SolarEdge ONE Controller for C&I

Quick Installation Guide

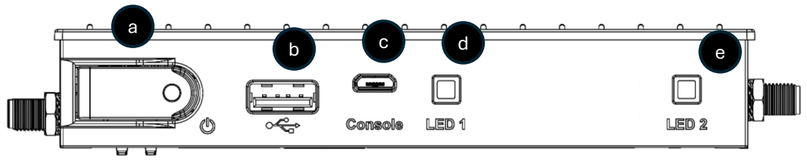
Version 1.3

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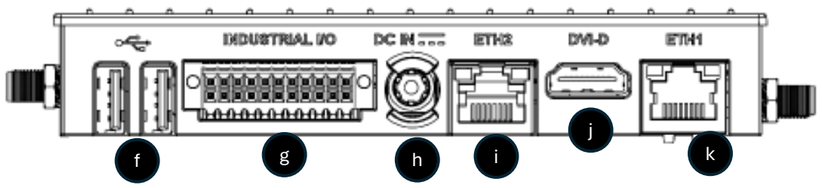
solaredge

ONE Controller for C&I
Quick installation guide

Interfaces and connectors



- a Power ON button with LED ⏻
- b Type A USB 3.0
- c Micro USB (serial debug console)
- d LED 1 - Local devices communication
- e LED 2 - Cloud communication

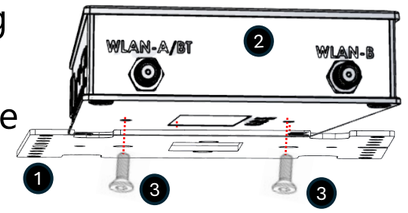


- f Type A USB2.0 x 2
- g Industrial I/O - 22-pin dual-raw plug with push-in spring connections
- h DC Power input
- i RJ45 Ethernet1 – external network
- j DVI-D
- k RJ45 Ethernet2 – internal network

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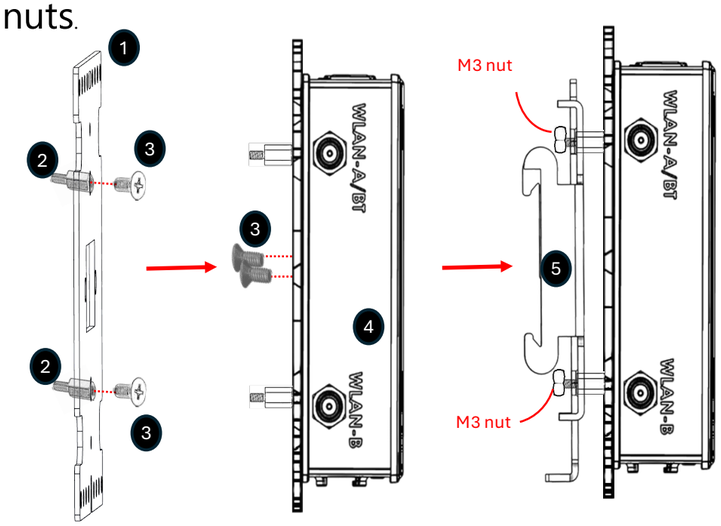
Installation - wall mount

Attach the wall mounting bracket 1 to the back of the controller 2 using the screws 3 provided.



Installation – DIN rail

1. Attach x2 standoffs 2 to wall-mount bracket 1 using screws 3
2. Attach wall-mount bracket to controller 4 using screws 3
3. Attach DIN rail mount 5 to the standoffs using M3 nuts.



Scanning the controller QR code
Leave at least 20cm space on the right-hand side.

Connect the power adaptor cable to the controller DC power input jack



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Setting up

1. Connect an Ethernet cable between the controller ETH1 and the router.
2. Connect devices to the ONE Controller.
3. Download the SolarEdge GO App.
4. Plug the power adaptor into an AC outlet, the ONE Controller and the Power LED will turn ON. If not, press the Power ON button ⏻
5. Open the SolarEdge GO App and go to the chosen commercial site. Tap Add Device → SolarEdge ONE Controller → follow on-screen instructions.



