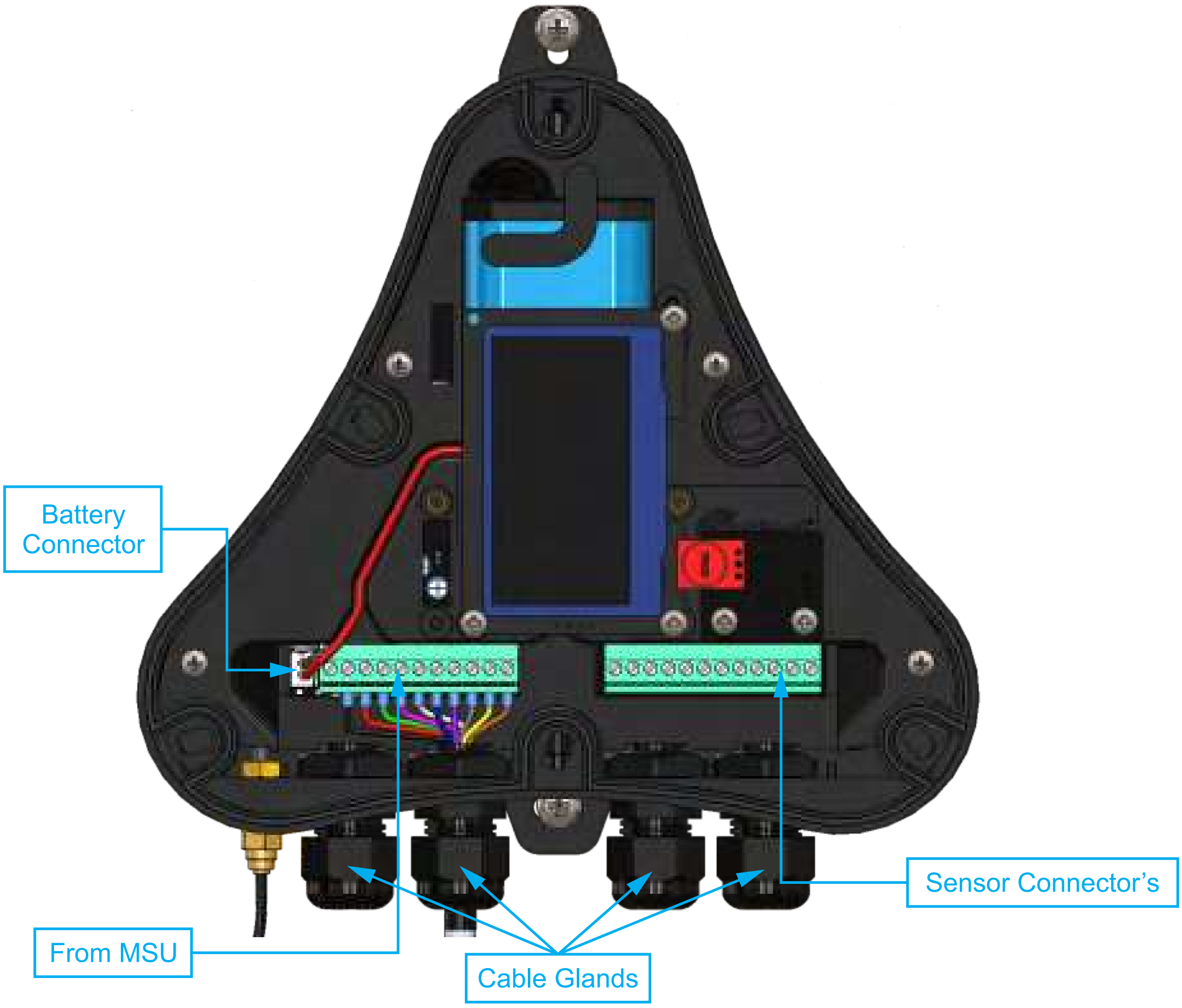
- Mount MCU unit with screw on pole.



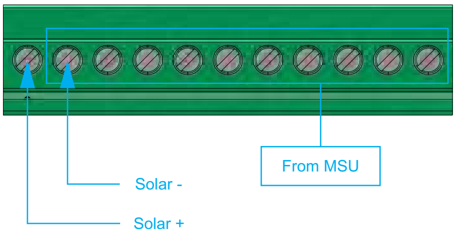
- Mount MSU unit with screw on wall using marking template given with unit.

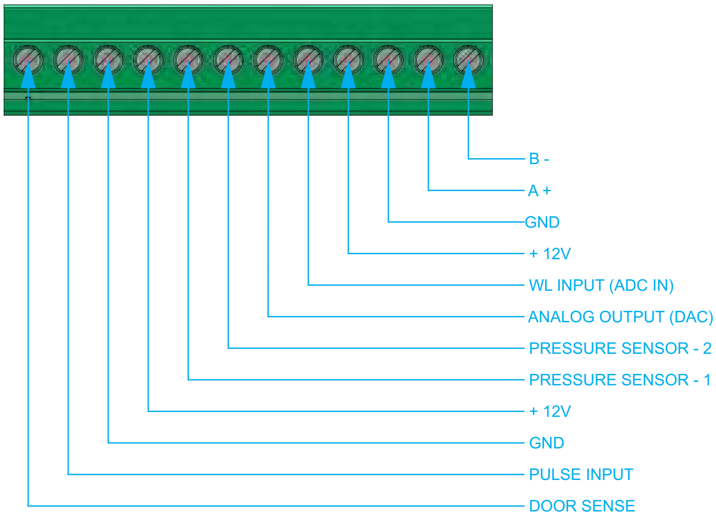
Wiring Drawing:

- Open top cover.
- Open cable gland 2, insert sensor cable’s 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:

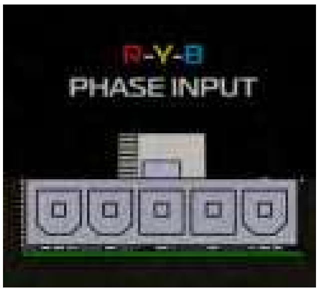




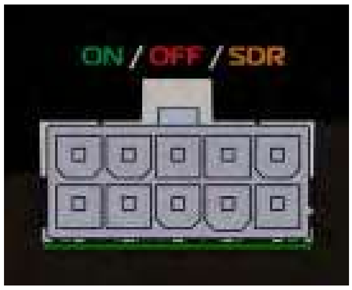
MSU Connector Detail:

Fuse:

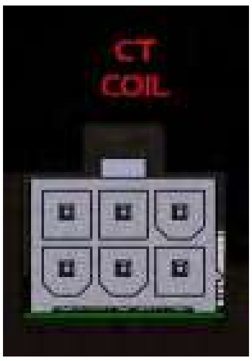
Power Input:



9-Pin Connector:



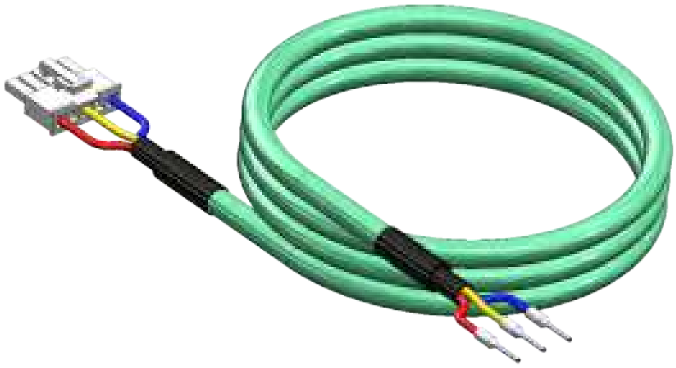
CT Coil:



Phase Preventer:

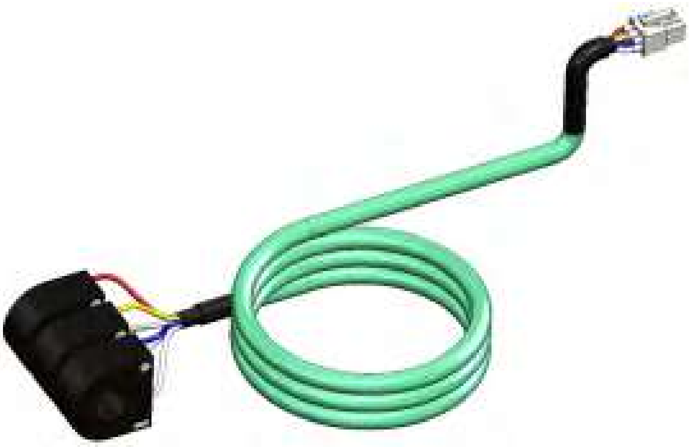
10-Pin Connector:

3 - Core Cable:

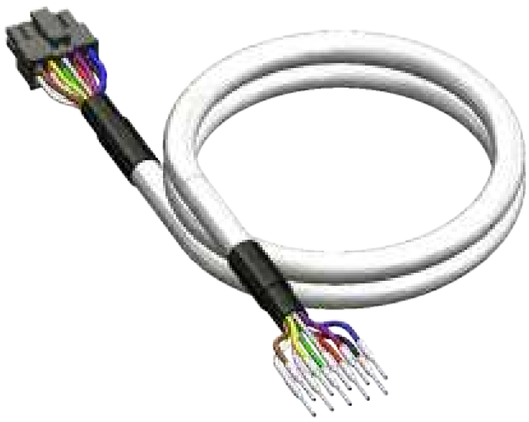


9 - Core Cable:

CT Coil 6 - Core Cable:

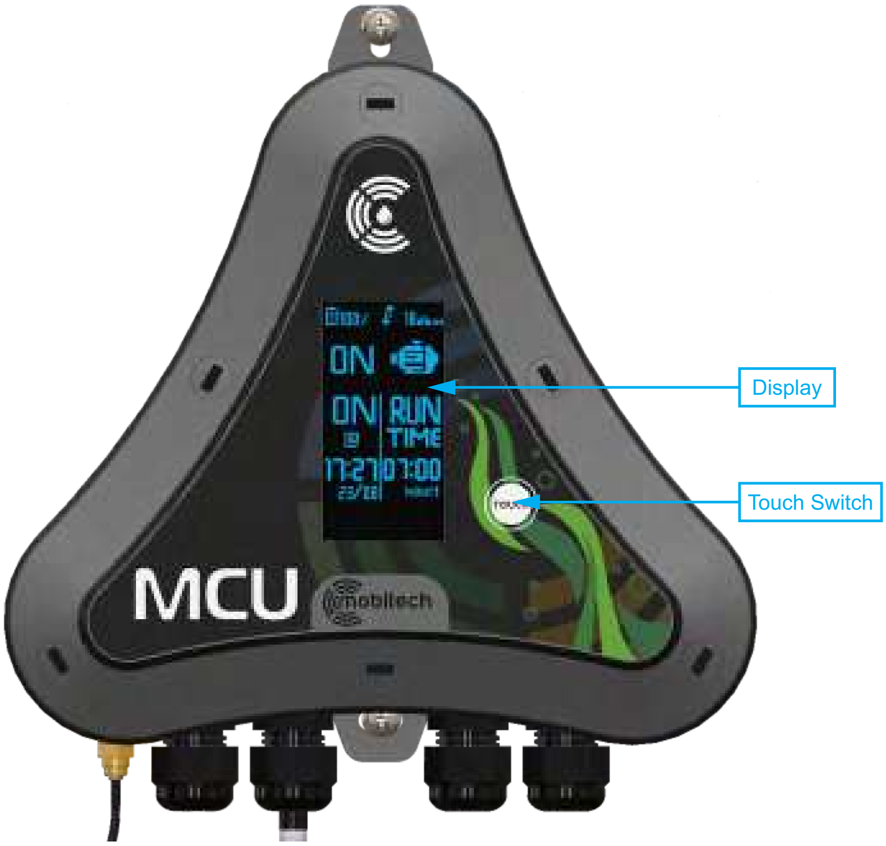


10 - Core Cable:



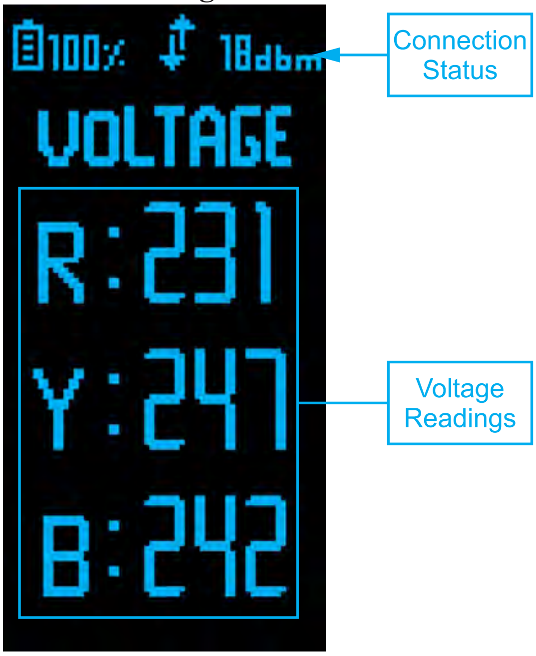
Configuration:

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

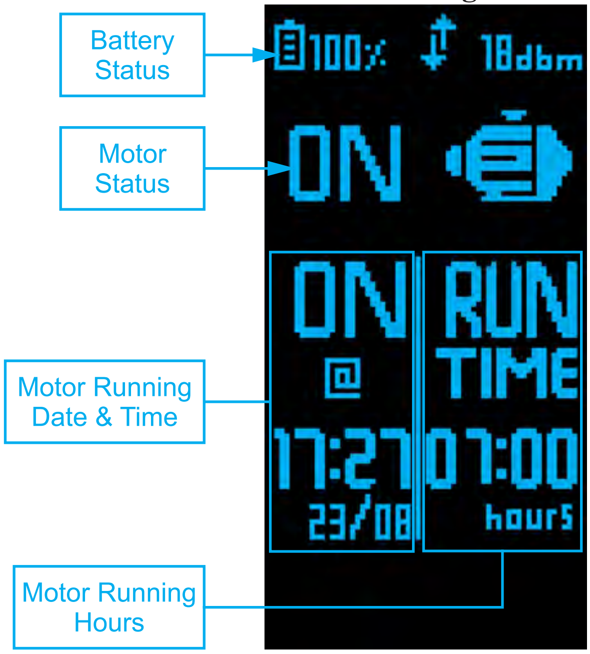


Display Screens:

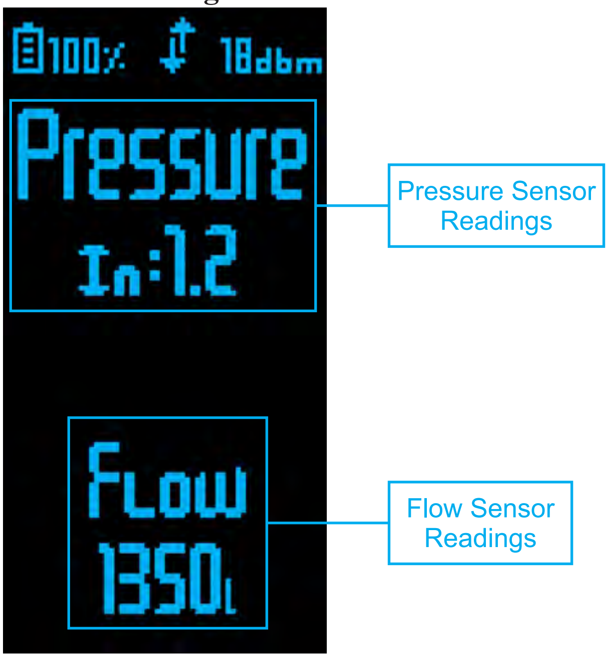
Phase Readings:



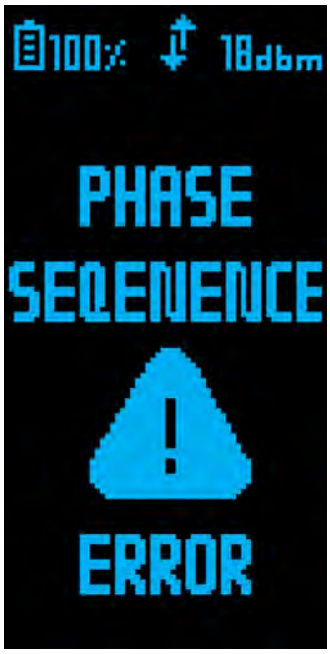
Motor Running Status:



Sensor Readings:



Phase Failure:



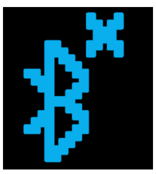
Battery Status:

- It shows Internal Battery Percentage.

Connectivity:

- It shows Connectivity Strength.

Blue tooth Status:



- Blue tooth Disconnected.

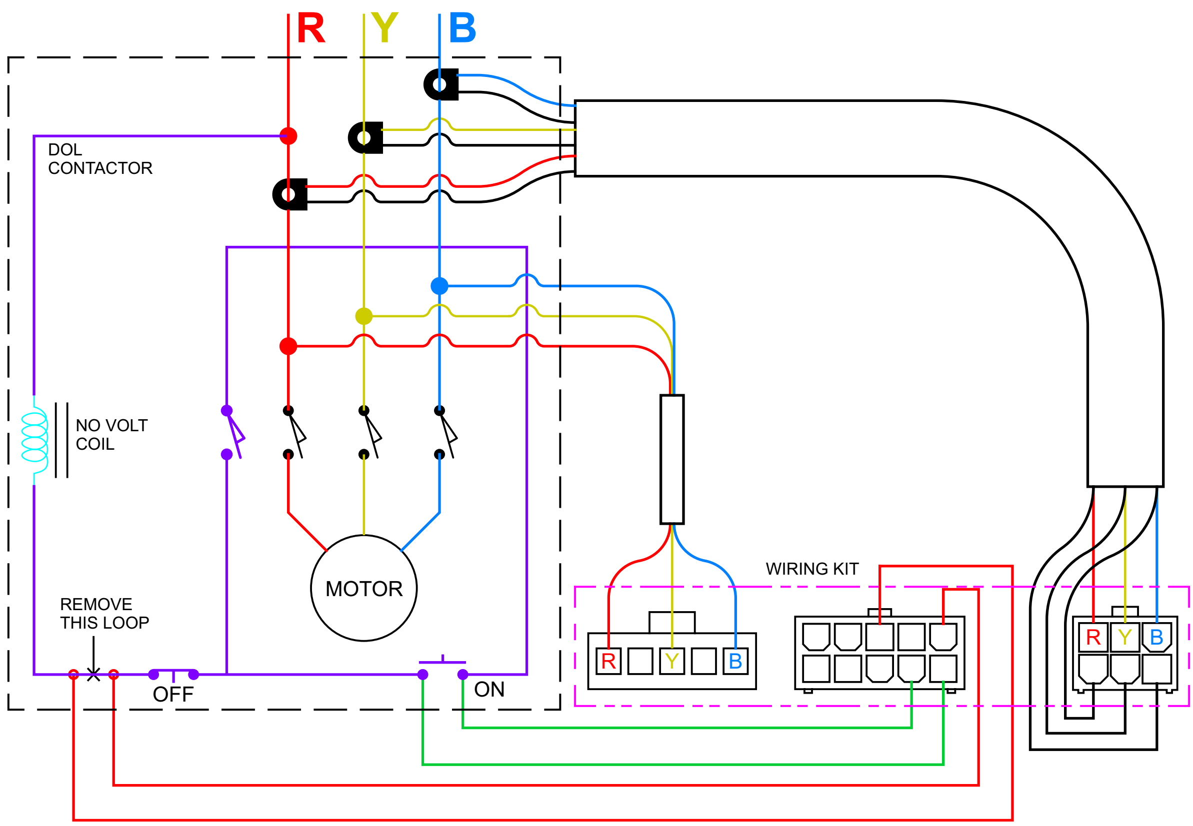
- Blue tooth connected.

Starter Wiring Diagram

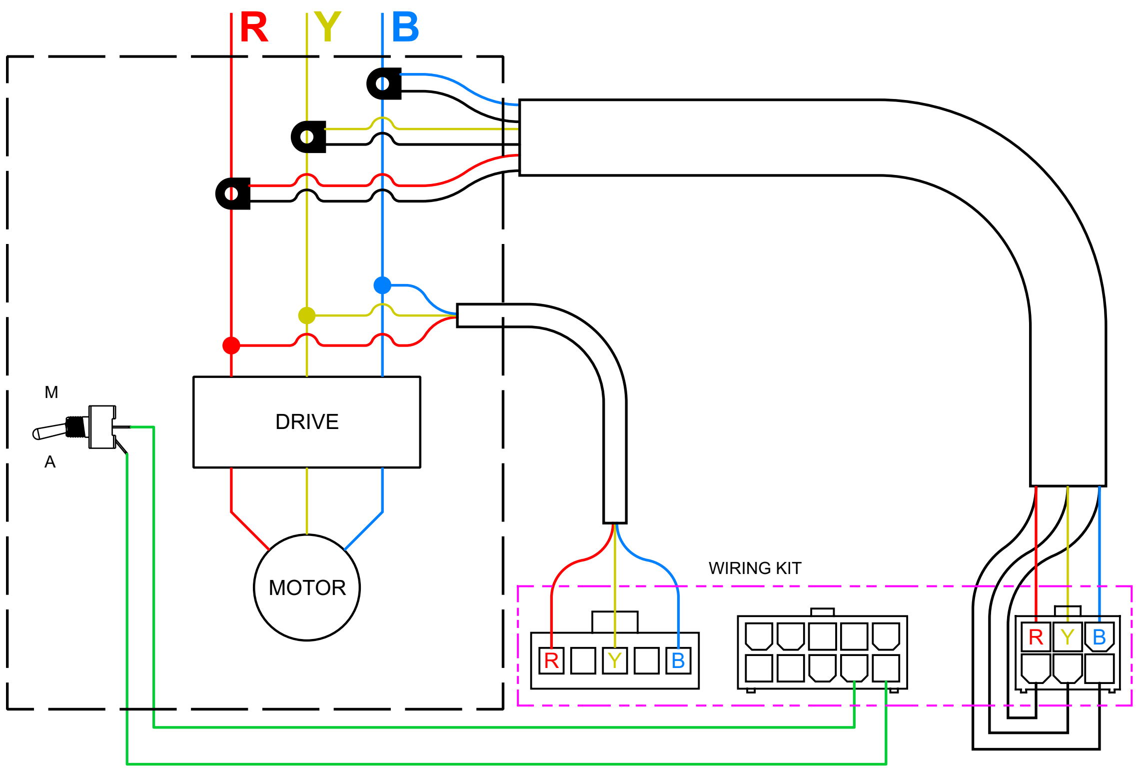
Field Installation Document

STARTER WIRING CONNECTIONS:

