

EASY INSTALL GUIDE: M4/SOL-SYS

1. Unpack & Open Up the Metron4



Place unit on a flat surface. To open, loosen the 2 nylon screws in the bottom corners of the Metron4 and 4 screws around battery.

Allen key and Pozi / Phillips head screwdriver required.

2. Mount the Solar Panel



Solar panel comes attached to a mounting bracket. The panel must face directly south and have a view of at least 100° of unobstructed sky.

The panel should be tilted at an angle 10° to 15° plus the site's latitude from the horizontal to achieve maximum sun exposure (example overleaf).

The higher the cell, the better.

3. Mount the Metron4



Ideally a flat surface such as a wall/ DIN railing/ Unistrut railing.

Avoid mounting inside metal cabinets or underground (could reduce signal).

There are pre-drilled holes for easy mounting.

5. Connect the Sensor(s)



The inputs shown in the blue box connect directly to the inputs in the yellow box on the Metron4 above

Run the sensor cable(s) through the lower unit's glands.

Unplug the green connector(s) and wire in as required.

Plug the connector(s) back into the correct input channel and tighten the gland. Ensure cable is through the gland.

Reattach all lids and take care to tighten screws to ensure waterproof IP67 rating is maintained.

4. Connect the Battery



Ensure the highlighted switch is positioned at Solar.

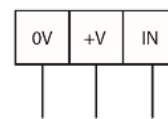
Remove the white plastic cover from the battery terminals.

Use the loose black and red wires and slide on to connect to the battery terminals.

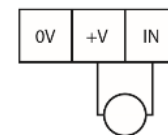
Maintain polarity:

Black to black (-). Red to red (+).

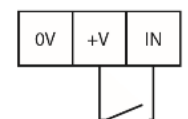
0-10 Volt DC 3 wire sensor



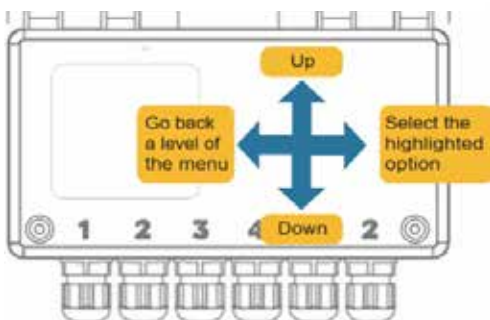
4-20mA 2 wire sensor that requires power



Volt free contacts



6. Navigate the Metron4



Press any button to wake the Metron4. Press left to cycle channels for immediate reading (config. dependent) or enter PIN (1234) and press right after 4th digit to enter homepage.

Move down to Force Transmit and right to select. Watch the progress bar and wait for the unit to transmit. Once complete, data can be viewed on MetronView. The unit will countdown for 45 seconds, then enter Run Mode. Screen will turn off.

For live channel readings, channels can be selected from the menu by pressing right on Channels and Read Now.

8. View Data



Visit: www.metronview.com

Login credentials will have been sent by email.

Once logged in, a summary of the units will be visible. Click view to the left of the device's name to see the historical data.

Powelectrics support can change the name of units and inputs if required.



7. Programming

Units can be remotely programmed from MetronView. It is possible to change how often units are taken & sent, alter scaling and alarm thresholds for each input channel and much more.

To make changes contact Powelectrics support.

The configuration will be held on the server and downloaded to the device when it next communicates.

Select 'Force transmit' rather than waiting for the next time the device transmits in order to reconfigure sooner.

Note

Failure to mount the solar panel exactly in accordance with the aforementioned rules may result in the unit failing during mid-Winter. If the power drain is greater than expected (from poor signal or lots of retries), a 2nd solar panel may be required.

Common Latitudes:

- London: 51.5°; Cardiff: 51.5°; Birmingham: 52.5°; Leeds: 54.0°; Belfast: 54.5°; Edinburgh: 56.0°; Aberdeen: 57.0°
- Example calculation:
London = 51.5° + 10 = **61.5°** tilt angle from the horizontal