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Industrial I/O

Pin-out is determined by the I/O modules configuration



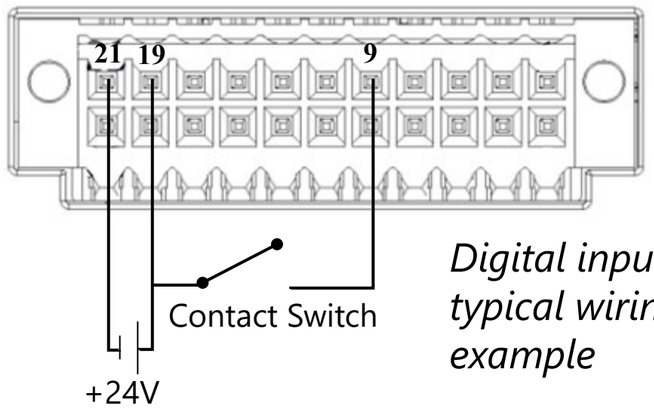
Pin	I/O	P domain	Pin	I/O	P domain
1	RS485-1 (A)	1	12	-	3
2	CAN_L	1	13	IN3	3
3	RS485-1 (B)	1	14	-	3
4	CAN_H	1	15	OUT0	3
5	RS485-1 (G)	1	16	OUT1	3
6	RS485-2 (A)	2	17	OUT3	3
7	RS485-2 (B)	2	18	OUT2	3
8	RS485-2 (G)	2	19	24V_IN	3
9	IN0	3	20	24V_IN	3
10	IN1	3	21	GND_3	3
11	IN2	3	22	GND_3	3

NOTE
Before wiring, connect the dual-raw plug.

Locking	Spring terminal
Wire cross-section	0,05mm² – 0,5mm²

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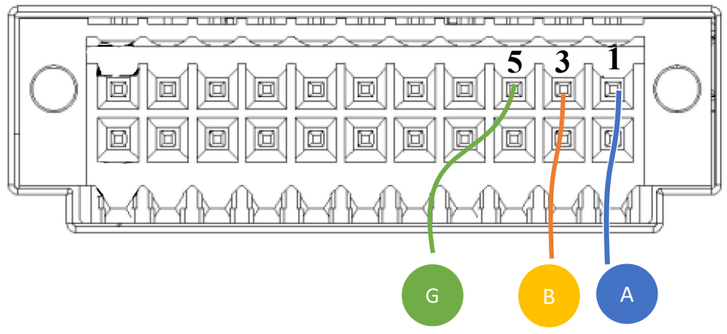
Digital I/O



Digital input – typical wiring example

RS485

- Use a three-wire cable for RS485-1/2 terminal blocks on the Industrial I/O
- Supports devices such as meters, sensors, etc.
- Maximum cable length 1km
- Use CAT5e or CAT6 cable, or 3-wire shielded twisted pair (0.2 to 1mm^2)
- Insert the wire ends into the **A(-)**, **B(+)** and **G(⏚)** pins



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Specifications

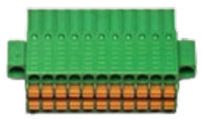
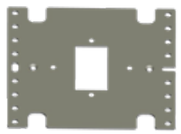
Power Adapter	100-240VAC 50/60Hz
External Communication	Ethernet: 1000Mbps Wi-Fi: 802.11ax, 2.4GHz and 5GHz
Environmental	Operational temperature: Industrial: -40°C to 80°C

LED Indications

Cloud	•Solid: Connected to SE server •Blinking: No connection to SE server
Local	•Solid: All devices are connected •Blinking: device disconnect
Power	•Solid: Normal operation •Blinking: Booting or updating •Off: No power

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Accessories

Dual-raw plug	
Wall mount bracket	
DIN rail mount	
2x antennas	
DC power adaptor	

Required tools

Phillips screwdriver 
5.5mm socket screwdriver 

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Safety Information

- For indoor use only
- DO NOT use in a wet area
- DO NOT clean with liquid

For the ONE Controller datasheet, scan the QR code

Discard this product according to local regulations or send it back to SolarEdge.

Support contact information:
If you have technical problems concerning SolarEdge products, contact:
https://www.solaredge.com/service/support

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