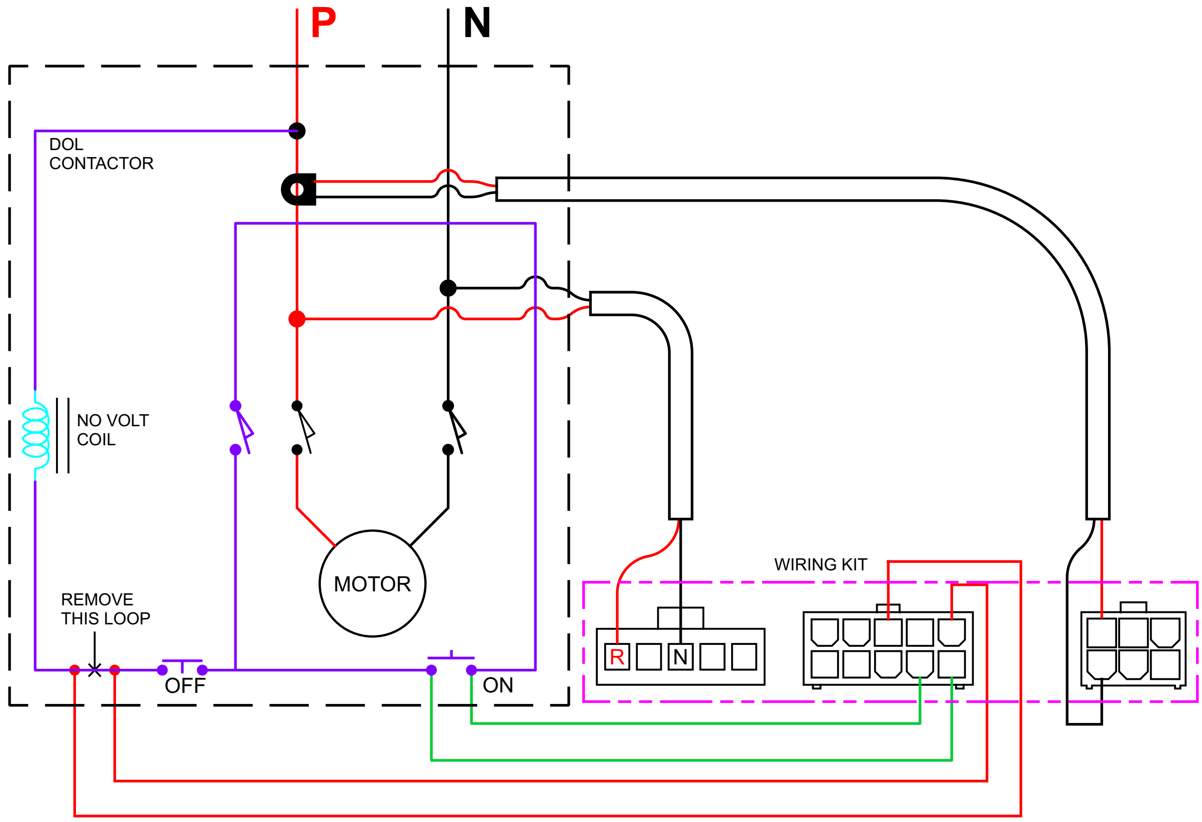
CONFIGURATION STEPS FOR DIRECT ONLINE (DOL) STARTER



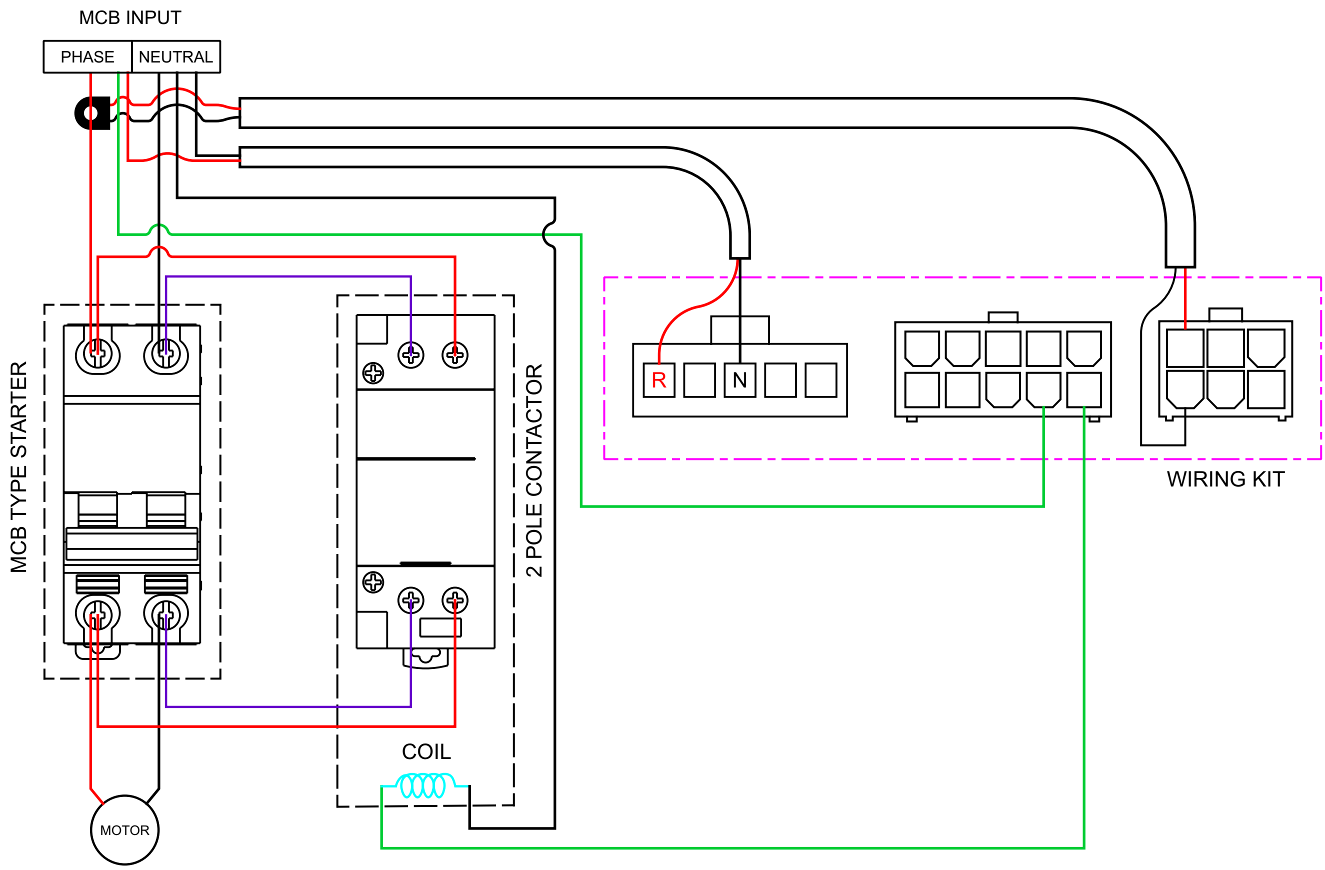
CONFIGURATION STEPS FOR DRIVE CONTROL



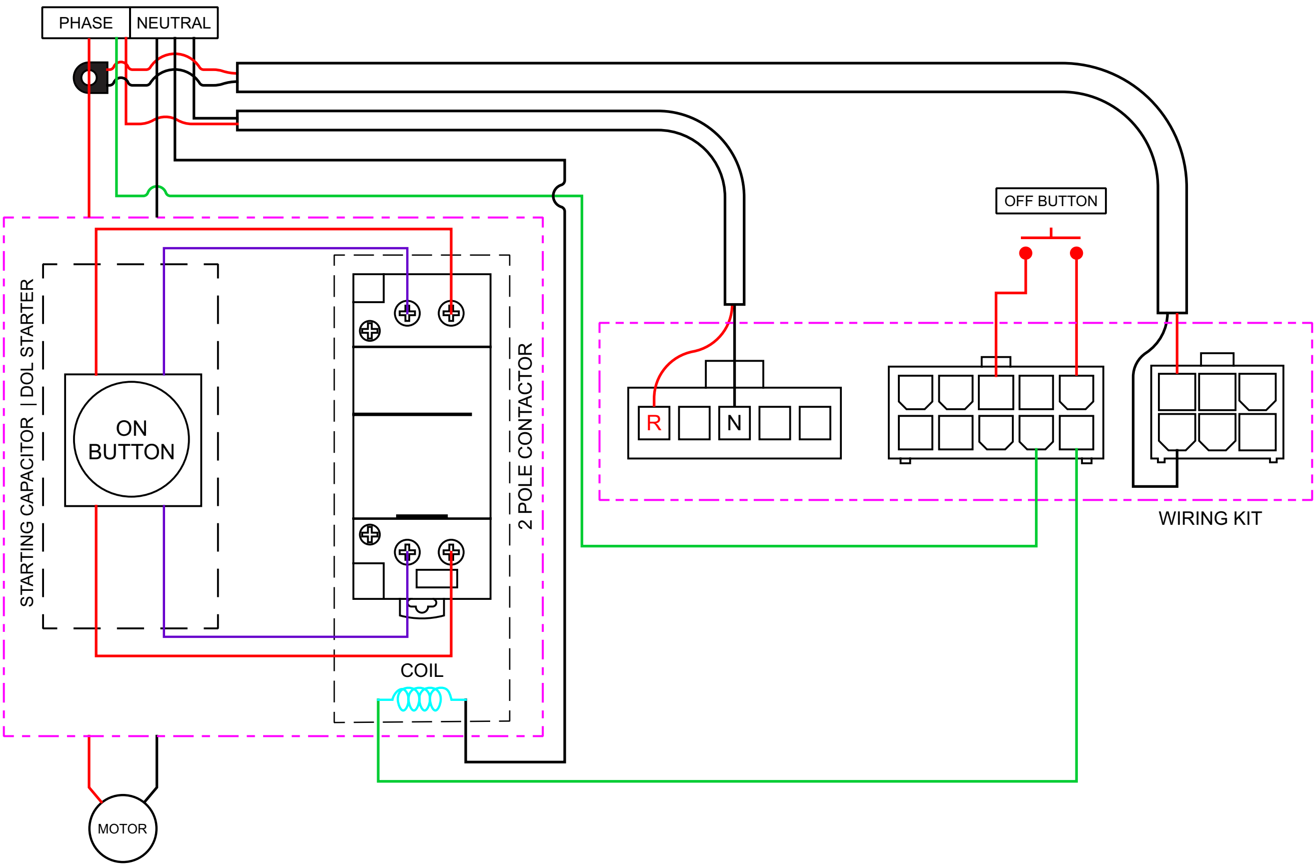
CONFIGURATION STEPS FOR SINGLE PHASE DOL TYPE MOTOR STARTER (Without starting condenser)



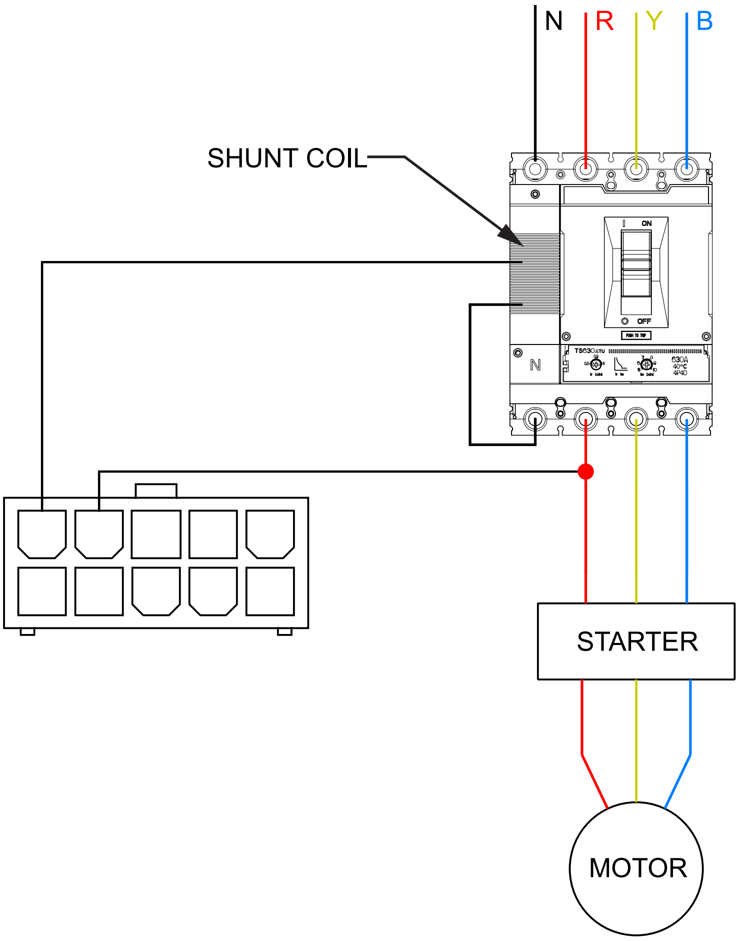
CONFIGURATION STEPS FOR SINGLE PHASE MCB TYPE MOTOR STARTER



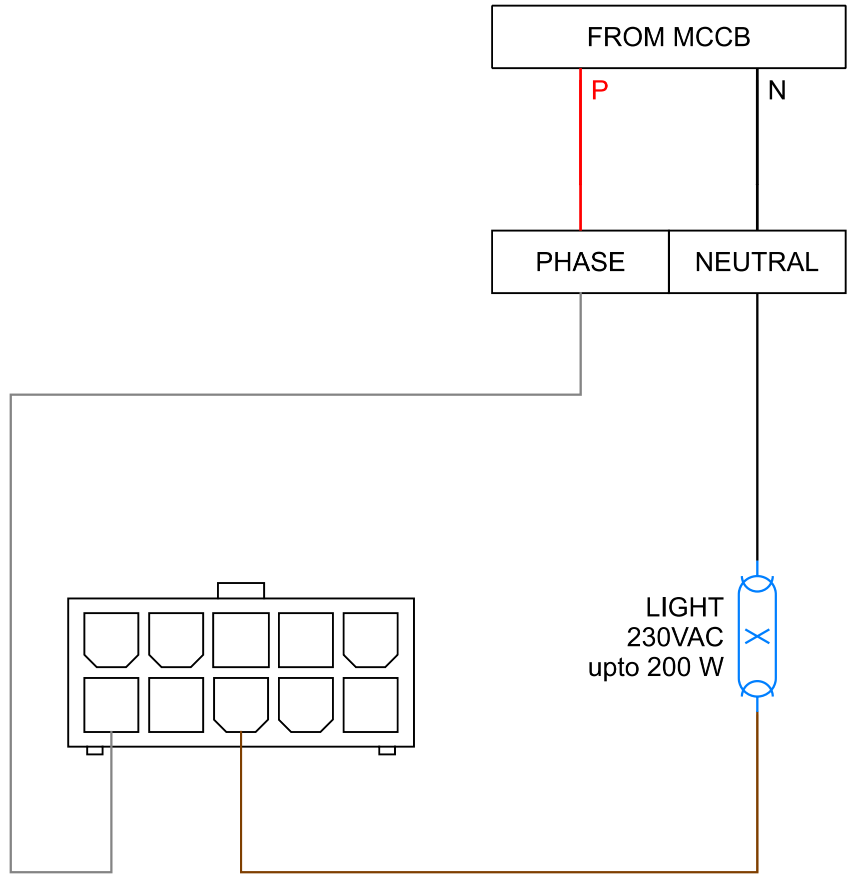
CONFIGURATION STEPS FOR SINGLE PHASE DOL TYPE MOTOR STARTER



CONFIGURATION STEPS FOR MCCB CONNECTION



CONFIGURATION STEPS FOR STARTER ROOM LIGHT BULB CONNECTION



Dcon_Ag_VCN
(Valve Controller)
Field Installation Document

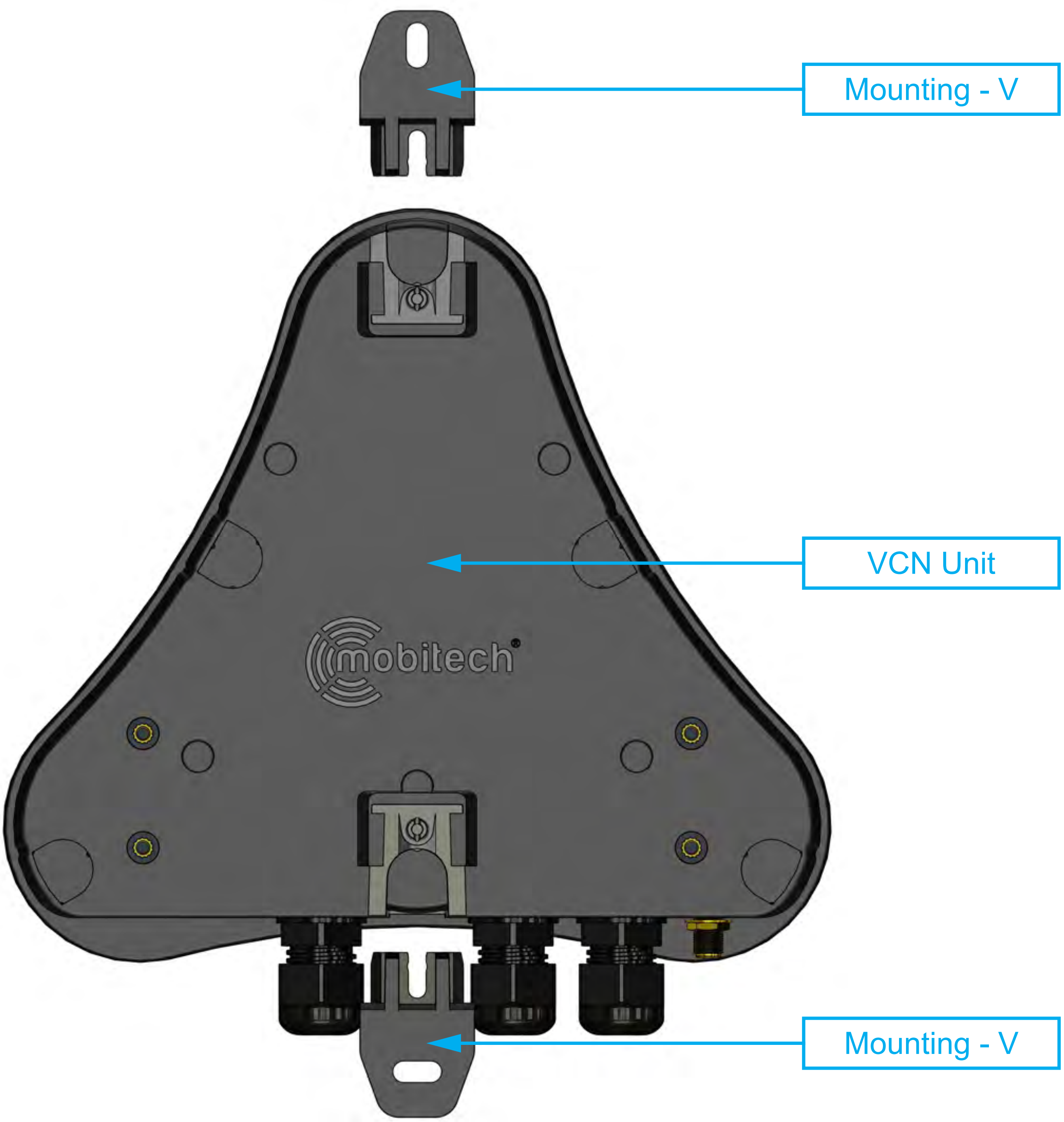
Technical Specification:

- Product Name : VCN
- Solar Panel : 9V/6W
- Battery : 3.7V/2.6AH
- Backup Time : 72 Hours
- Communication : LORA and Blue tooth 5.0
- GPS : Inbuilt
- Number of Valves : 2 No's

Assembly Procedure:

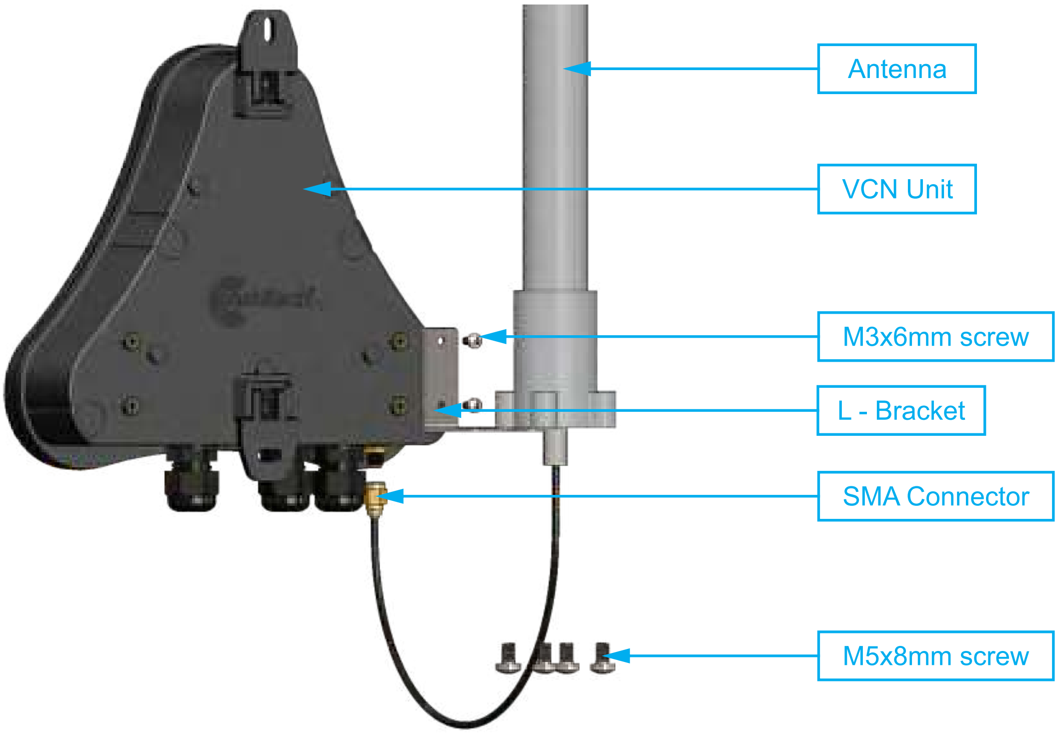
Mounting Assembly:

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



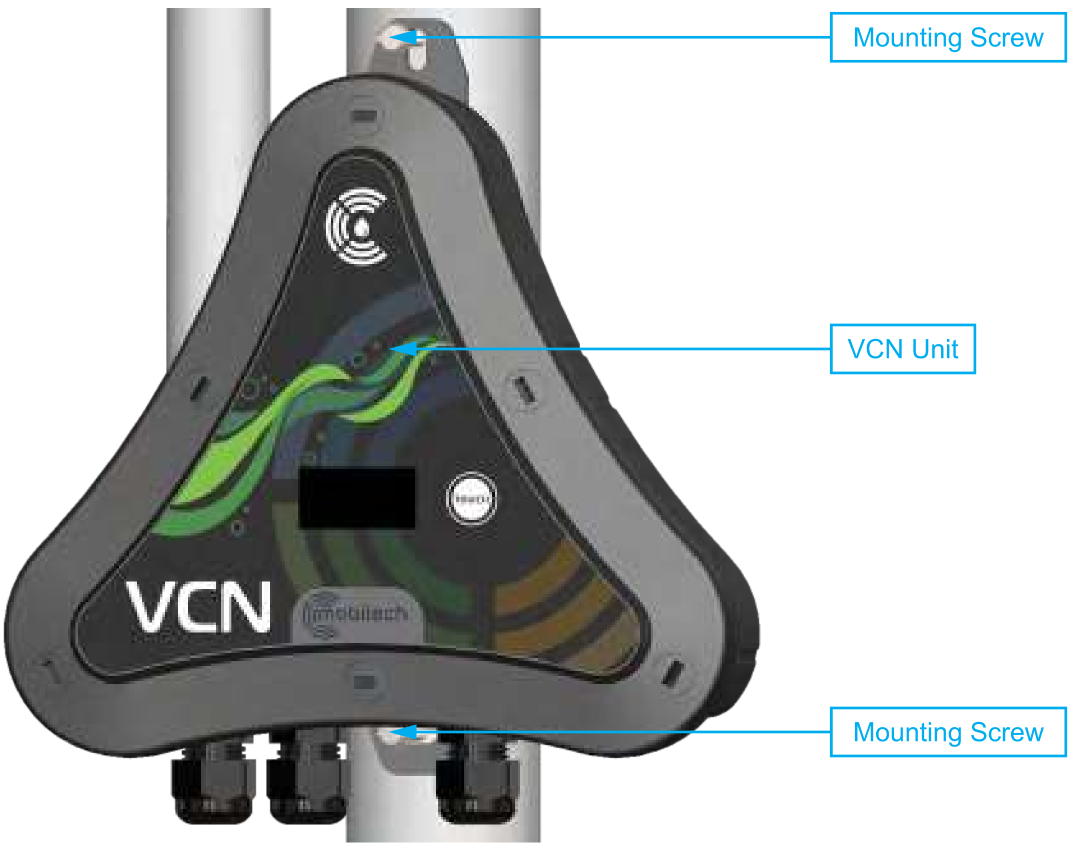
Antenna Assembly:

- 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 VCN unit.

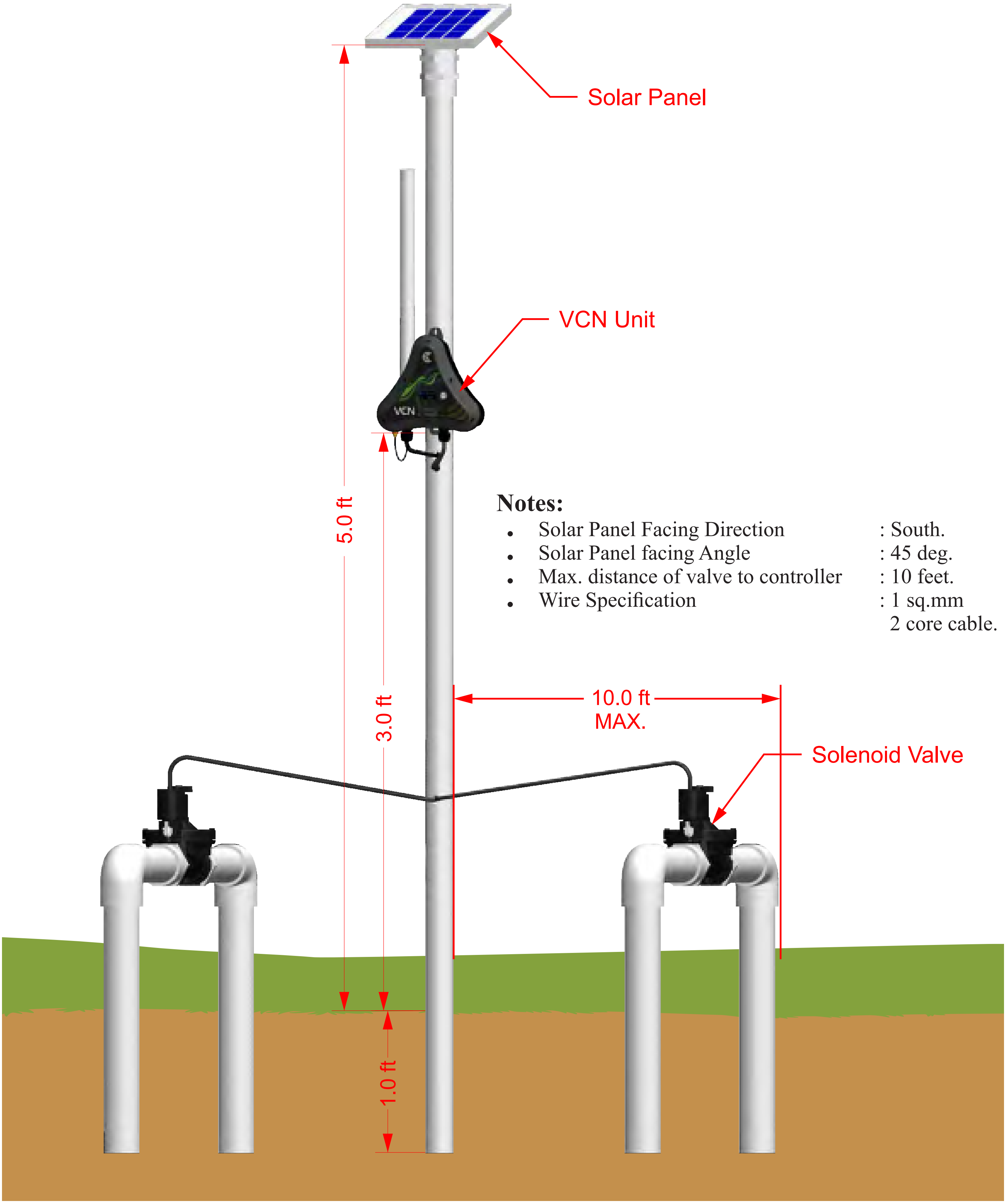


Pole Assembly:

- Mount VCN unit with screw on pole.



Full Assembly:

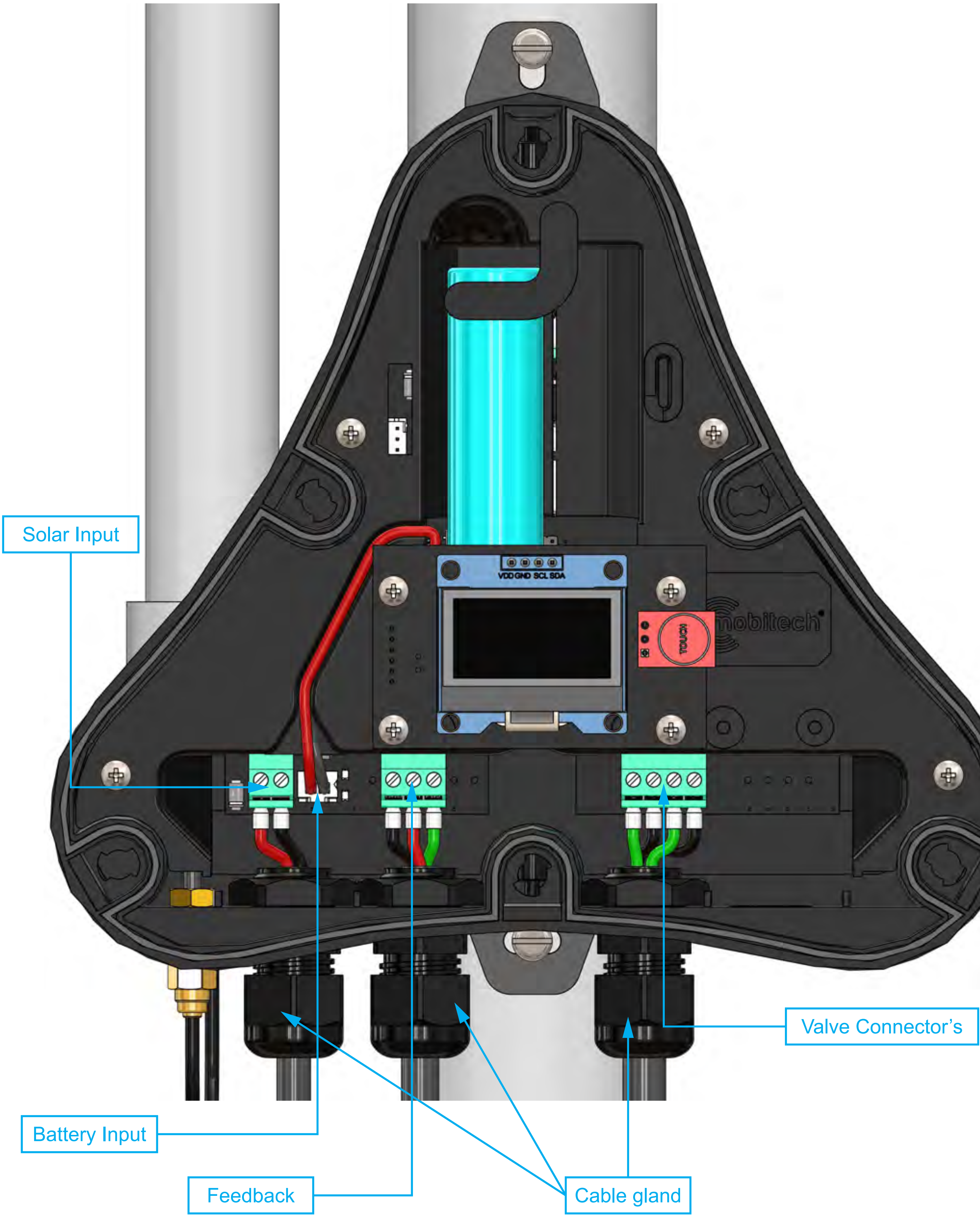


Notes:

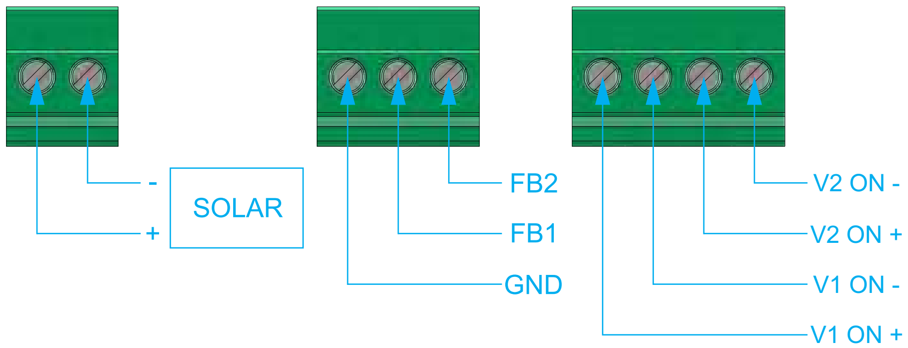
- Solar Panel Facing Direction : South.
- Solar Panel facing Angle : 45 deg.
- Max. distance of valve to controller : 10 feet.
- Wire Specification : 1 sq.mm 2 core cable.

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 feedback cable in to cable gland 2 and connect cable as shown in wiring diagram.
- Open cable gland 3, insert valve cable in to cable gland 3 and connect cable as shown in wiring drawing.
- Connect battery connector as shown in picture.
- Check all connections and ensure tight of cable gland before closing top cover.



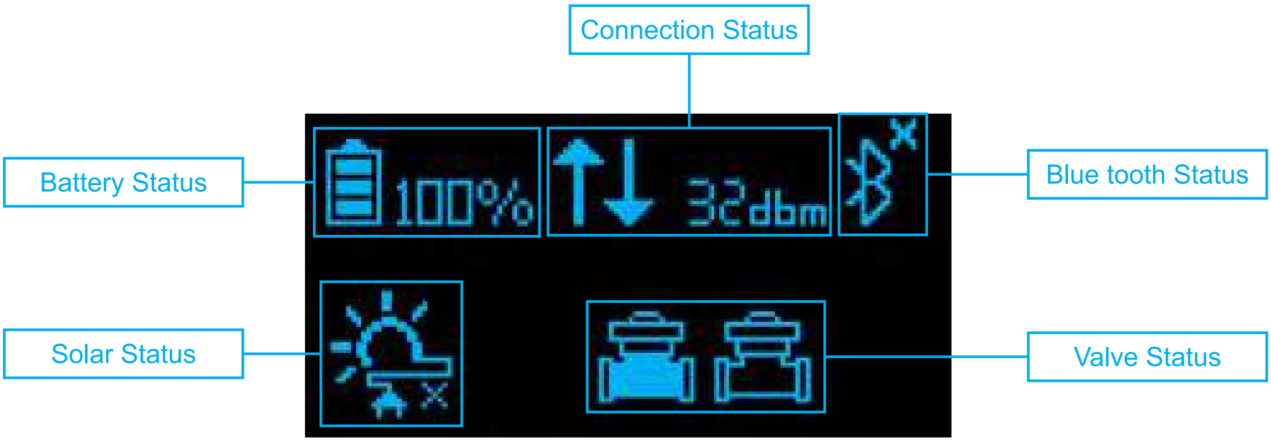
Connector Detail:



Configuration:

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

Display Screen:



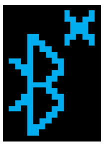
Battery Status:

- It shows Internal Battery Percentage.

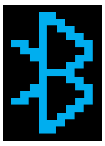
Connectivity:

- It shows Connectivity Strength.

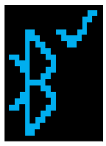
Blue tooth Status:



- Blue tooth Disconnected.

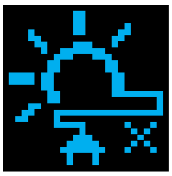


- Blue tooth Stand-by(blink).

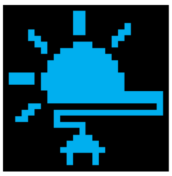


- Blue tooth connected.

Solar Status:

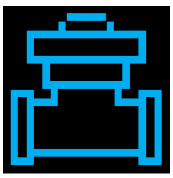


- Solar Not Connected.

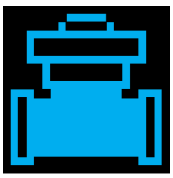


- Solar Connected (Blink).

Valve Status:



- Valve OFF.



- Valve ON.

Dcon_Ag_VCN4

(Valve Controller - 4)

Field Installation Document

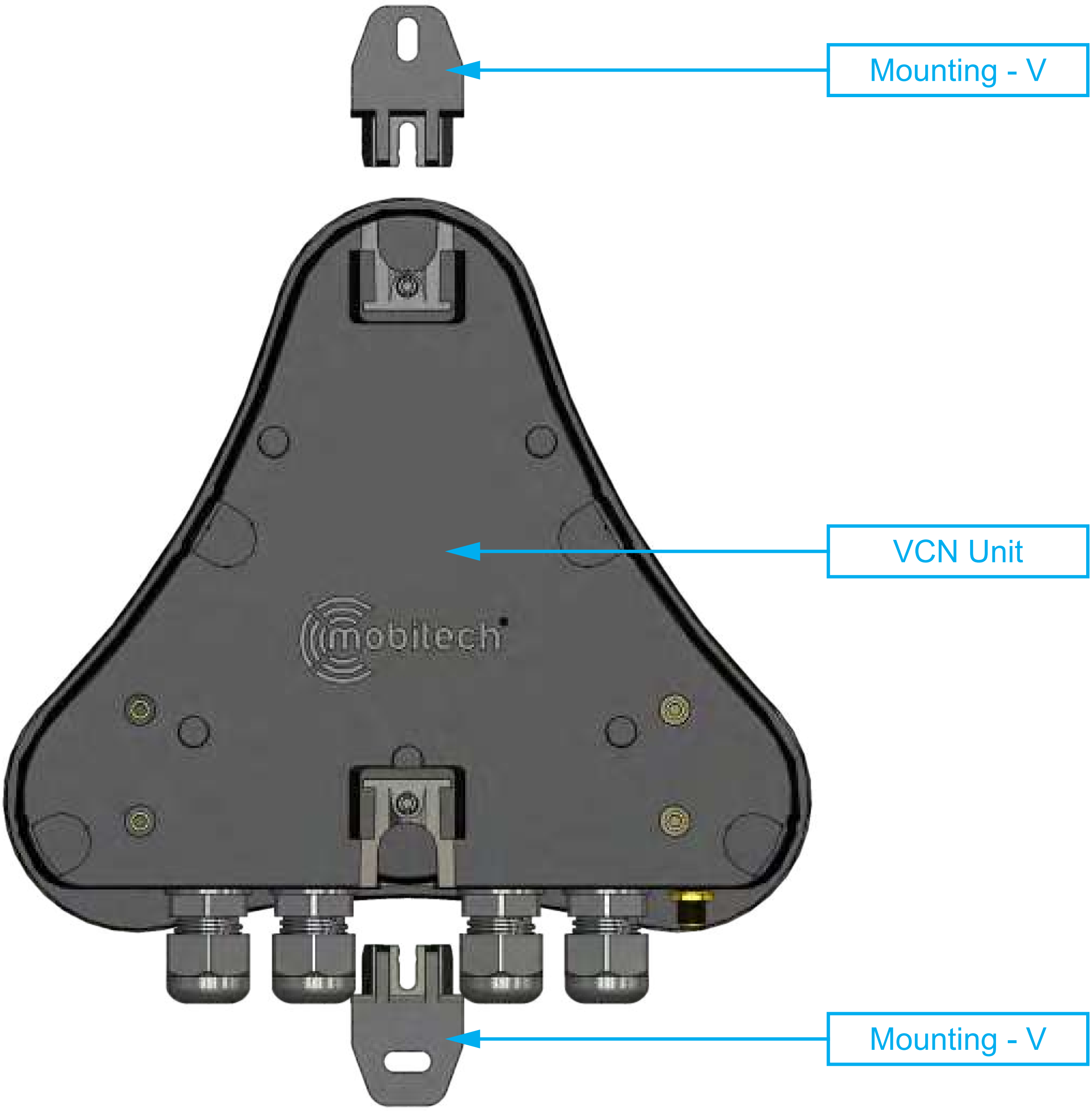
Technical Specification:

- Product Name : VCN - 4
- Solar Panel : 9V/6W
- Battery : 3.7V/2.6AH
- Backup Time : 72 Hours
- Communication : LORA and Blue tooth 5.0
- GPS : Inbuilt
- Number of Valves : 4 No's

Assembly Procedure:

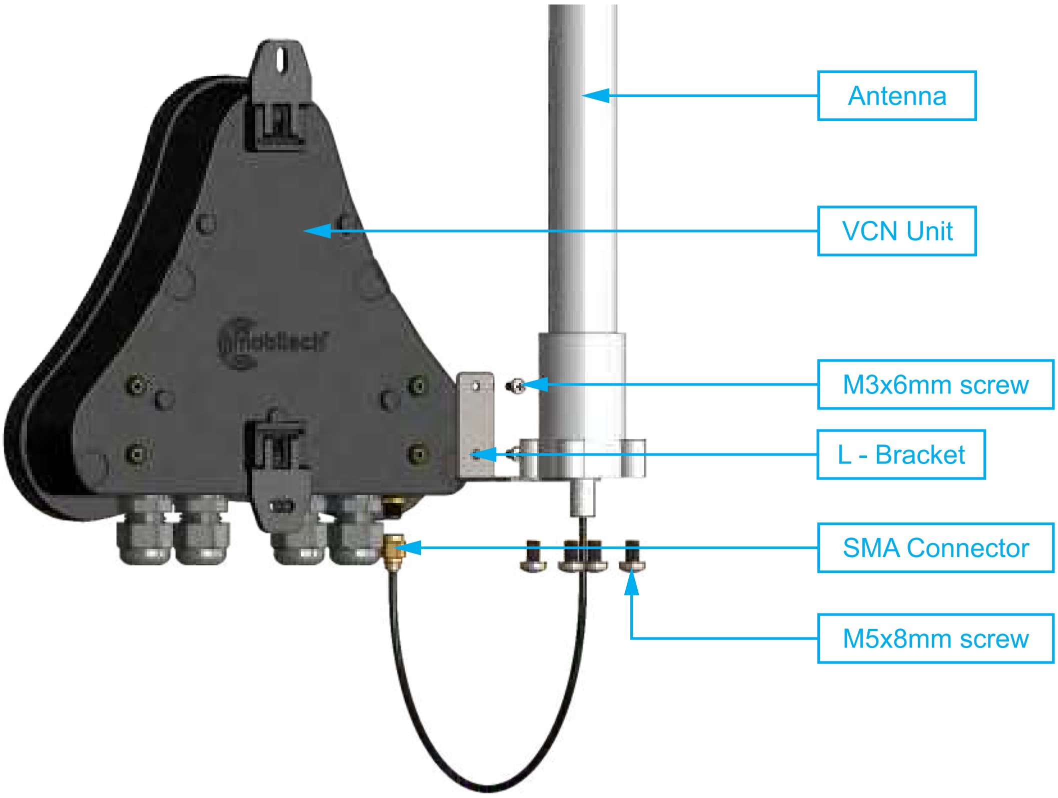
Mounting Assembly:

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



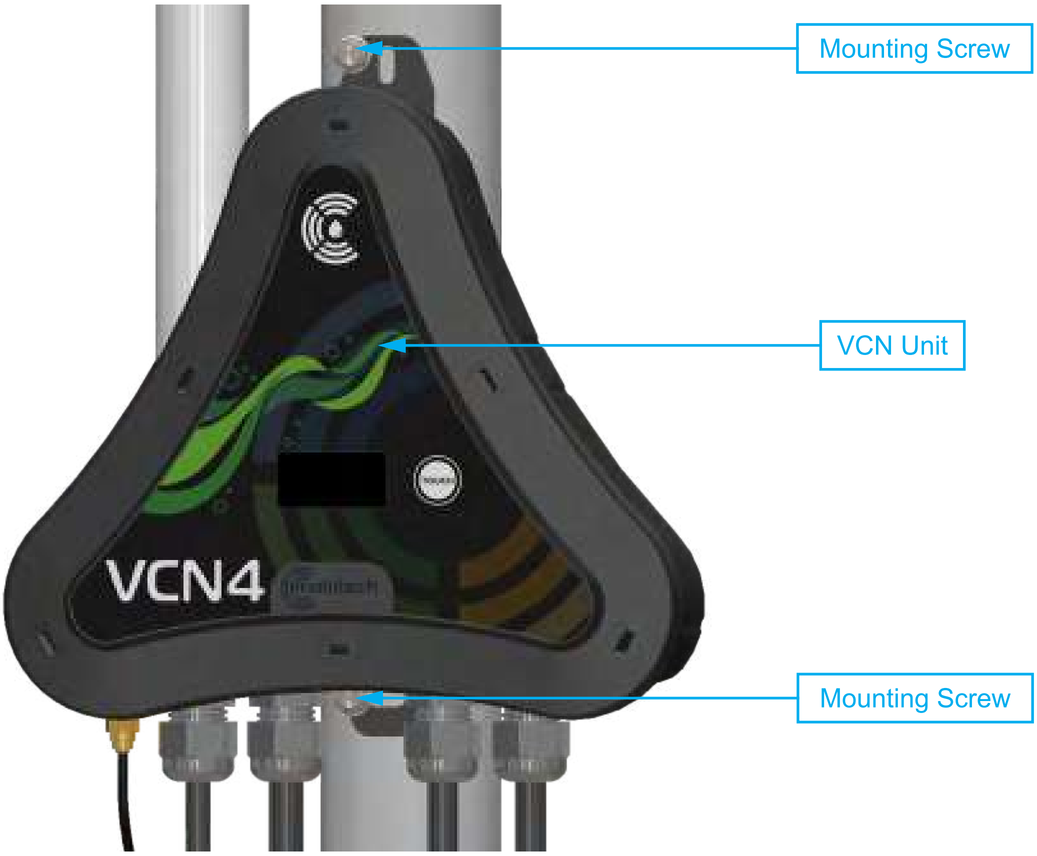
Antenna Assembly:

- 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 VCN-4 unit.

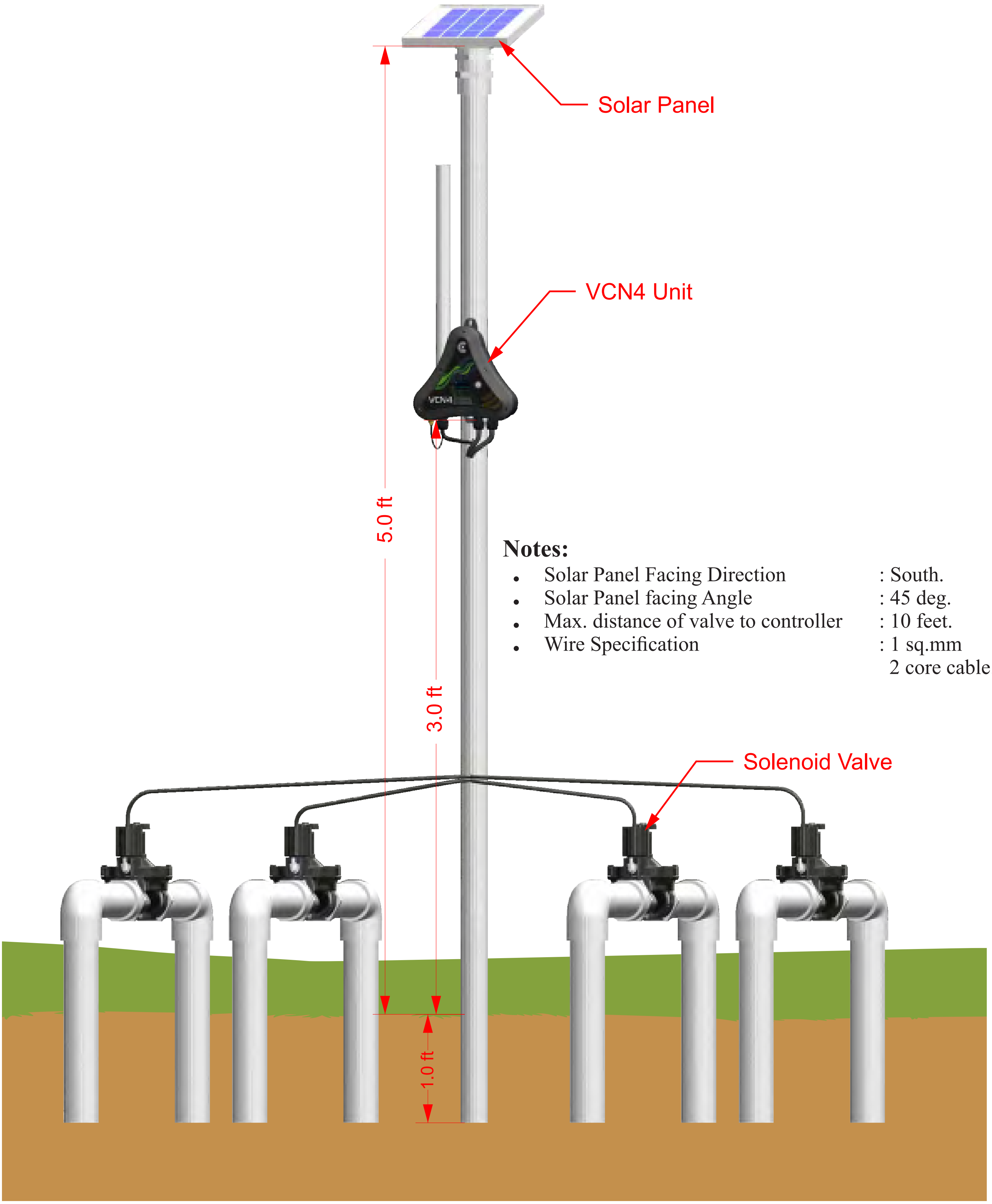


Pole Assembly:

- Mount VCN-4 unit with screw on pole.



Full Assembly:

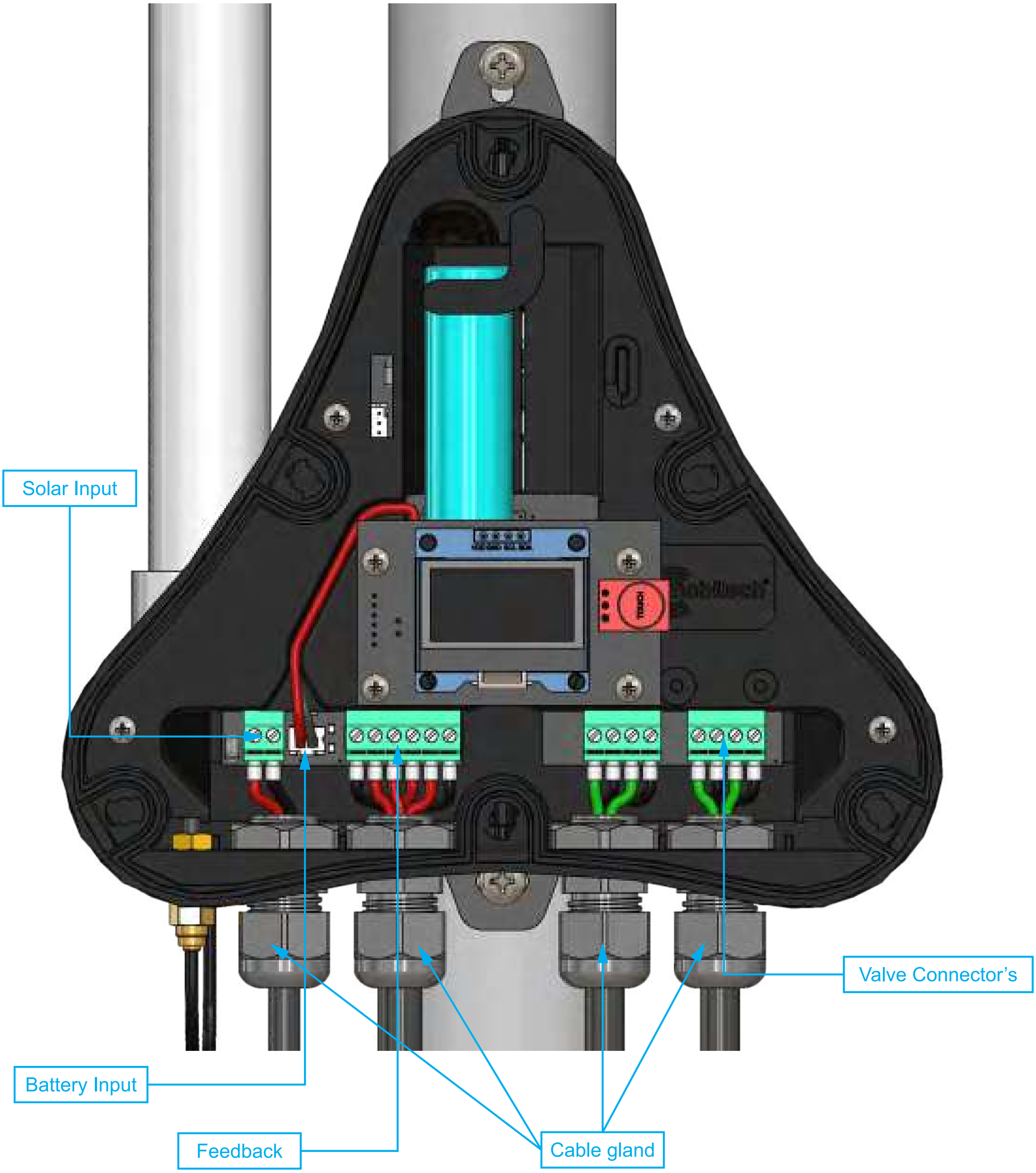


Notes:

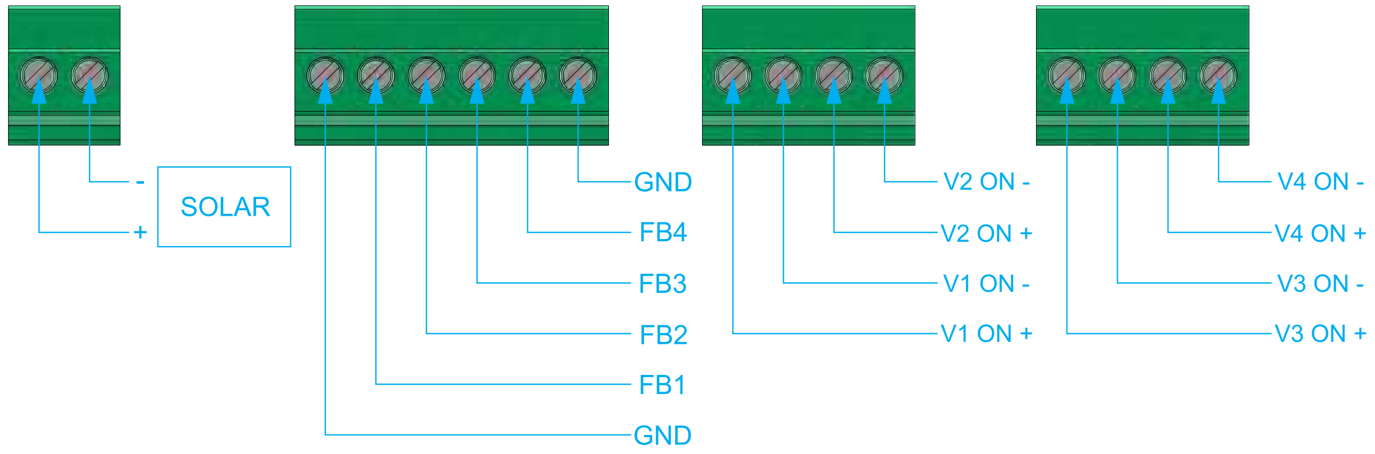
- Solar Panel Facing Direction : South.
- Solar Panel facing Angle : 45 deg.
- Max. distance of valve to controller : 10 feet.
- Wire Specification : 1 sq.mm 2 core cable.

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 feedback cable in to cable gland 2 and connect cable as shown in wiring diagram.
- Open cable gland 3, insert valve cable in to cable gland 3 and connect cable as shown in wiring drawing.
- Open cable gland 4, insert valve cable in to cable gland 4 and connect cable as shown in wiring drawing.
- Connect battery connector as shown in picture.
- Check all connections and ensure tight of cable gland before closing top cover.

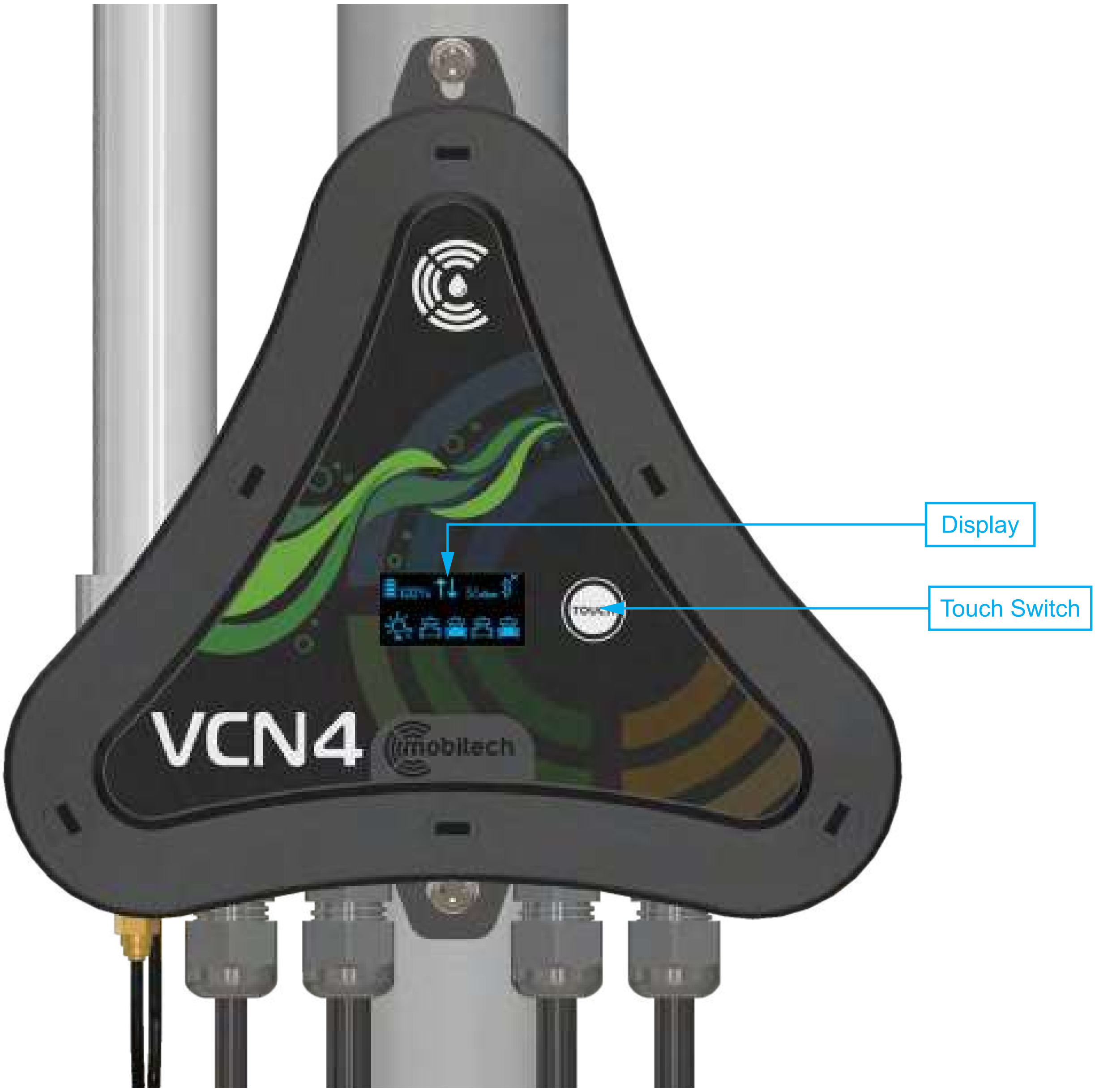


Connector Detail:

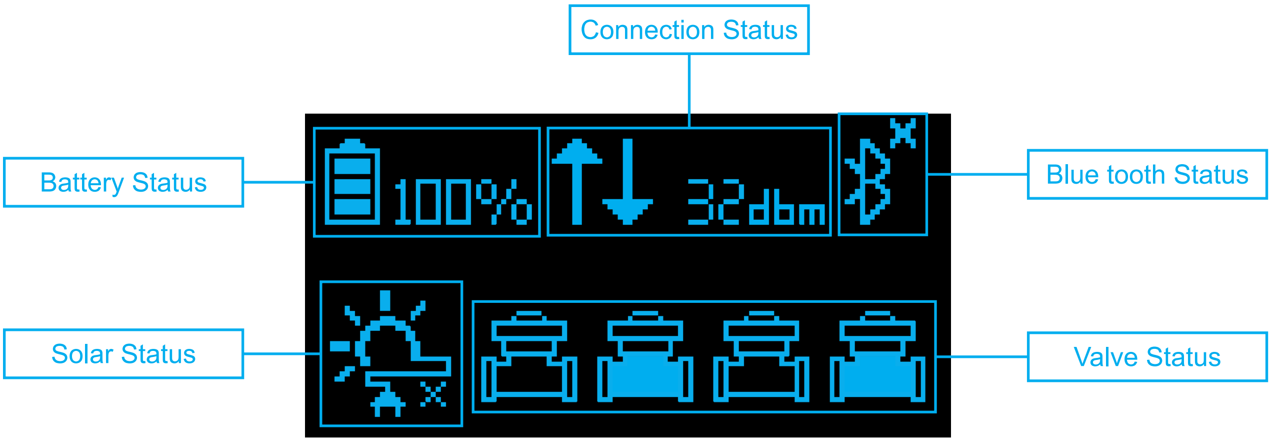


Configuration:

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



Display Screen:



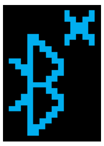
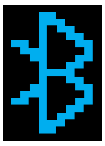
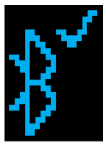
Battery Status:

- It shows Internal Battery Percentage.

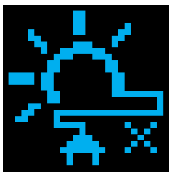
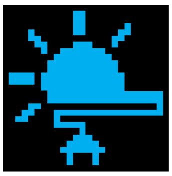
Connectivity:

- It shows Connectivity Strength.

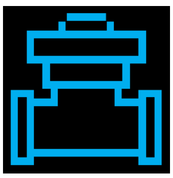
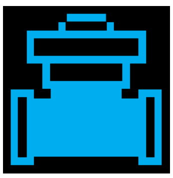
Blue tooth Status:

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

Solar Status:

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

Valve Status:

 - Valve OFF.  - Valve ON.

Dcon_Ag_WL
(Water Level)
Field Installation Document

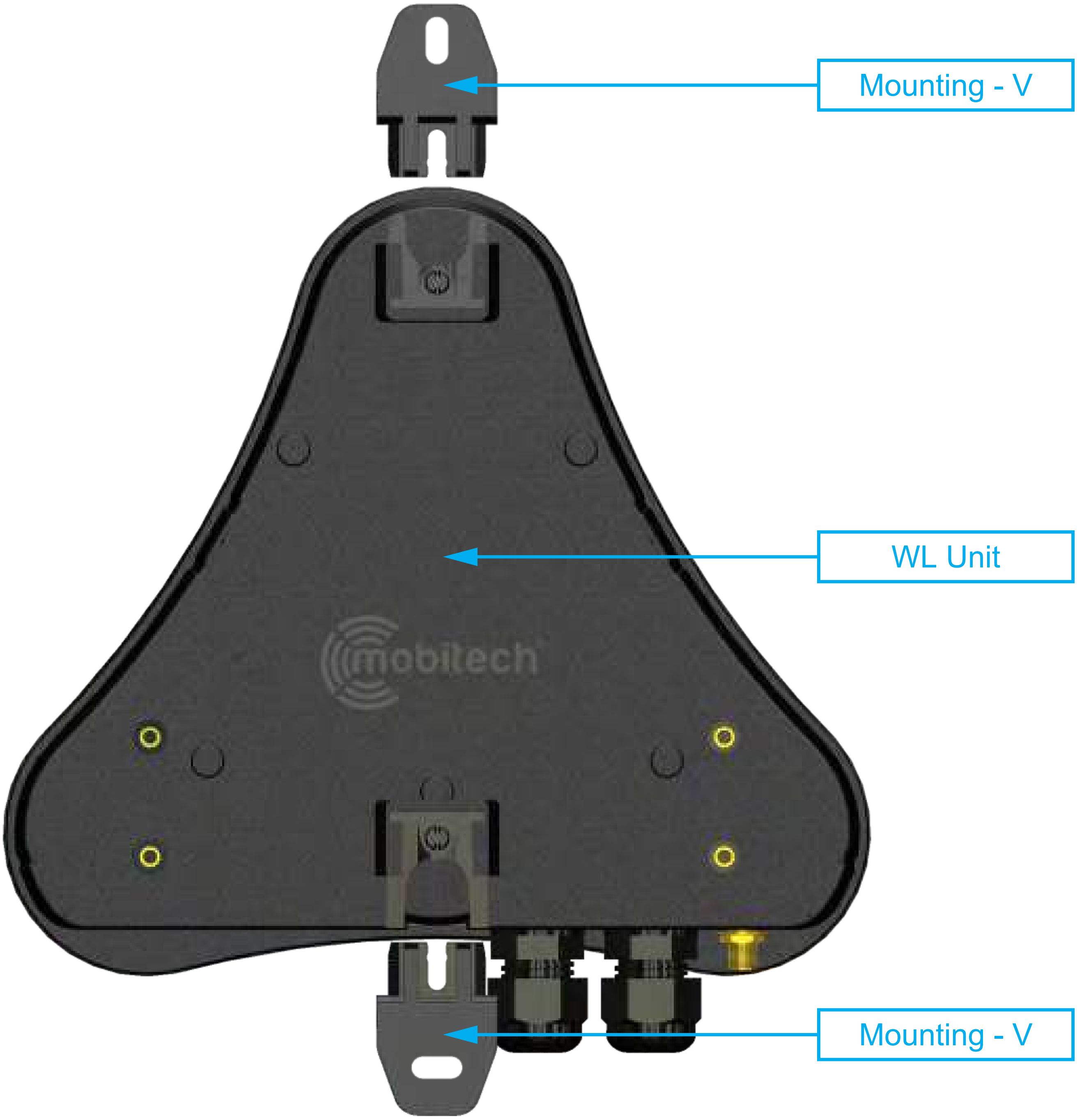
Technical Specification:

- Product Name : WL
- Solar Panel : 12V/13W
- Battery : 7.4V/2.6AH
- Backup Time : 72 Hours
- Communication : LORA and Blue tooth 5.0
- GPS : Inbuilt
- Sensor Output : 0 - 5V Analog
- Sensor : Linear Water Level Sensor

Assembly Procedure:

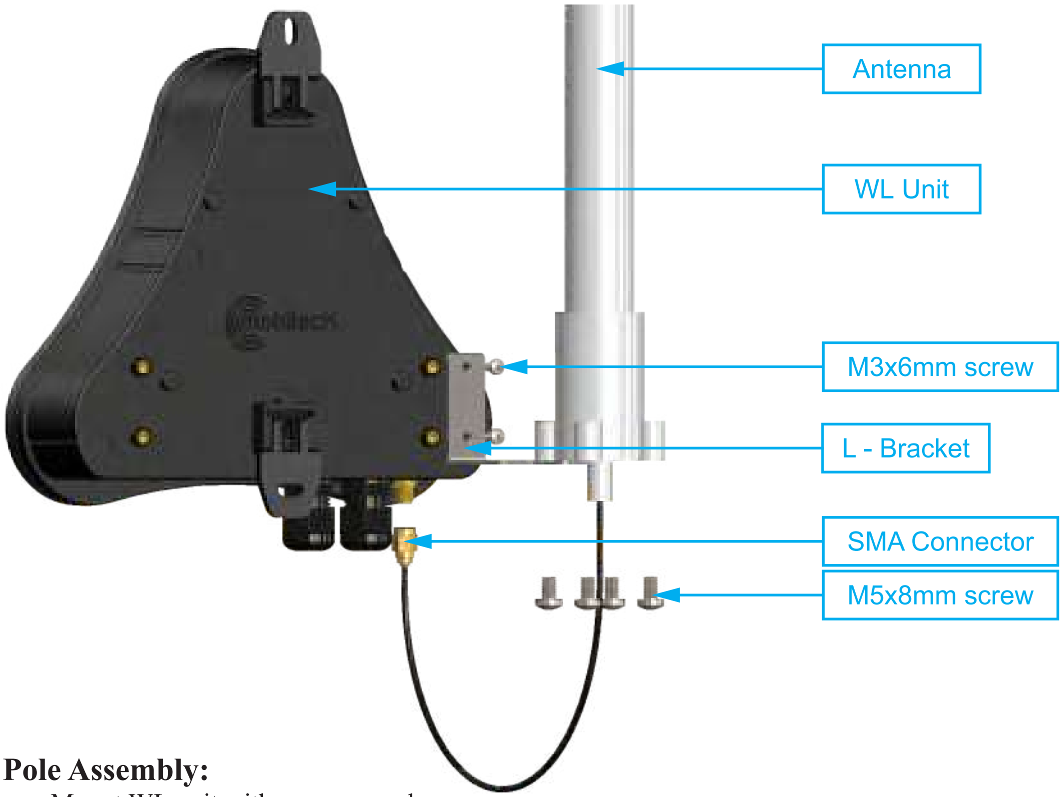
Mounting Assembly:

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



Antenna Assembly:

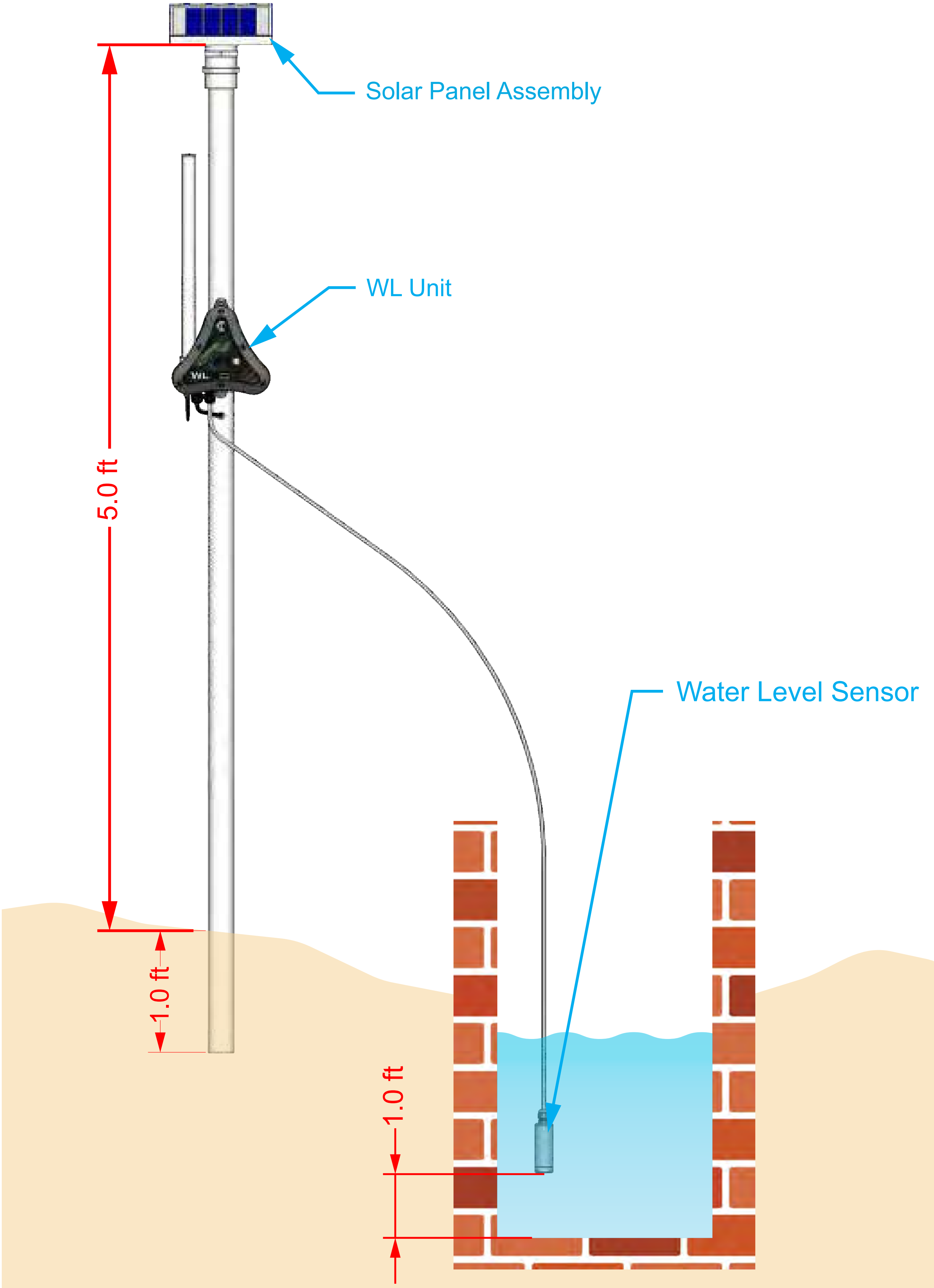
- Place the L-bracket for antenna mounting and screw with M3x6mm screw.
- Place the antenna on the mounting plate with M5x8mm screw.
- Connect antenna connector to SMA connector in WL unit.



Pole Assembly:

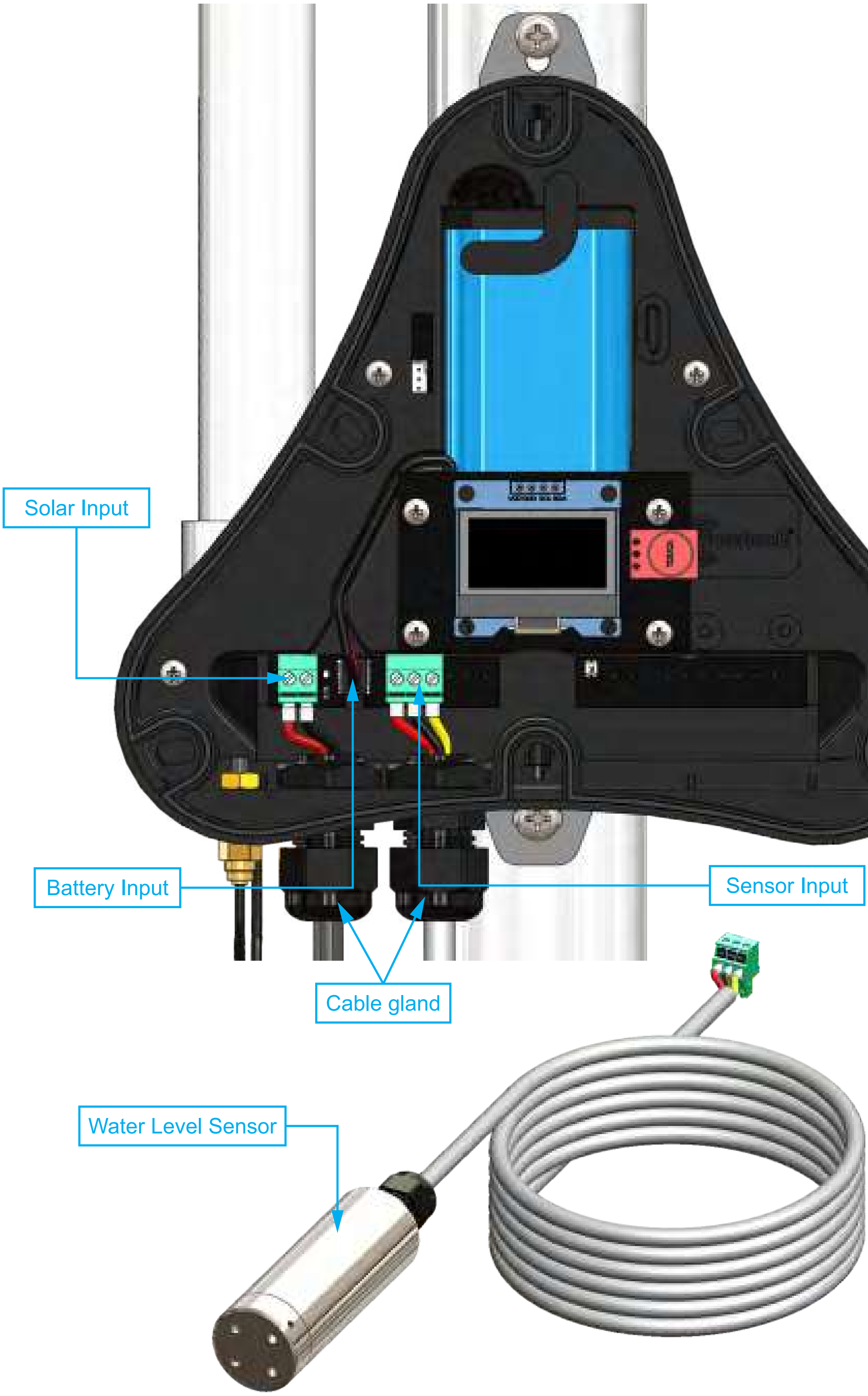
- Mount WL unit with screw on pole.

Full Assembly:

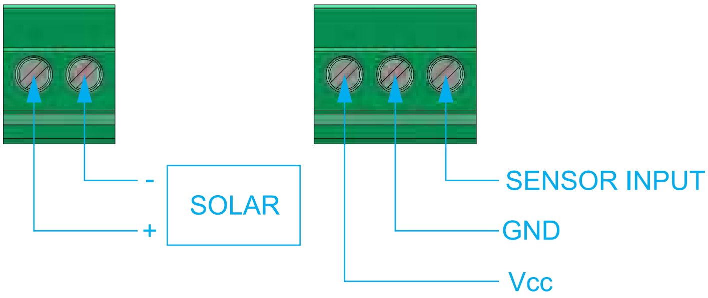


Wiring Drawing:

- 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 Water level sensor 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.

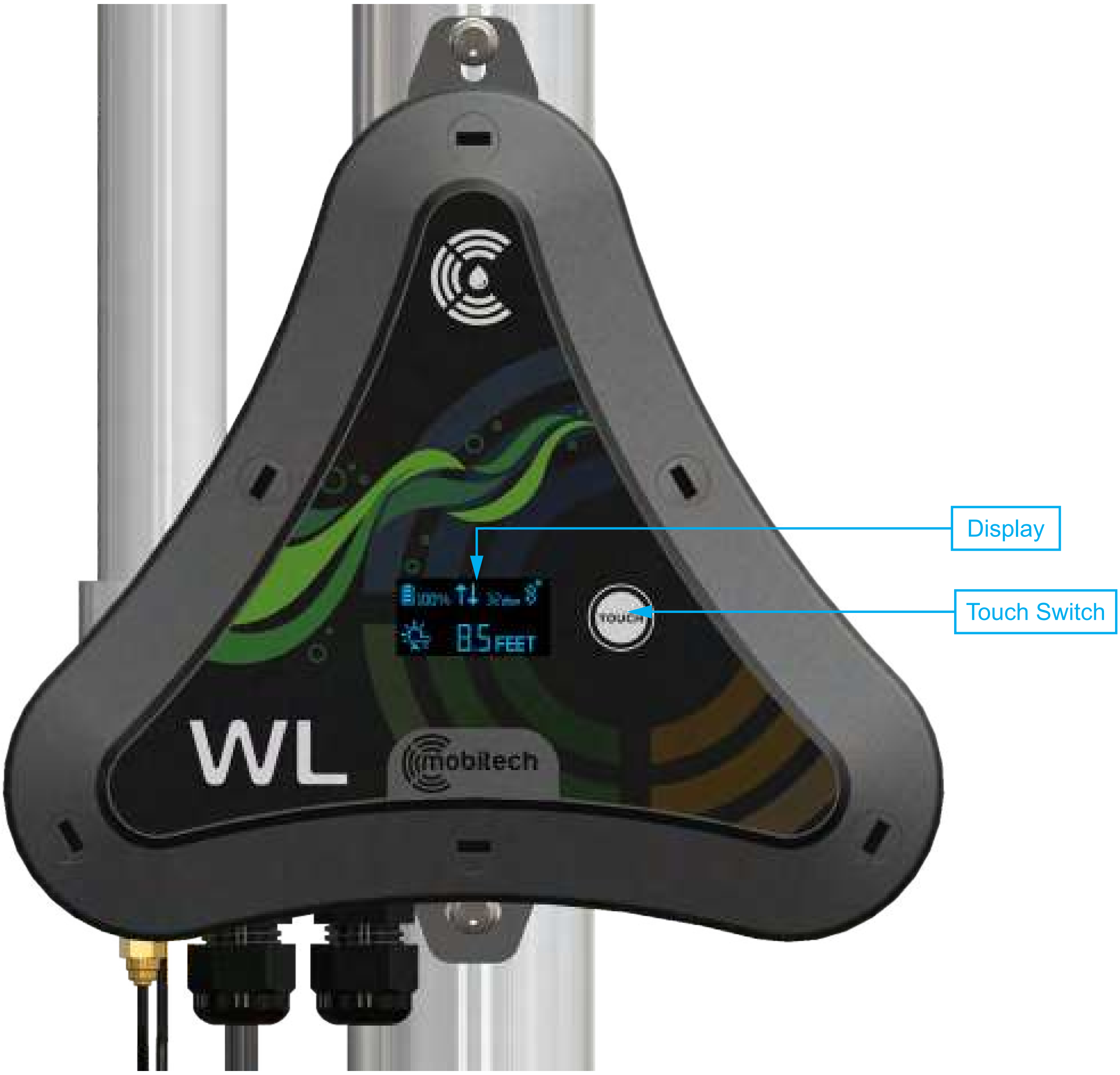


Connector Detail:

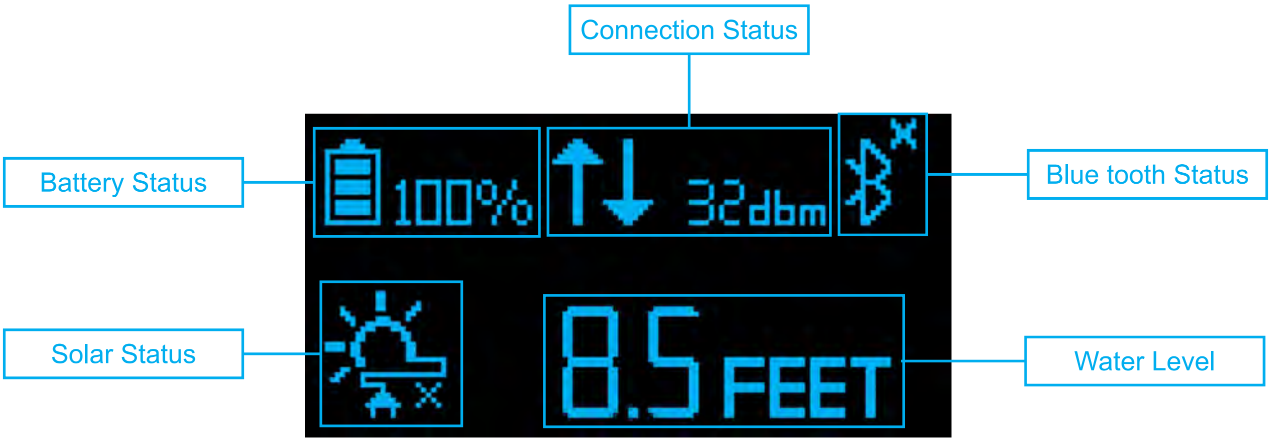


Configuration:

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



Display Screen:



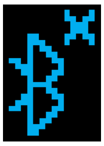
Battery Status:

- It shows Internal Battery Percentage.

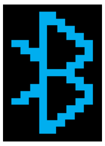
Connectivity:

- It shows Connectivity Strength.

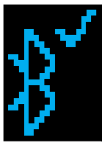
Blue tooth Status:



- Blue tooth Disconnected.

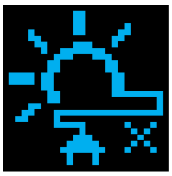


- Blue tooth Stand-by(blink).

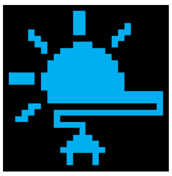


- Blue tooth connected.

Solar Status:



- Solar Not Connected.



- Solar Connected (Blink).

Sensor Value:

- It shows water level in Feet.

- It shows water level in Meter.

- It shows water level in Percentage.

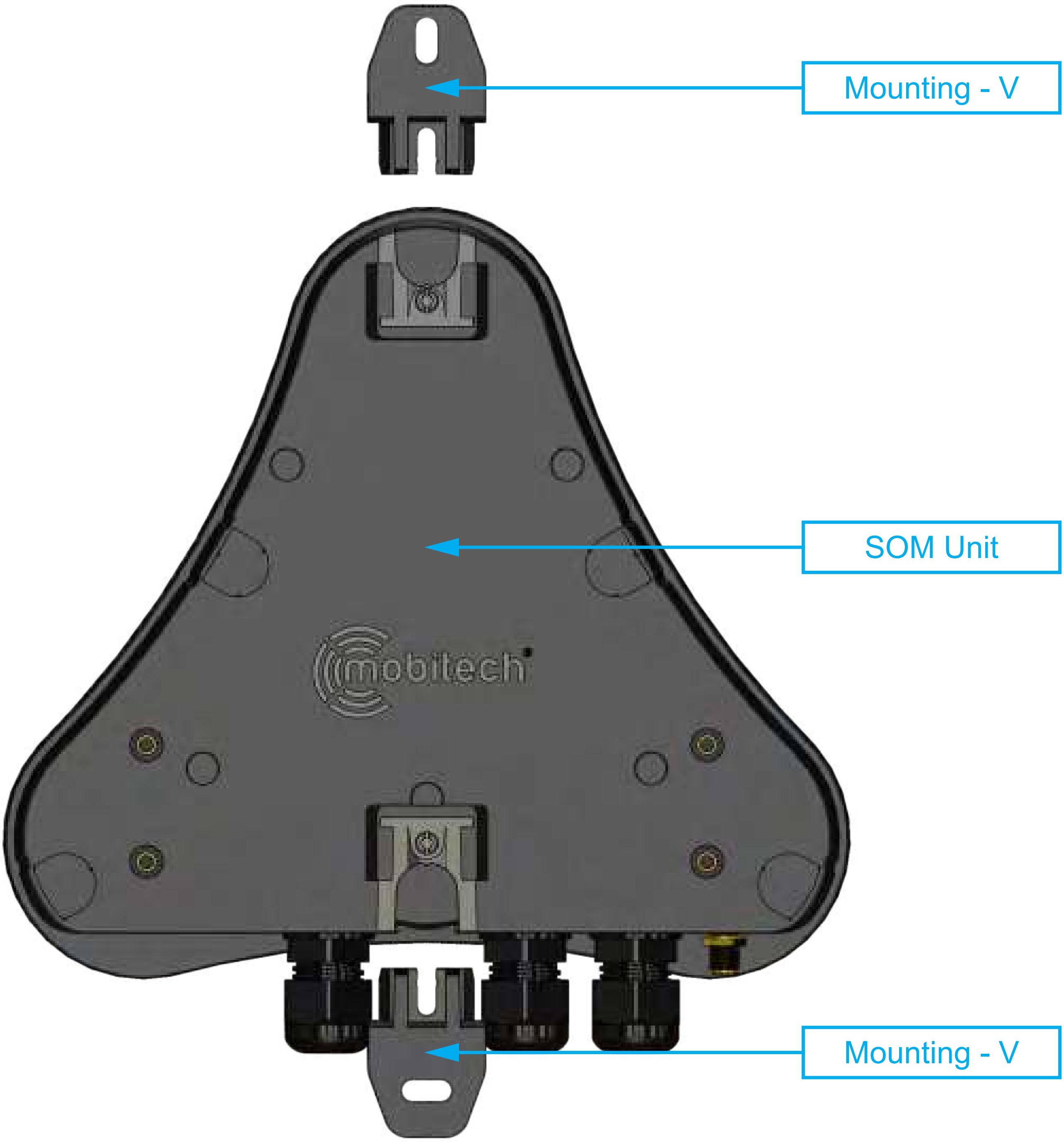
Dcon_Ag_SOM
(Soil Moisture Sensor)
Field Installation Document

Technical Specification:

- Product Name : SOM
- Solar Panel : 9V/6W
- Battery : 3.7V/2.6AH
- Backup Time : 72 Hours
- Communication : LORA and Blue tooth 5.0
- GPS : Inbuilt
- No of Soil Moisture Sensor : 3 No's
- No of Temperature Sensor : 1 No

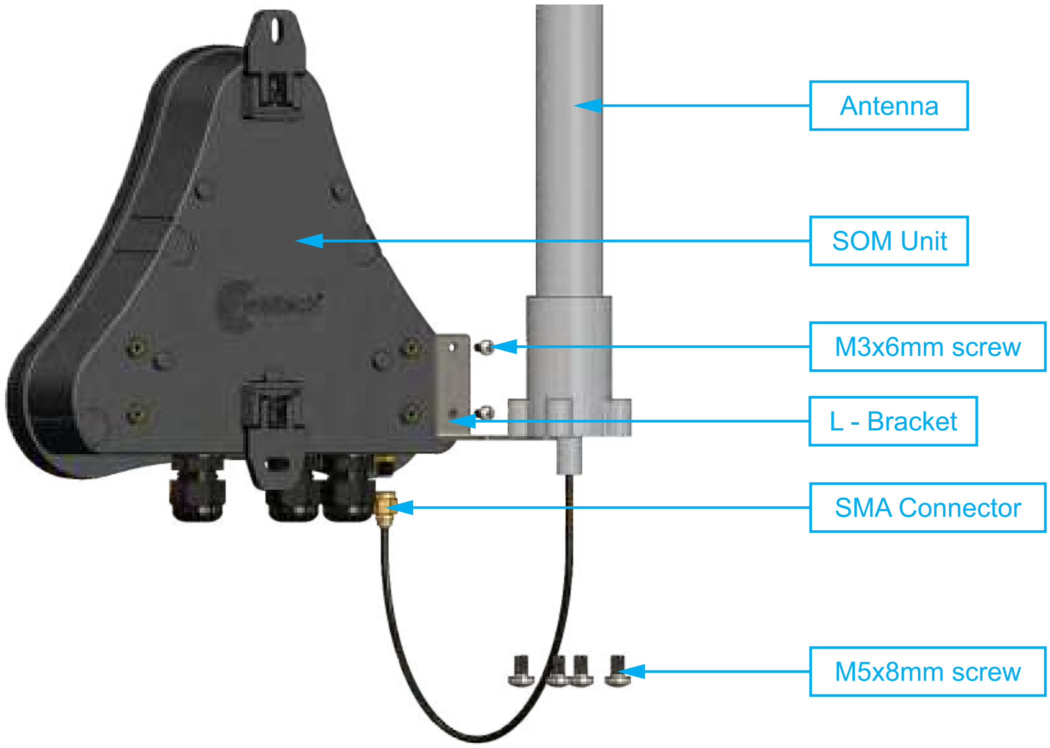
Assembly Procedure:
Mounting Assembly:

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



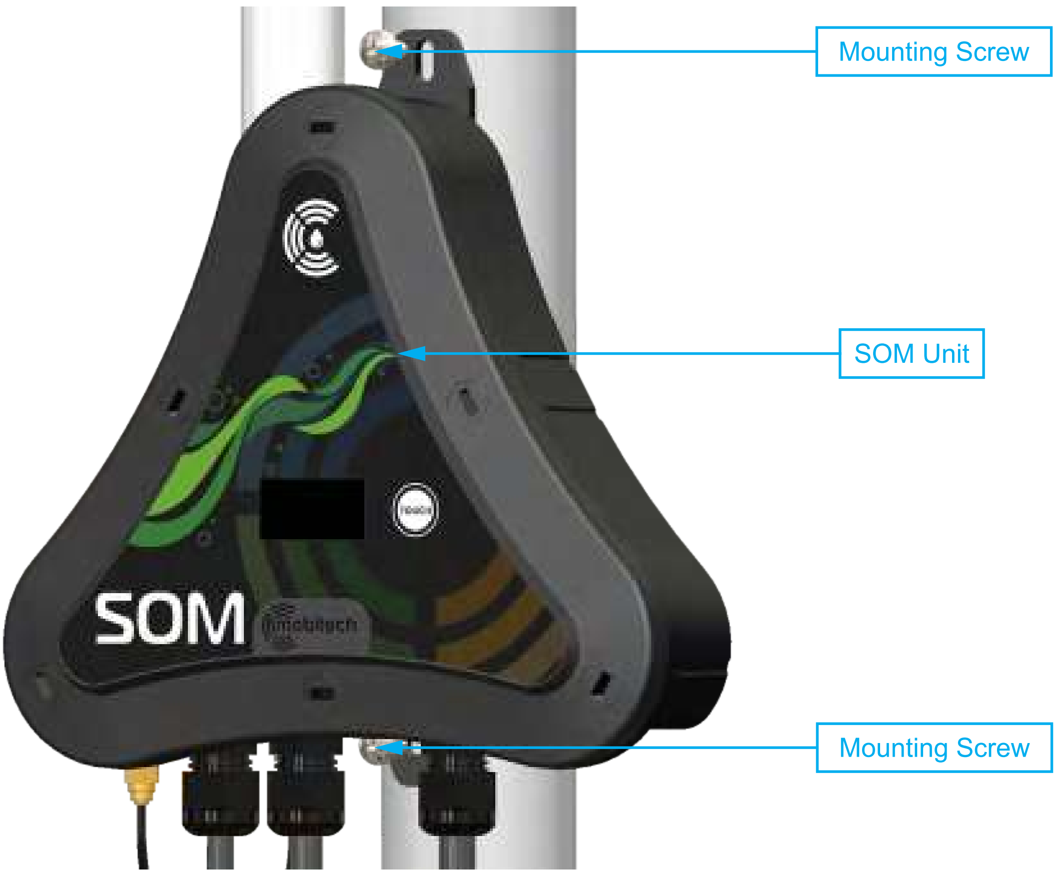
Antenna Assembly:

- 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 SOM unit.

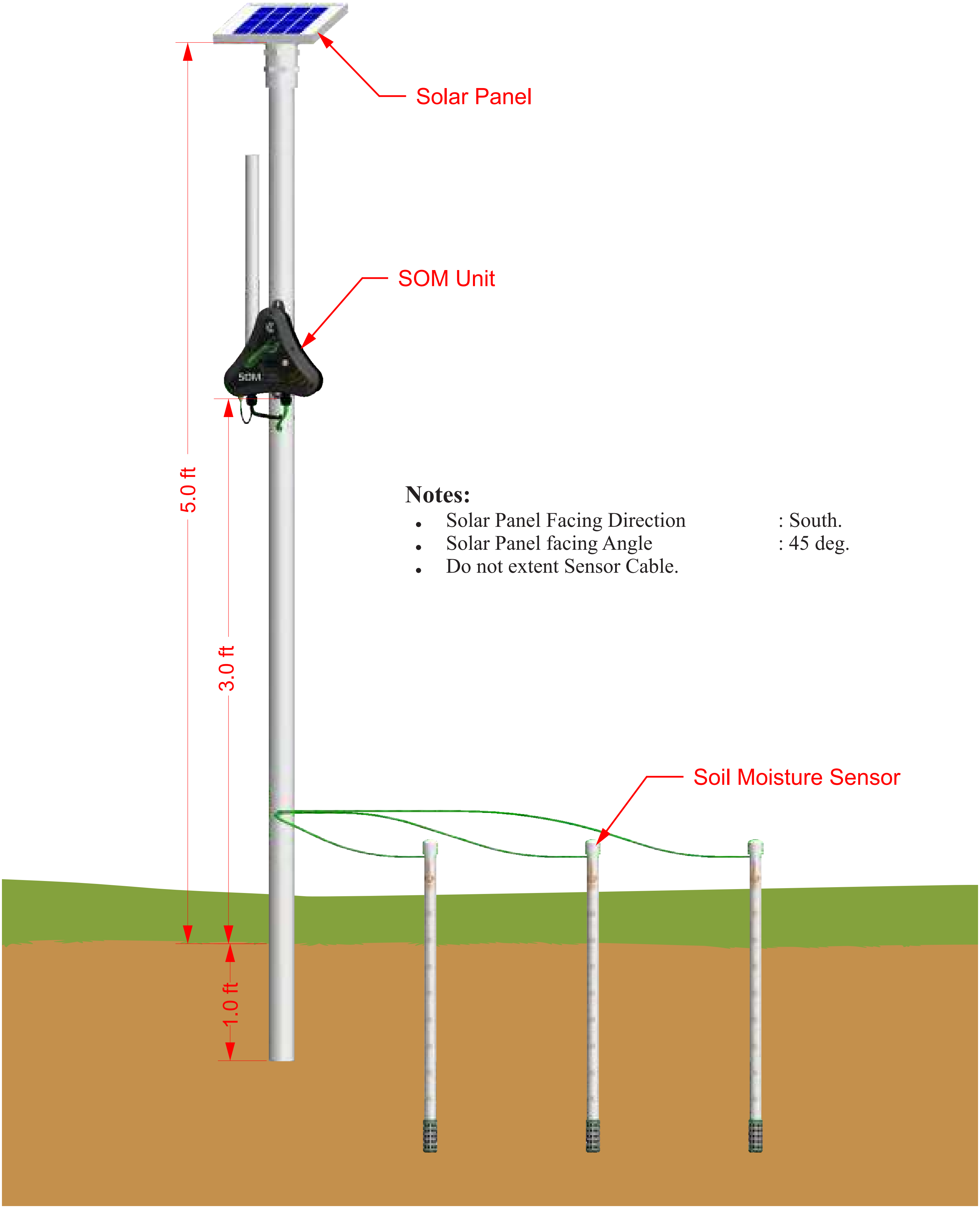


Pole Assembly:

- Mount SOM unit with screw on pole.



Full Assembly:

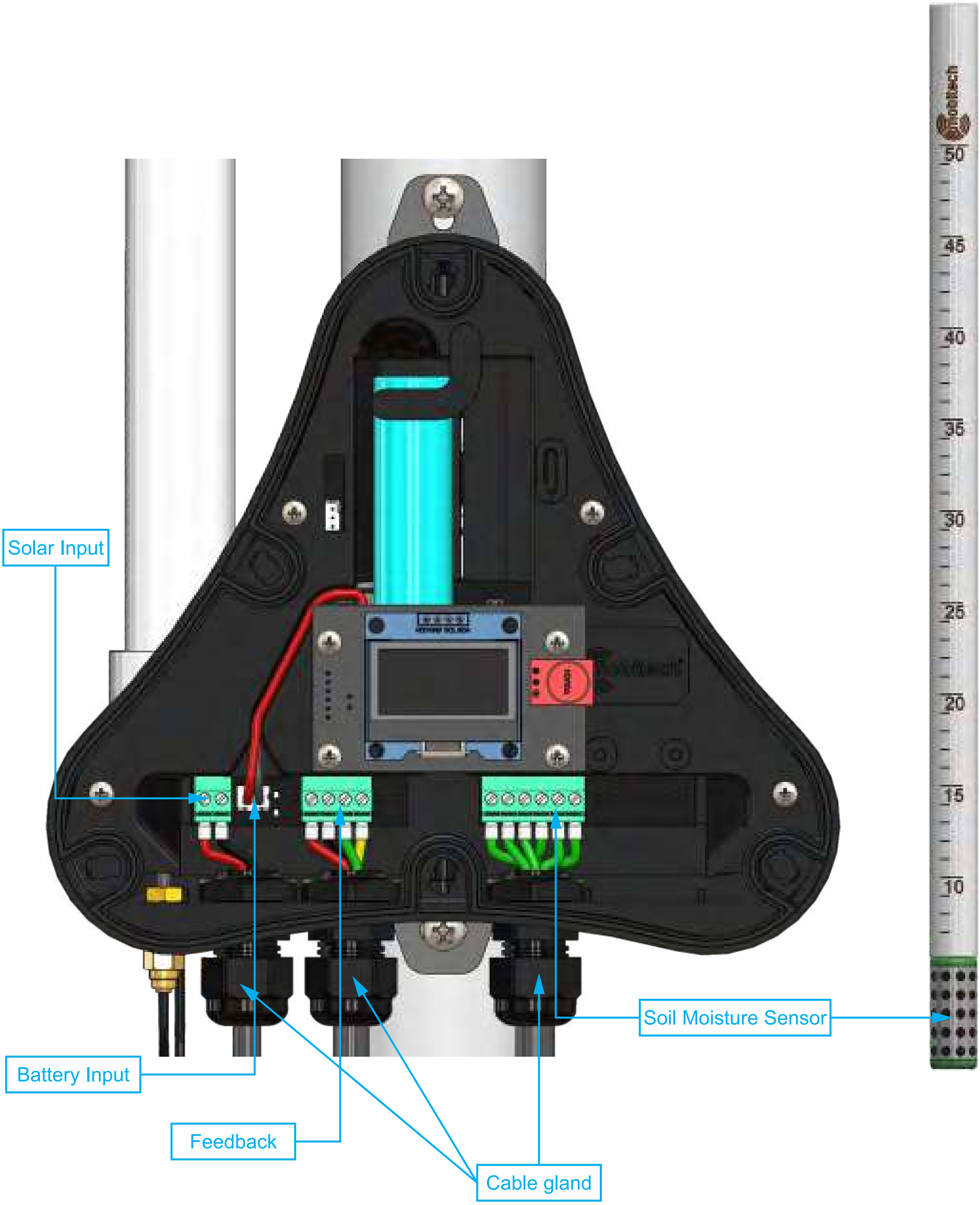


Notes:

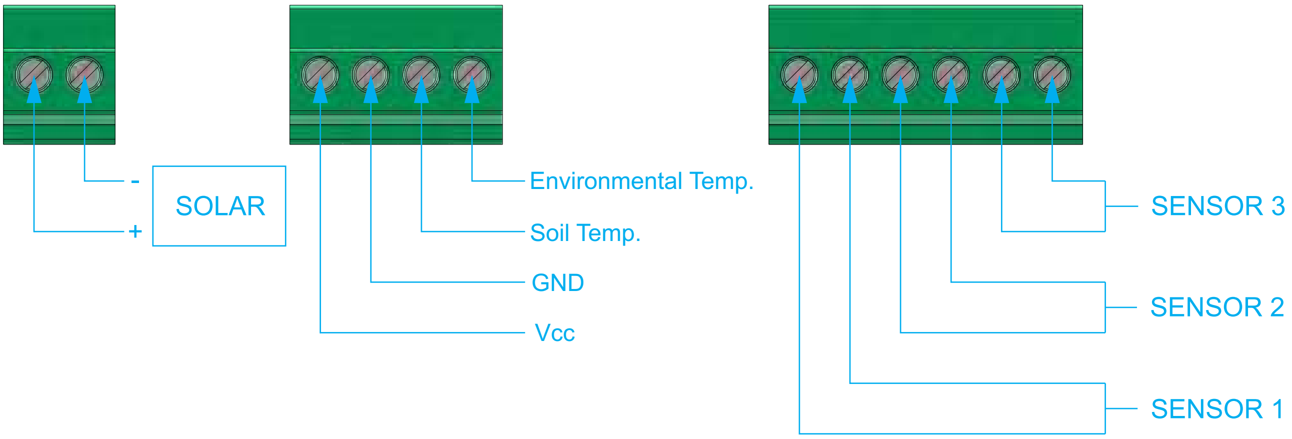
- Solar Panel Facing Direction : South.
- Solar Panel facing Angle : 45 deg.
- Do not extent Sensor Cable.

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 Temperature Sensor Cable in to cable gland 2 and connect cable as shown in wiring diagram.
- Open cable gland 3, insert Soil Moisture Sensor cable in to cable gland 3 and connect cable as shown in wiring drawing.
- Connect battery connector as shown in picture.
- Check all connections and ensure tight of cable gland before closing top cover.



Connector Detail:



SENSOR PREPARATION BEFORE INSTALLATION:

SENSOR HYDRATION PROCEDURE (RECOMMENDED):

- Wet the sensor 1st time by **submerging less than halfway** for 30 minutes in the morning.
- Fully submerged the sensor will trap air inside it and will require drying the sensor completely and restarting this procedure.
- Submerging it only halfway lets air escape out of the pores above the water. It allows the capillary action to pull water into the inner pores. It is the fastest way to get the sensor prepared for installation.
- Let it dry until the evening.
- Wet the sensor 2nd time by **submerging less than halfway** for 30 minutes that same evening.
- Let it dry overnight.
- Wet the sensor 3rd time by **submerging less than halfway** for 30 minutes the next morning and let dry until the evening.
- Finally, **fully submerged the sensor** over 2nd night and install soaking wet in the 3rd morning.

Full sensor accuracy will reach after two or more irrigation cycle, depending on the soil's wetness.

SENSOR HYDRATION PROCEDURE (NOT-RECOMMENDED):

- Soak the sensors overnight in irrigation water before installing the next day. A minimum of 8 hours should be allowed penetrating water into most of the inner matrix pores and for most of the air need to pushed out or dissolved in the water.
- Full sensor accuracy will reach after five or more irrigation cycles, depending on the soil's wetness.

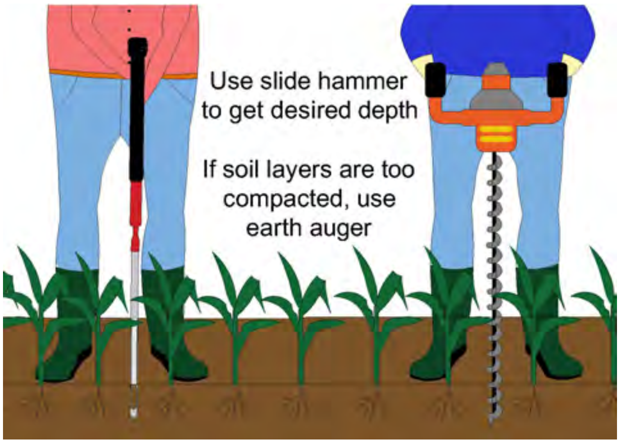
Sensor submerging less than halfway

Drying Condition

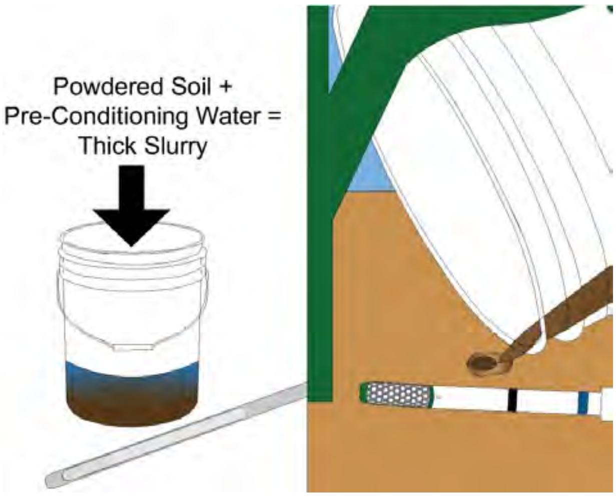
Sensor submerged fully

FIELD INSTALLATION STEPS:

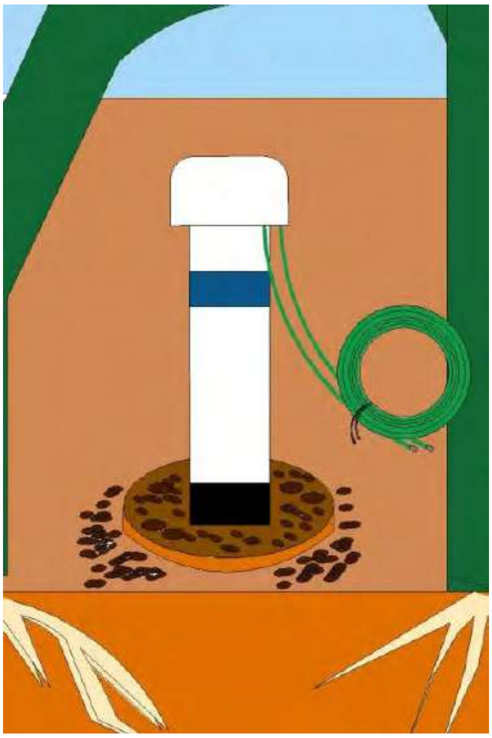
Step-1: At the selected location, create a vertical hole for the 6-inch sensor. Keep pushing deeper until the marking corresponding to this sensor depth is even with the soil surface. If the soil is compacted, use a 7/8-inch OD auger bit with a cordless drill or gas power head.



Step-2: create a thick slurry by thoroughly mixing powdered soil (preferably sieved) with preconditioning water. Pour this smooth “batter” (not “broth” or “paste”) into the hole to fill it halfway.

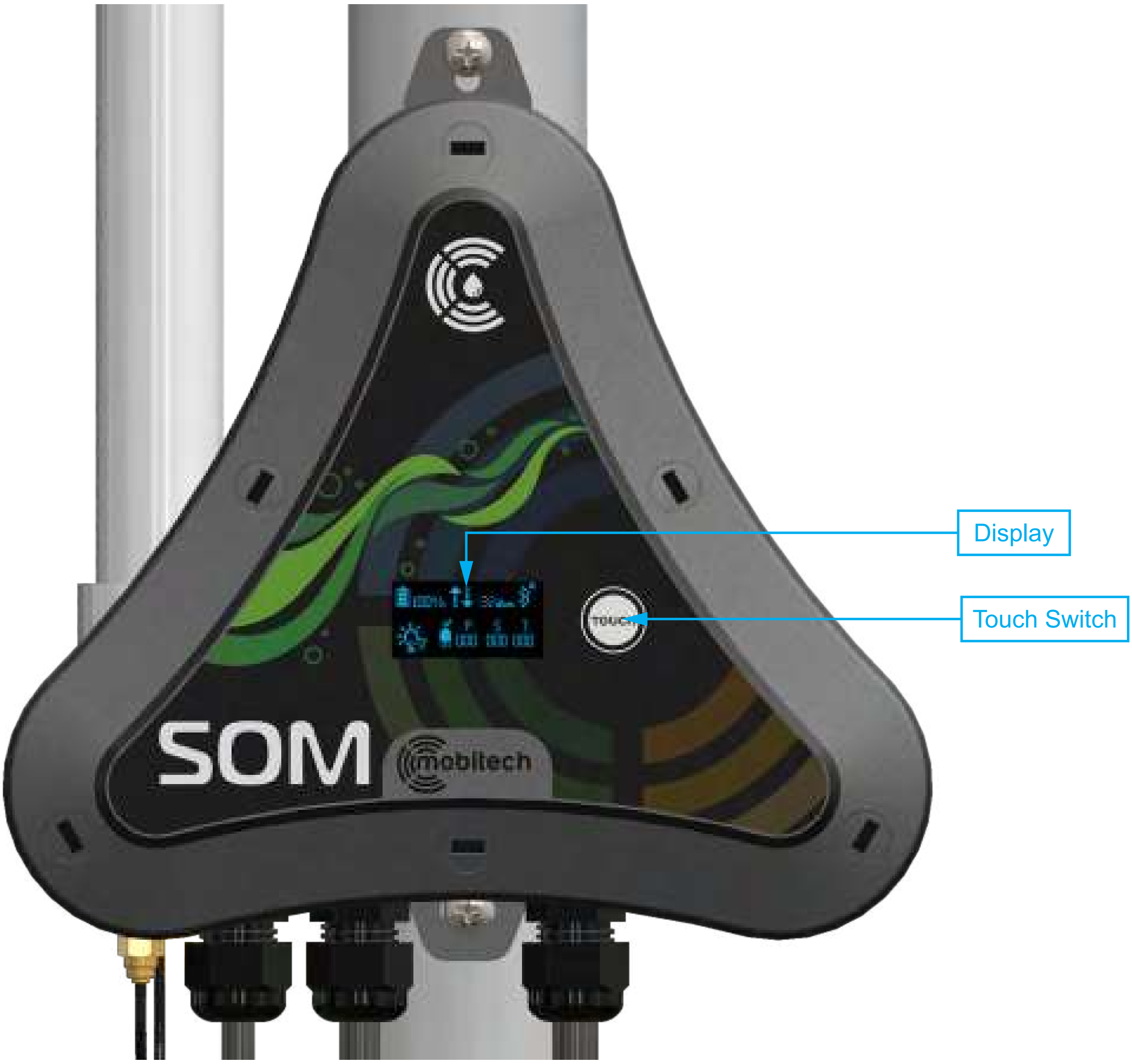


Step-3: Push the sensor down into the hole until the bottom of the black electrical tape is even with the soil surface. Some of the slurry should ooze out. Around the lip of the hole, pack down the existing soil and then a mound of additional soil, holding down the rubber washer (if used) to further reduce water leakage into the hole.

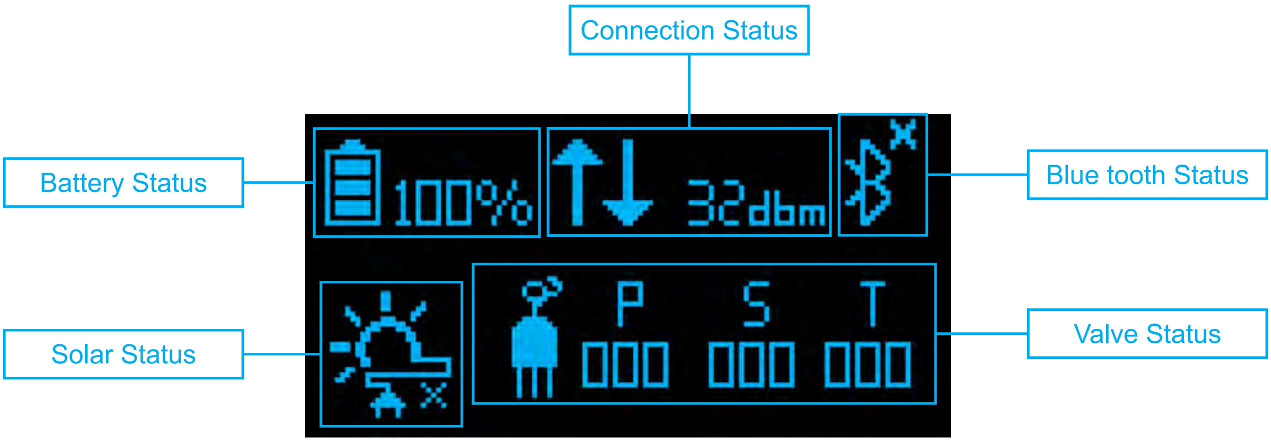


Configuration:

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



Display Screen:



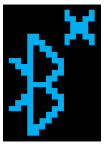
Battery Status:

- It shows Internal Battery Percentage.

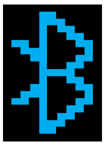
Connectivity:

- It shows Connectivity Strength.

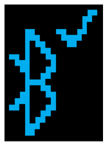
Blue tooth Status:



- Blue tooth Disconnected.

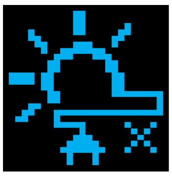


- Blue tooth Stand-by(blink).

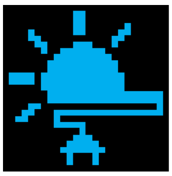


- Blue tooth connected.

Solar Status:

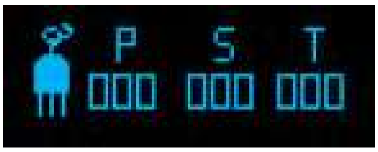


- Solar Not Connected.



- Solar Connected (Blink).

Sensor Readings:



- Sensor Readings.

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IRRIGATION AUTOMATION

Dcon_Ag_ABW - DC
(Auto Backwash - DC)
Field Installation Document

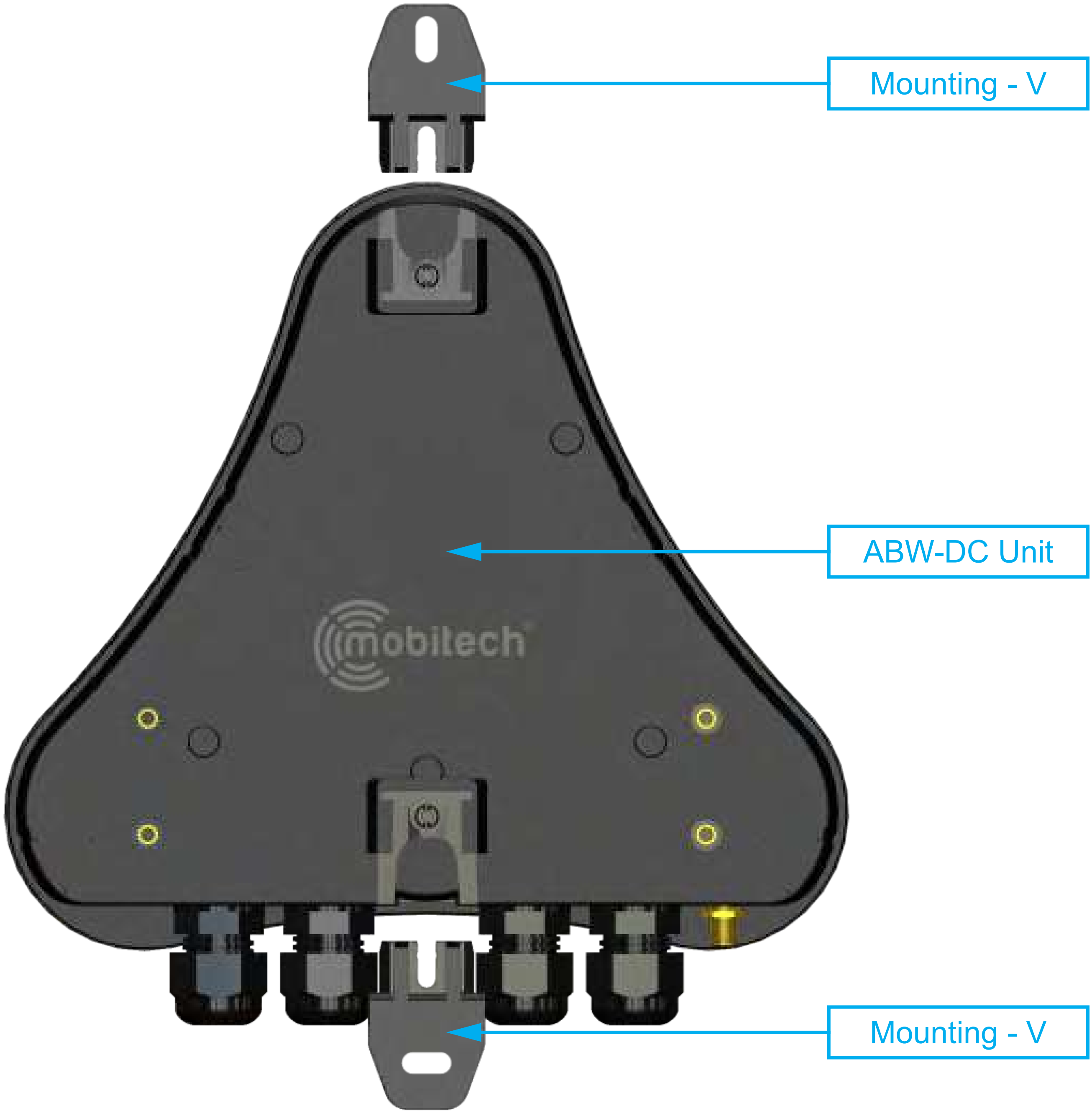
Technical Specification:

- Product Name : ABW - DC
- Solar Panel : 12V/12W
- Battery : 7.4V/2.6AH
- Backup Time : 72 Hours
- Communication : LORA and Blue tooth 5.0
- GPS : Inbuilt
- Water Flow sensor : Pulse Type (optional)
- Pressure Sensor : 2 No's (4-20 mA type)
- Number of Valves : 4 No's (9V latch coil)

Assembly Procedure:

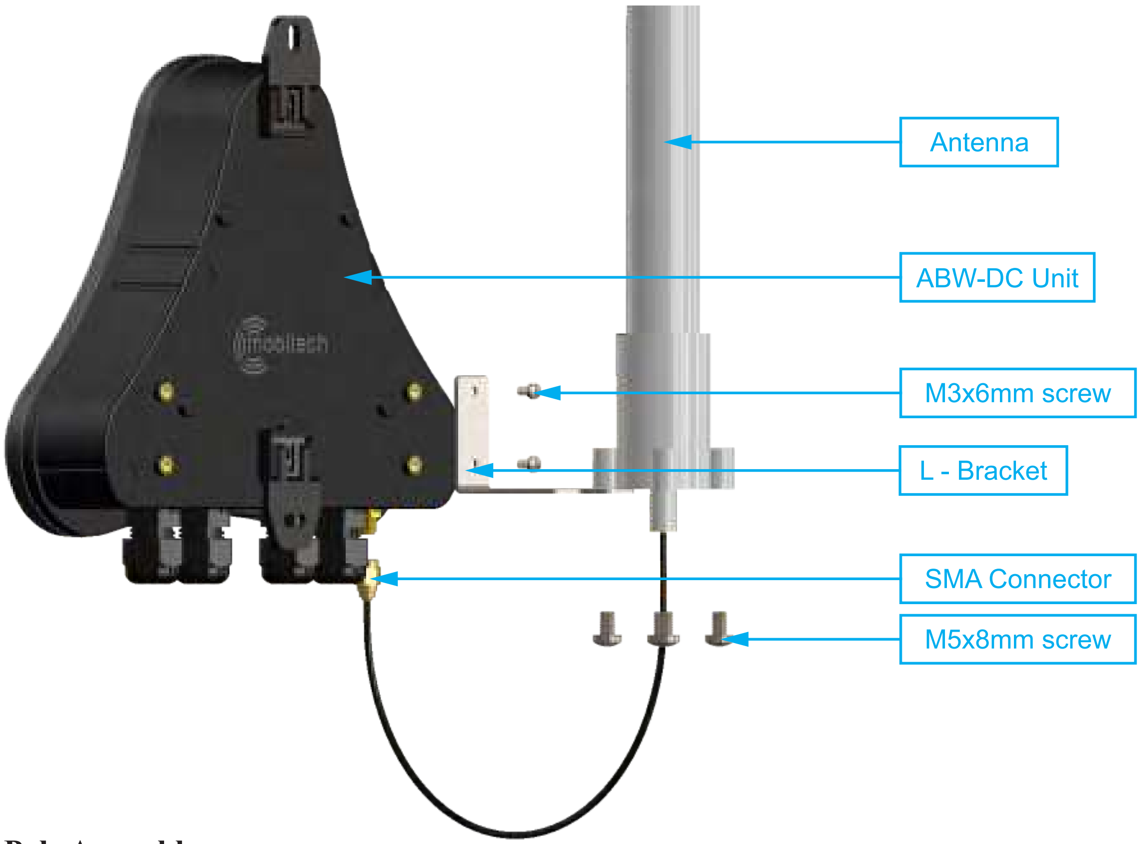
Mounting Assembly:

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



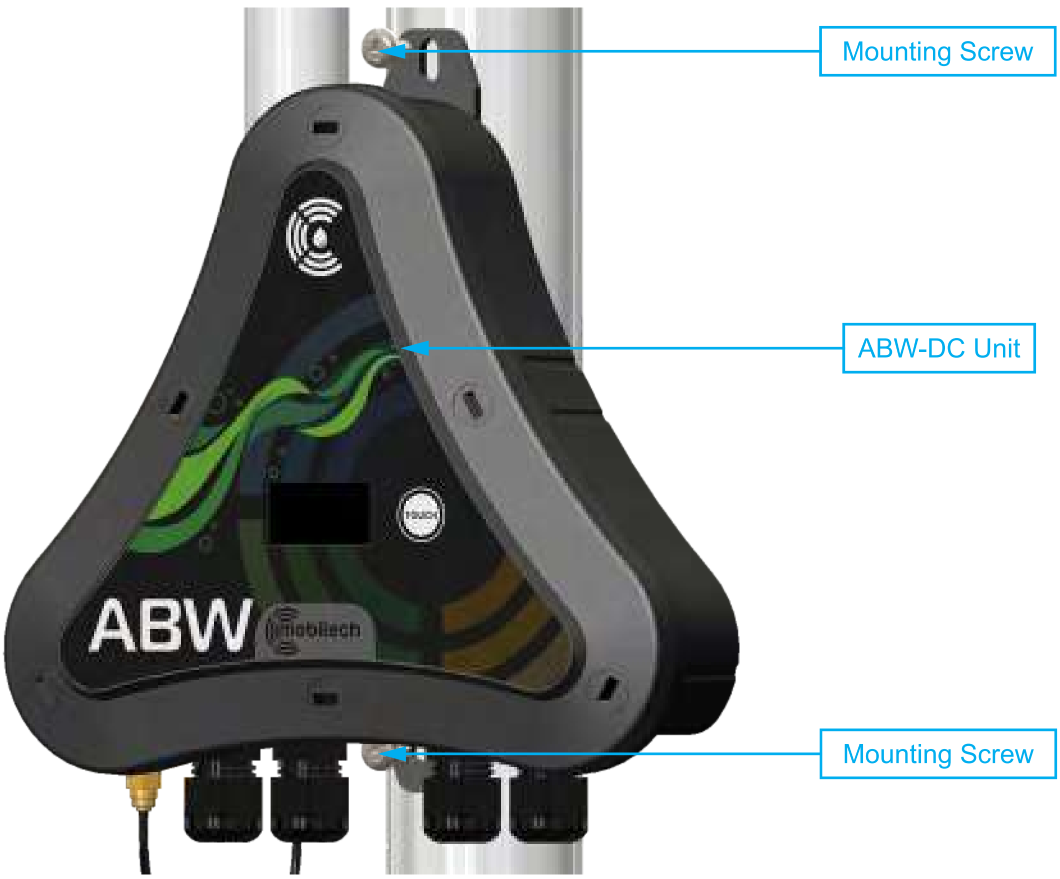
Antenna Assembly:

- 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 ABW - DC unit.

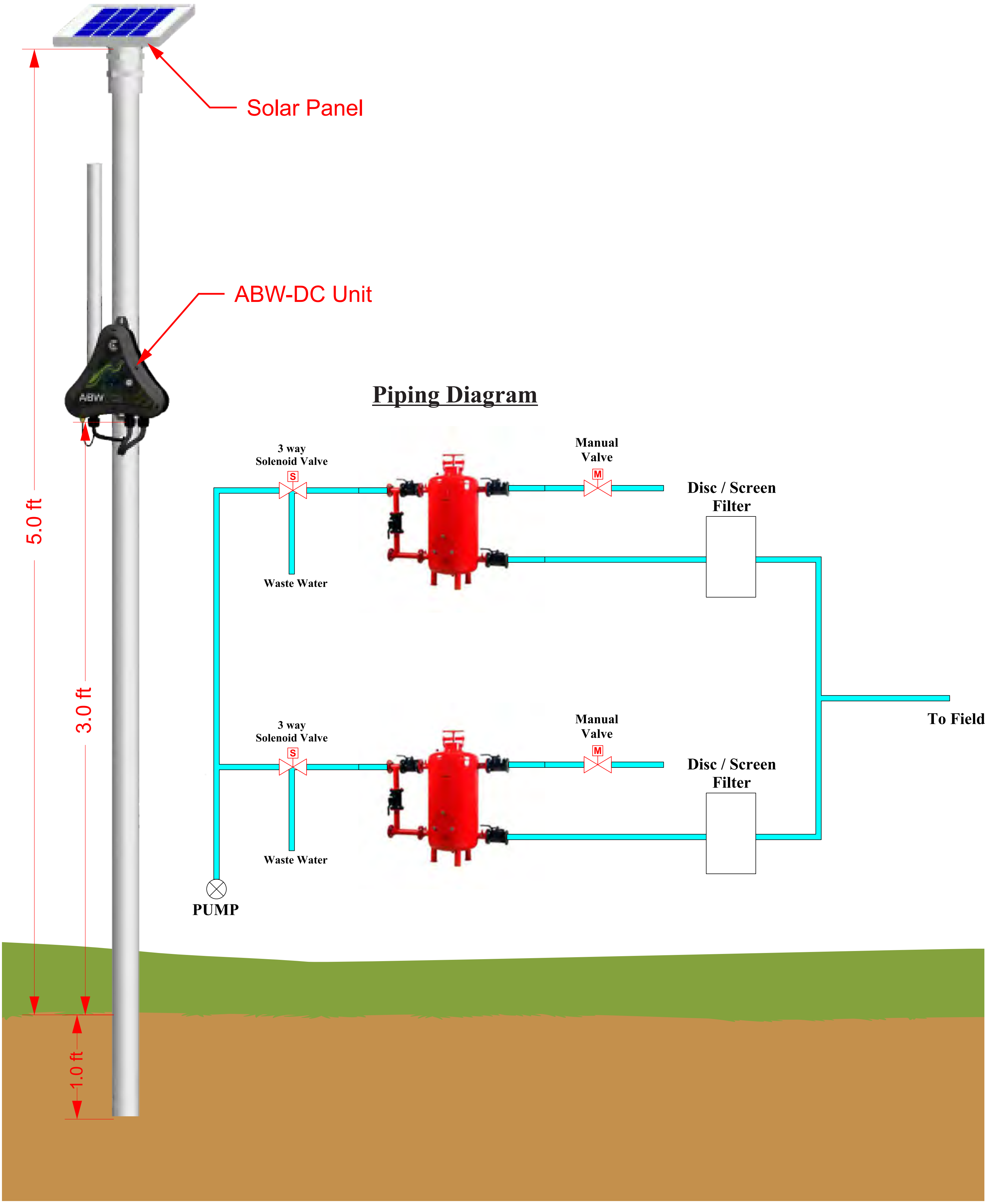


Pole Assembly:

- Mount ABW - DC unit with screw on pole.

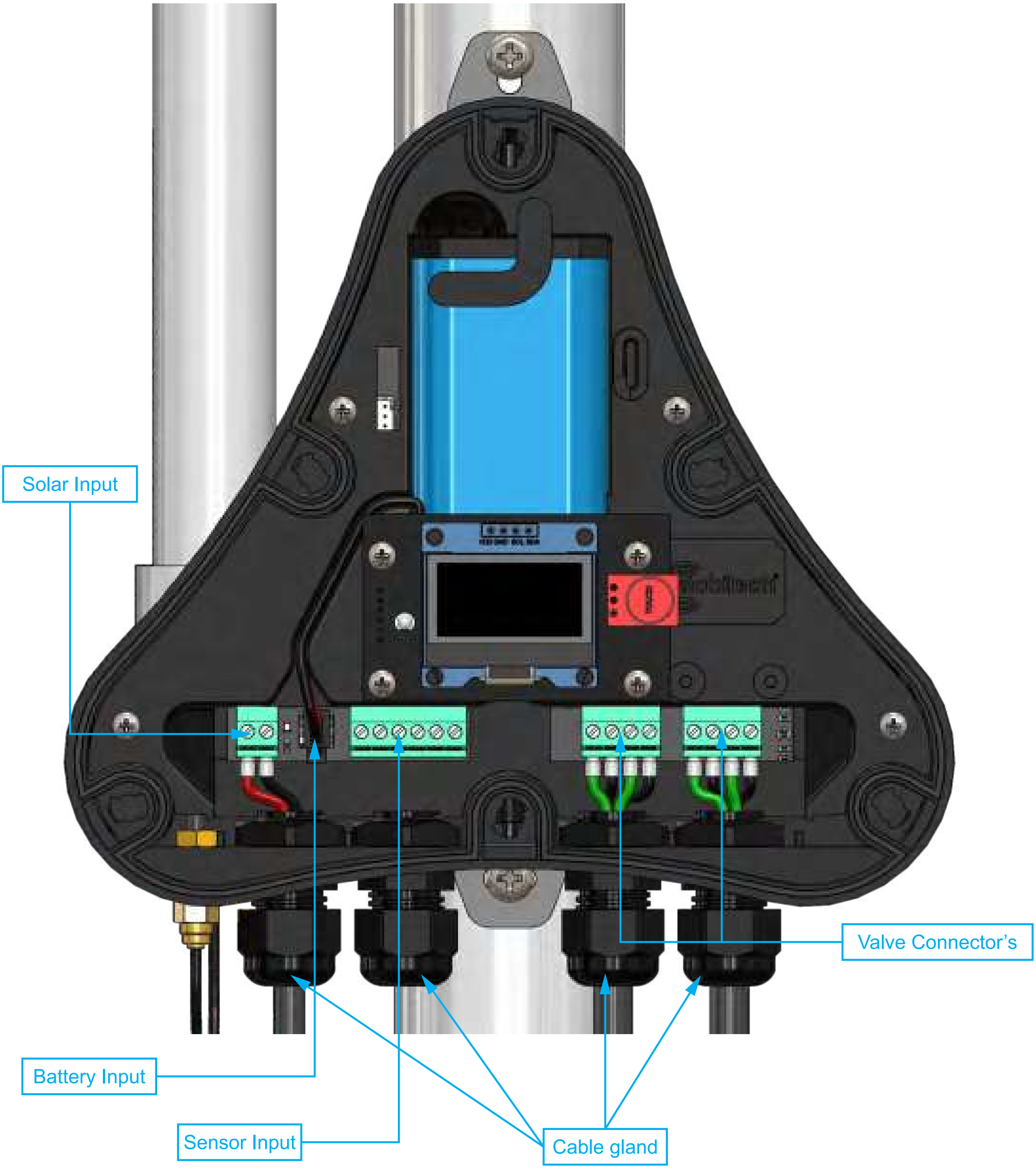


Full Assembly:

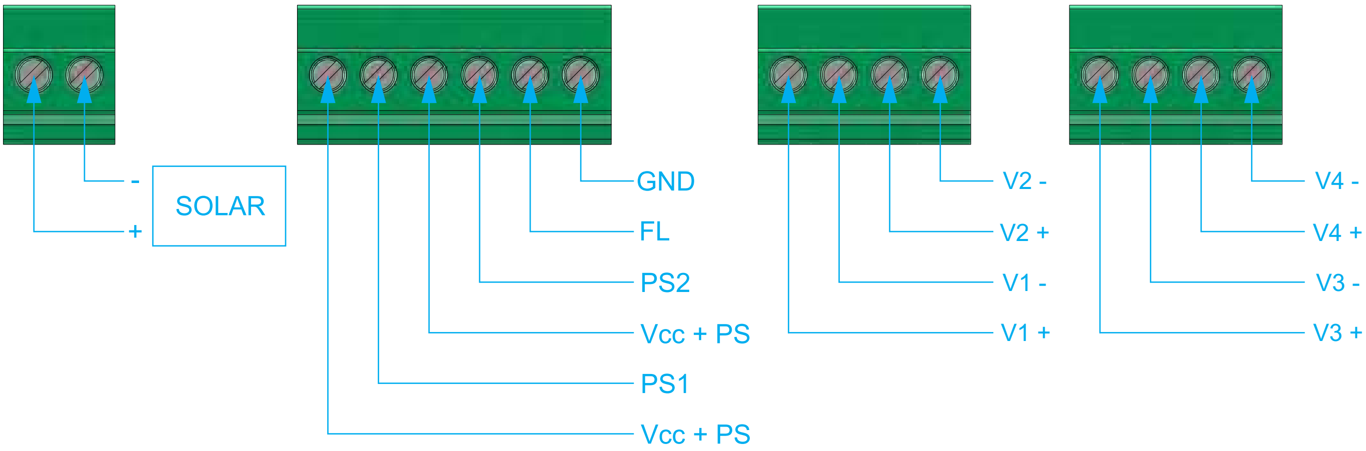


Wiring Drawing:

- 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 sensor cable in to cable gland 2 and connect cable as shown in wiring diagram.
- Open cable gland 3, insert valve cable in to cable gland 3 and connect cable as shown in wiring drawing.
- Open cable gland 4, insert valve cable in to cable gland 4 and connect cable as shown in wiring drawing.
- Connect battery connector as shown in picture.
- Check all connections and ensure tight of cable gland before closing top cover.

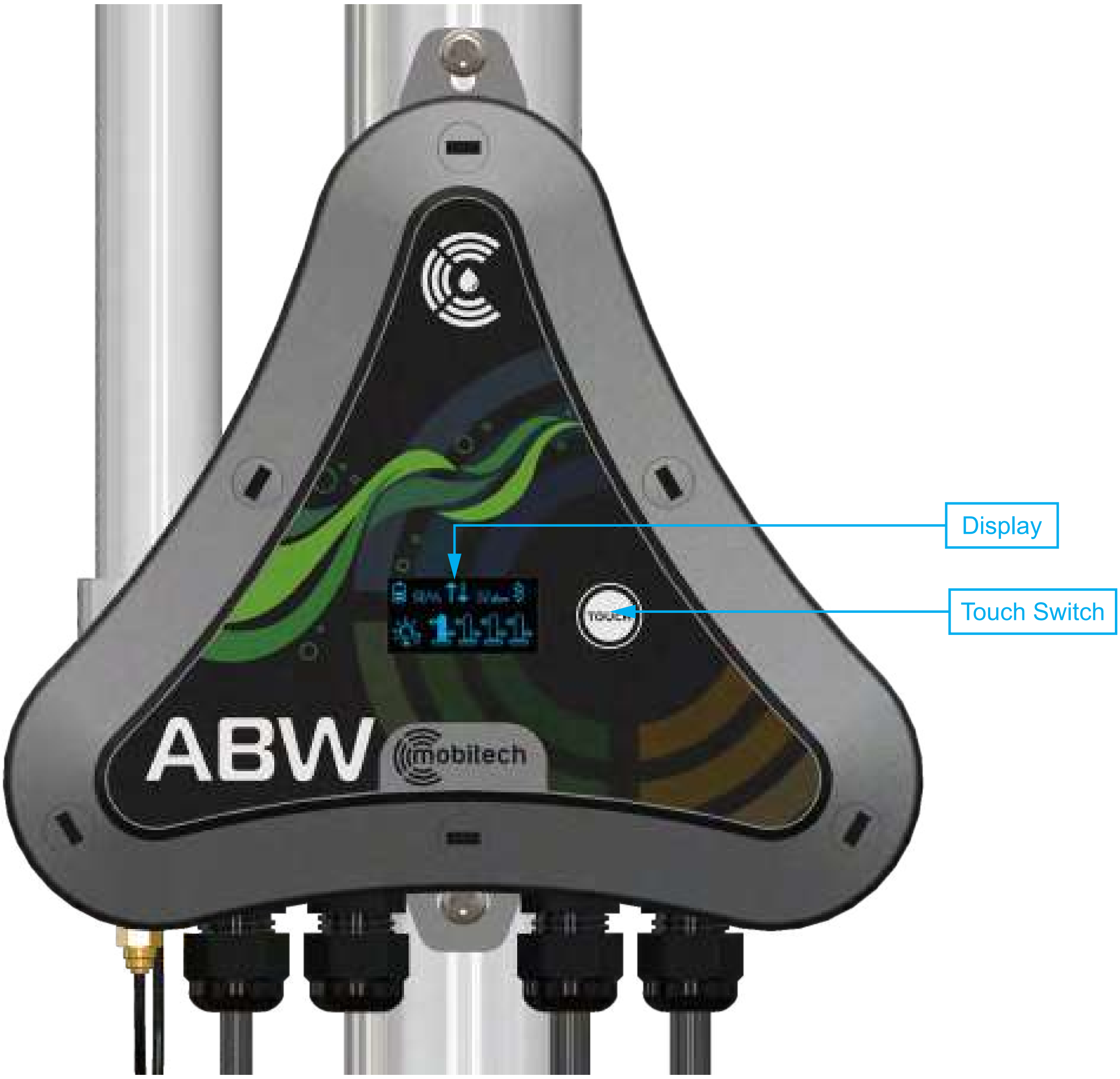


Connector Detail:



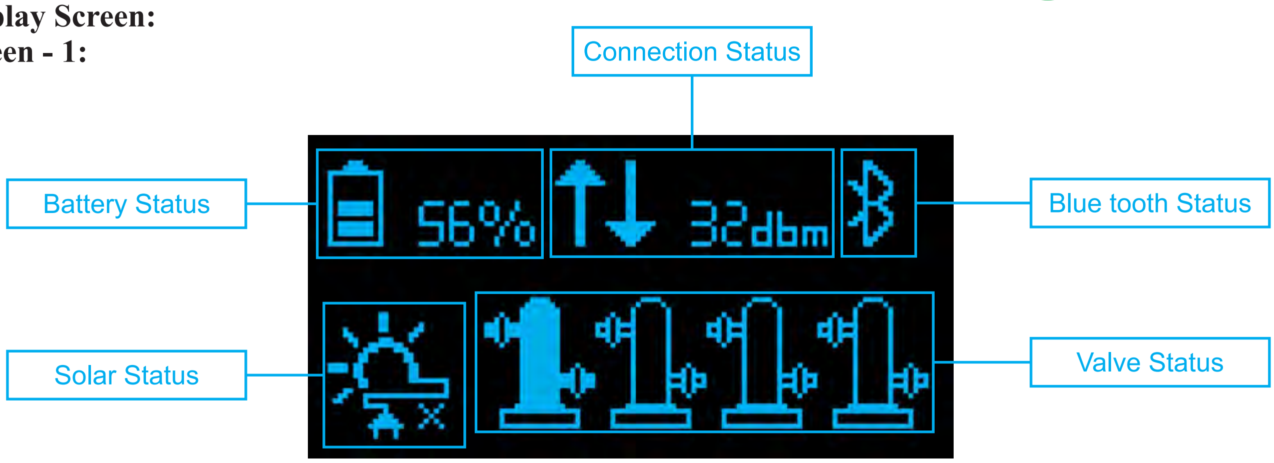
Configuration:

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

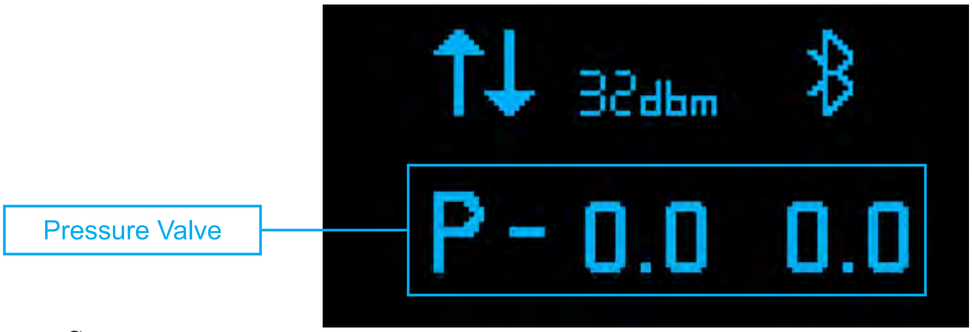


Display Screen:

Screen - 1:



Screen - 2:



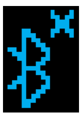
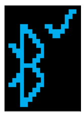
Battery Status:

- It shows Internal Battery Percentage.

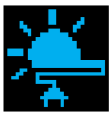
Connectivity:

- It shows Connectivity Strength.

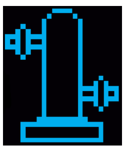
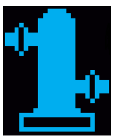
Blue tooth Status:

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

Solar Status:

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

Valve Status:

 - Valve OFF.  - Valve ON (Blink).

Temperature:

- Indicated Pressure Value.

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IRRIGATION AUTOMATION

Dcon_Ag_AWS
(Advance Weather Station)
Field Installation Document

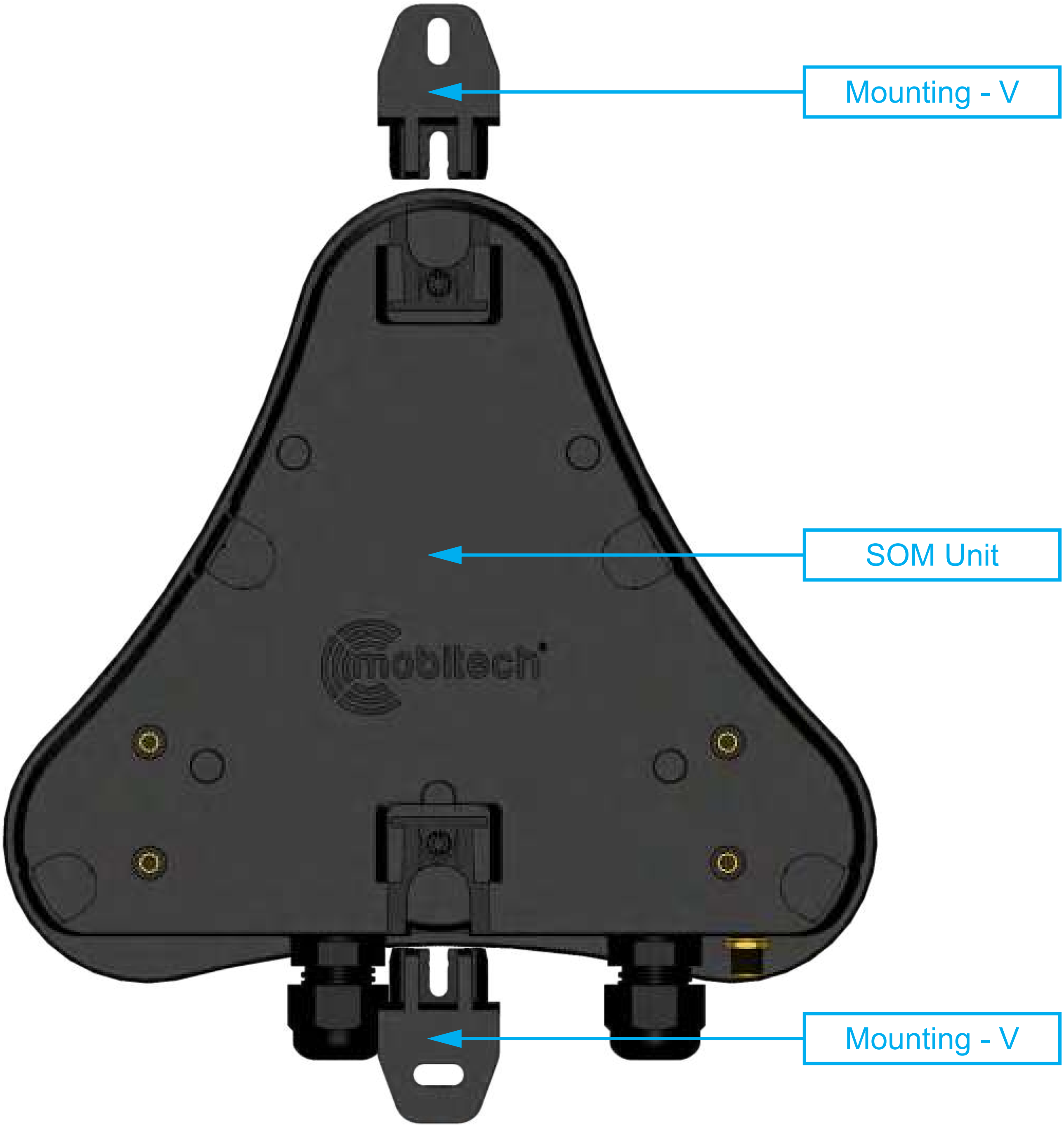
Technical Specification:

- 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:

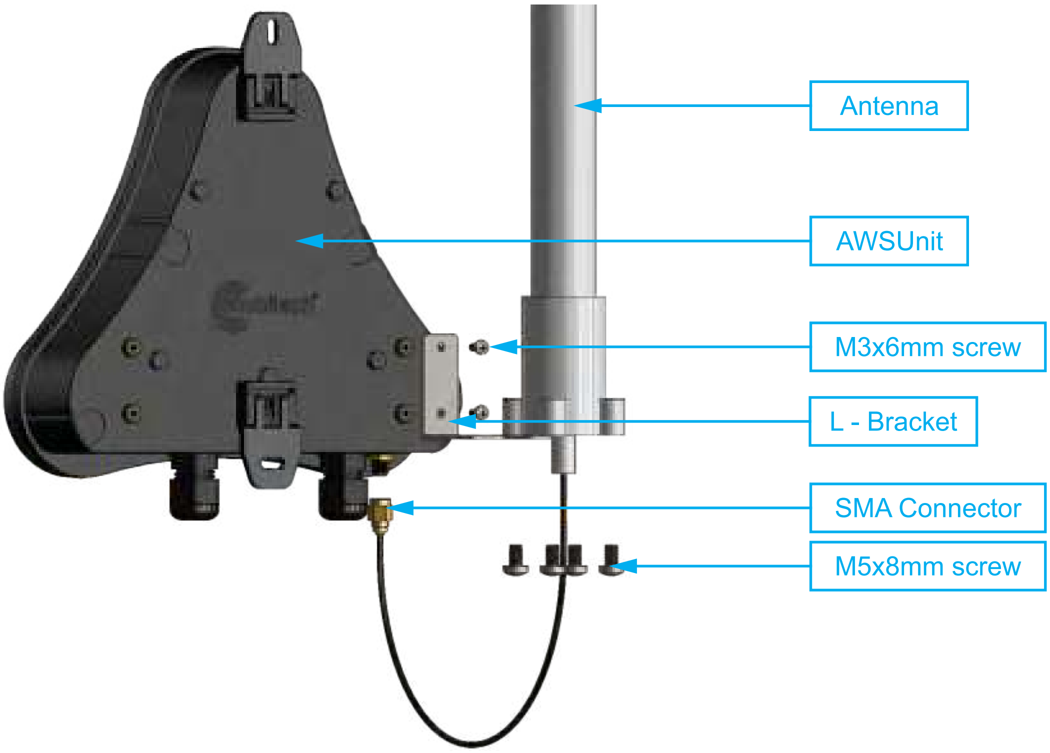
Mounting Assembly:

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



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.

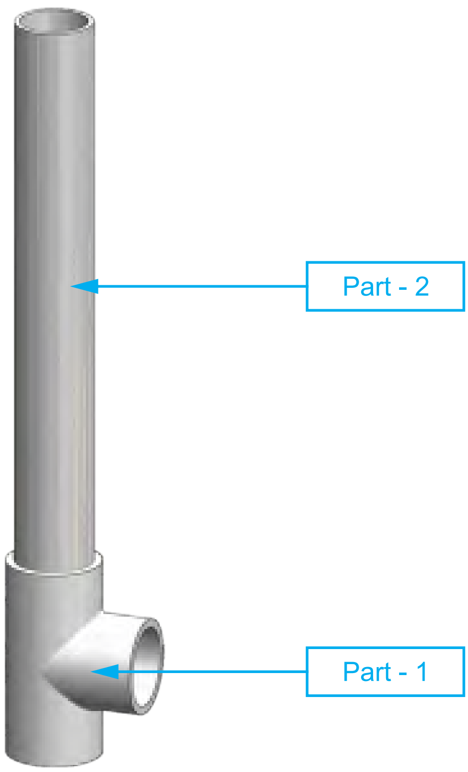


Pole Assembly:

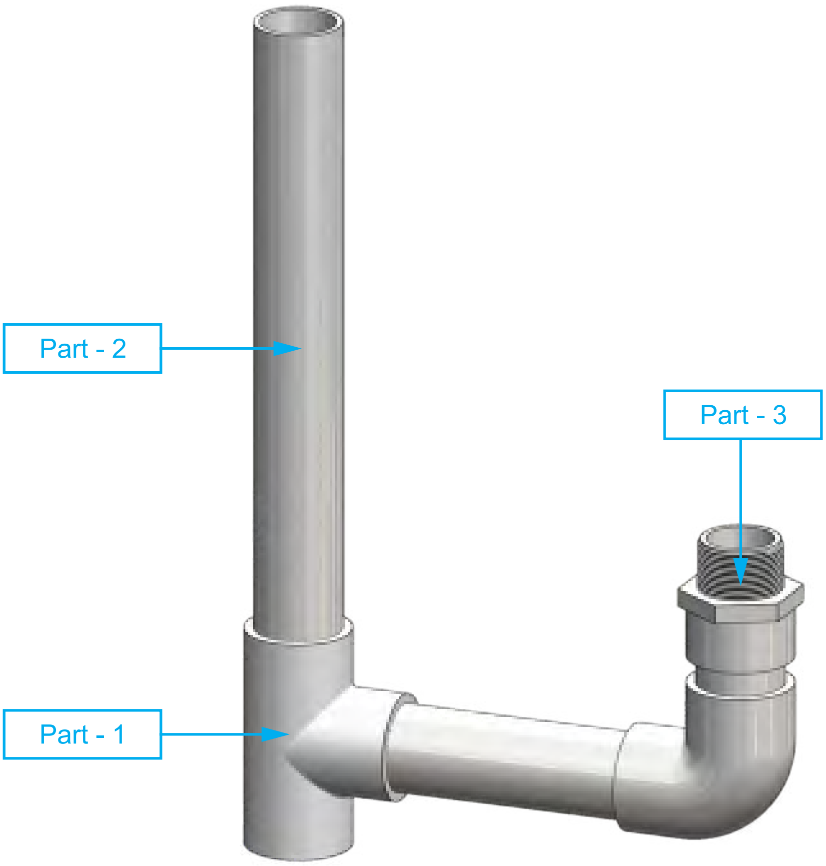
- Mount AWS unit with screw on pole.

Weather station and solar panel pole assembly:

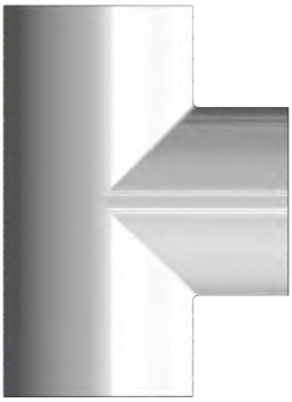
- Prepare mounting assembly before mounting on base pole.
- Inside the packing found three parts for mounting weather station and solar panel.
    - Step - 1: Connect Part - 1 and Part - 2 with paste as shown in the image.



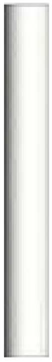
- Step - 2: Connect first assembly with next Part - 3 with paste as shown in the image.



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

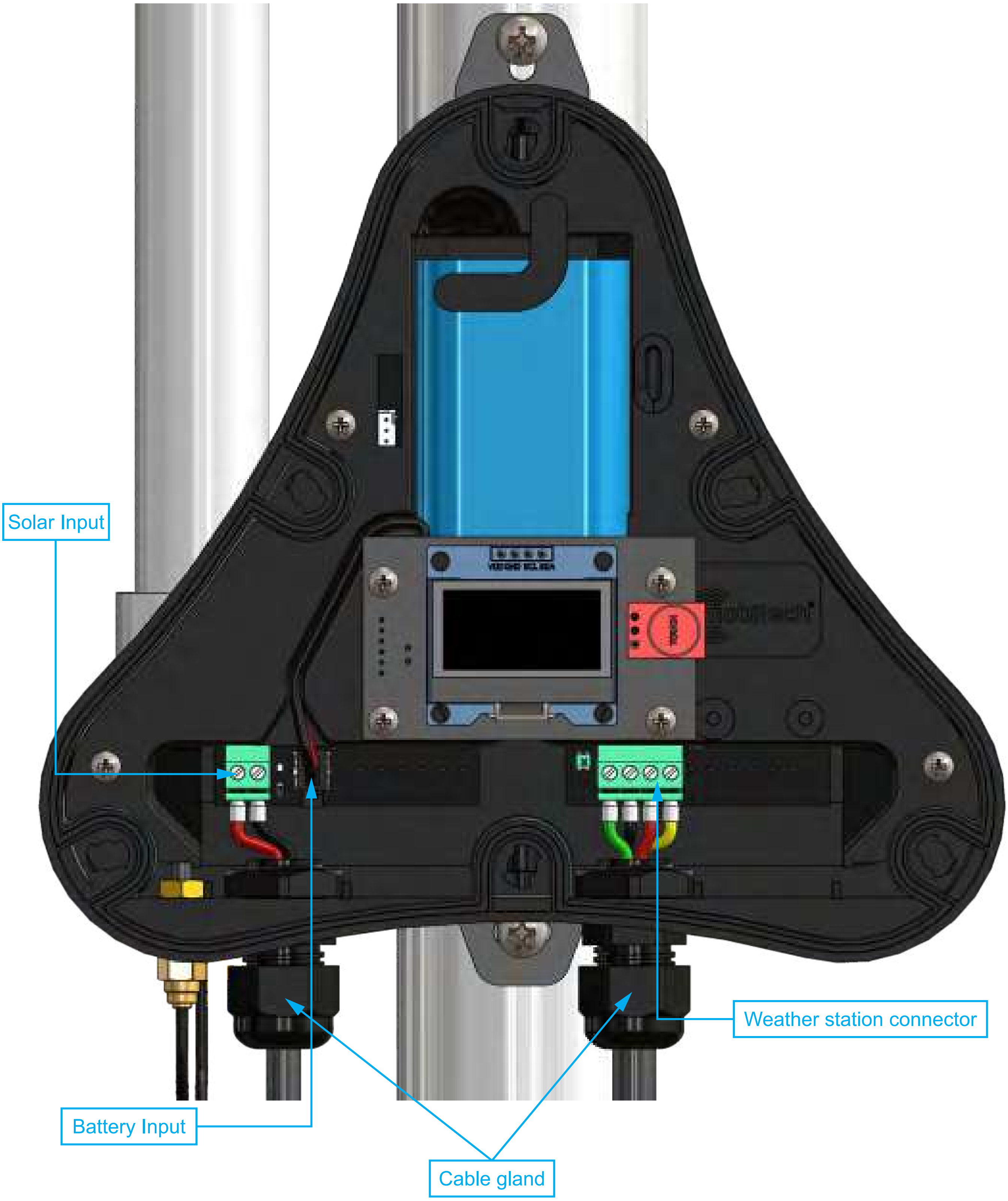
Image - 2

Image - 3

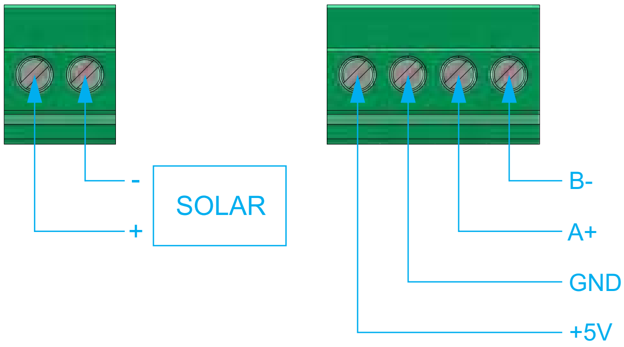
Full Assembly:

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.

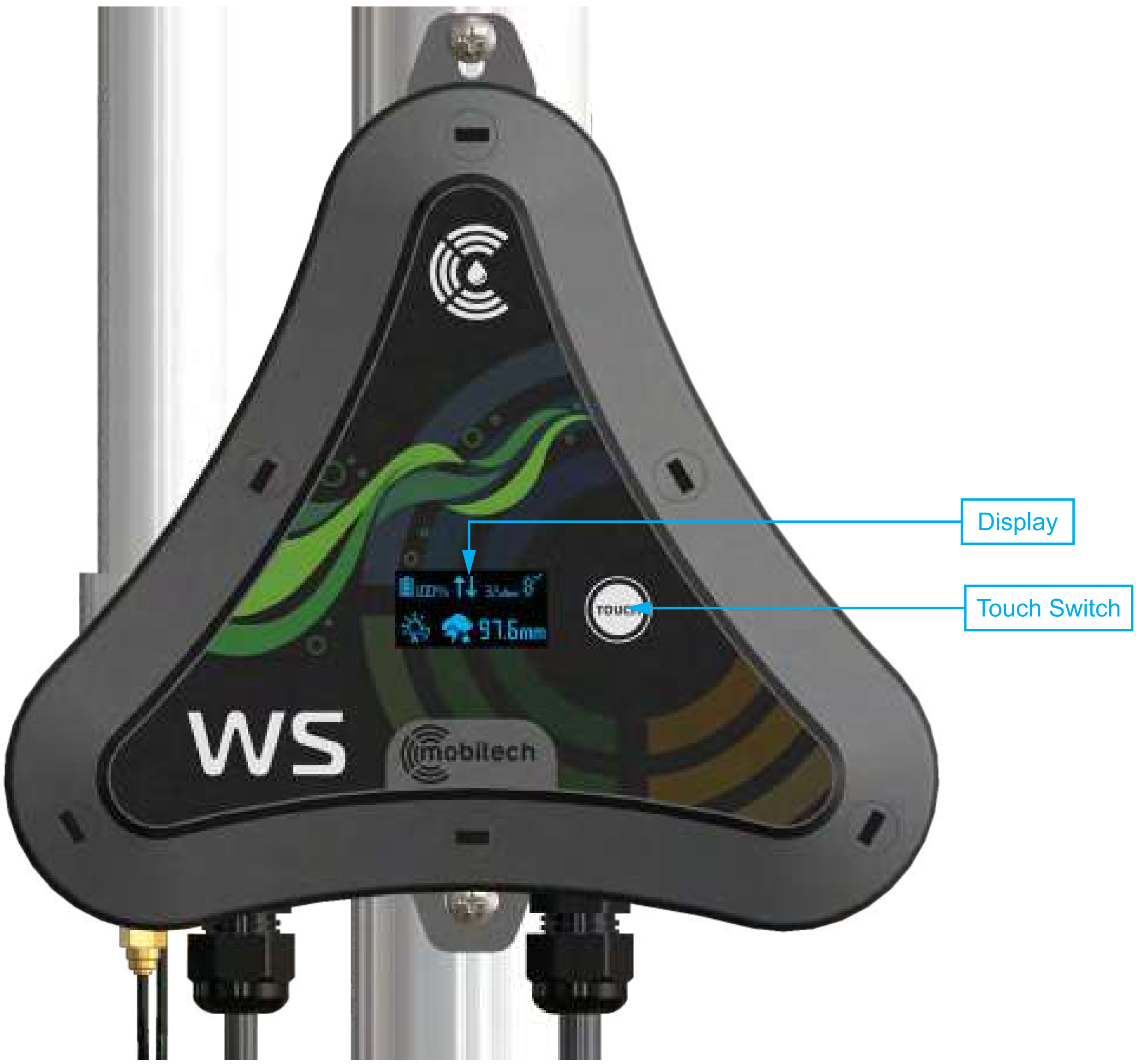


Connector Detail:



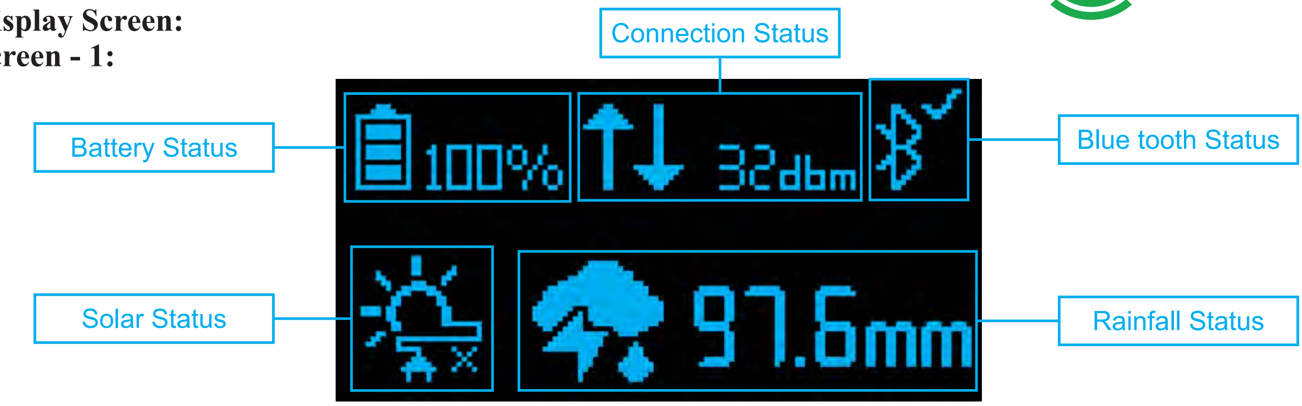
Configuration:

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

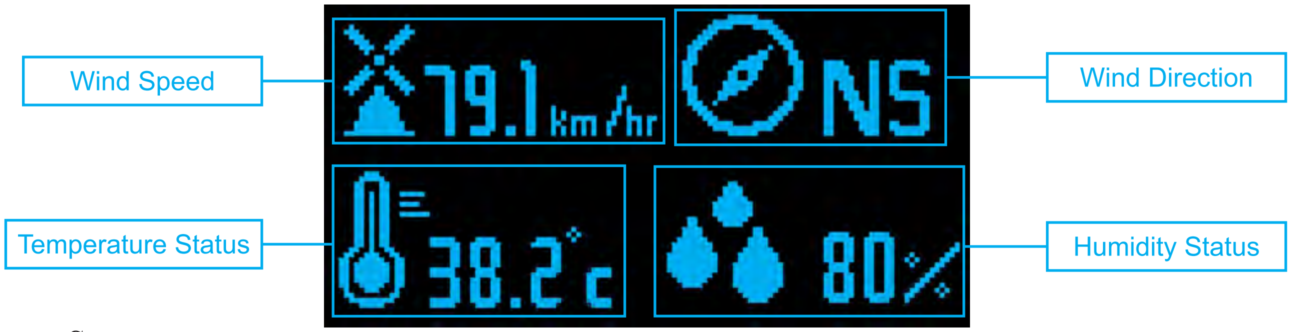


Display Screen:

Screen - 1:



Screen - 2:



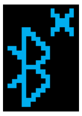
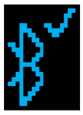
Battery Status:

 - It shows Internal Battery Percentage.

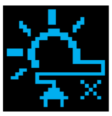
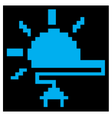
Connectivity:

 - 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:

 - It shows level of rainfall.

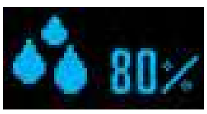
Wind Speed:

 - It shows speed of wind.  &  - It shows direction of wind.

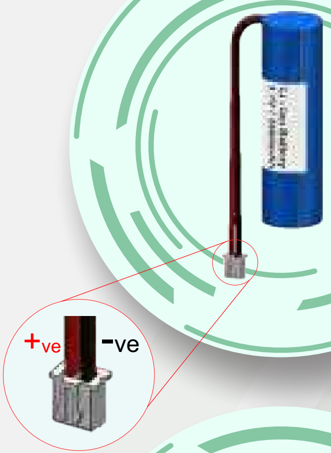
Temperature:

 - It shows temperature value of the surroundings.

Humidity:

 - It shows water content present in the surroundings.

Dcon Ag Battery Details

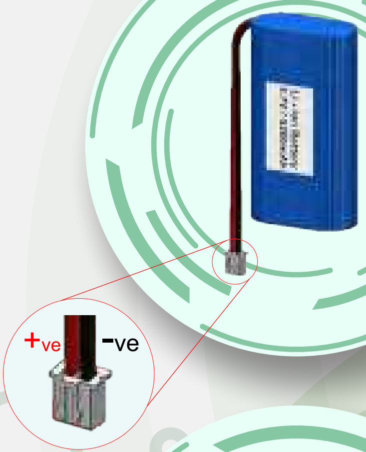


Technical Specification:

Battery Voltage	: 3.7V
Battery Capacity	: 2.6Ah (2600 mAh)
Cell Type	: Li-ION (18650)
No of cells	: 1 No
Dimensions(D x H), mm	: 20 x 67 mm
Connector	: 2 PIN RMC Female 2.54mm (JST XHP-2)

Used In:

Dcon_Ag_VCN
Dcon_Ag_VCN 4
Dcon_Ag_FRT
Dcon_Ag_M1PRO

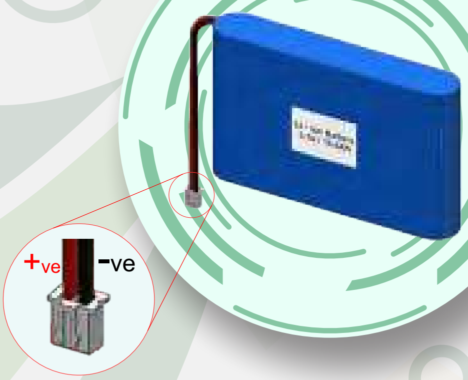


Technical Specification:

Battery Voltage	: 3.7V
Battery Capacity	: 5.2Ah (5200 mAh)
Cell Type	: Li-ION (18650)
No of cells	: 2 No's (2 x 1)
Dimensions(L x W x H), mm	: 40 x 20 x 67 mm
Connector	: 2 PIN RMC Female 2.54mm (JST XHP-2)

Used In:

Dcon_Ag_MCU
Dcon_Ag_SMR
Dcon_Ag_REP
Dcon_Ag_WS
Dcon_Ag_WL
Dcon_Ag_SAWS

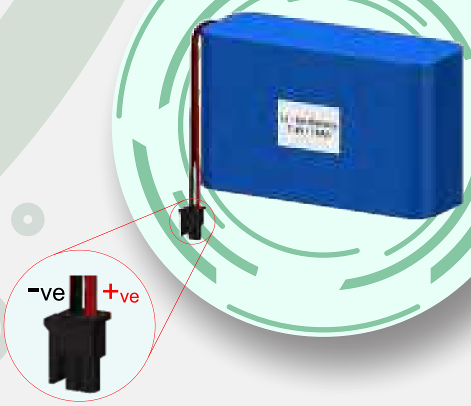


Technical Specification:

Battery Voltage	: 3.7V
Battery Capacity	: 15Ah (15000 mAh)
Cell Type	: Li-ION (18650)
No of cells	: 6 No's (6 x 1)
Dimensions(L x W x H), mm	: 112 x 20 x 67 mm
Connector	: 2 PIN RMC Female 2.54mm (JST XHP-2)

Used In:

Dcon_Ag_AIR



Technical Specification:

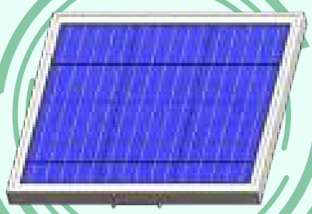
Battery Voltage	: 7.4V
Battery Capacity	: 15Ah (15000 mAh)
Cell Type	: Li-ION (18650)
No of cells	: 12 No's (6 x 2)
Dimensions(L x W x H), mm	: 112 x 40 x 67 mm
Connector	: 2 Pin Micro Molex Female 3mm

Used In:

Dcon_Ag_Battery Bank

Dcon Ag Solar Panel Details

Technical Specification:		Used In:
Power Output (Pmax)	: 6.0W	Dcon_Ag_VCN
Current (Imax)	: 0.66A	Dcon_Ag_VCN 4
Voltage (Voc)	: 10.80V	Dcon_Ag_SOM
Short Circuit Current	: 0.70A	Dcon_Ag_MCU
Open Circuit Voltage	: 9.09V	Dcon_Ag_AWS
Dimensions(L x B x T), mm	: 255 x 190 x 18 mm	Dcon_Ag_WL
		Dcon_Ag_ABW



Technical Specification:		Used In:
Power Output (Pmax)	: 40.0W	Dcon_Ag_Air
Current (Imax)	: 2.99A	
Voltage (Voc)	: 13.63V	
Short Circuit Current	: 3.18A	
Open Circuit Voltage	: 16.08V	
Dimensions(L x B x T), mm	: 505 x 495 x 34 mm	