

Application Note

Wiring Ethernet Cables

One method of connecting the SolarEdge inverter to the SolarEdge Monitoring Portal is via a direct connection to the internal Ethernet port of the inverter.

This application note explains Ethernet cable pin-out and installation method.

Tool and Material needed

1. Ethernet cable – CAT 5 twisted pair



2. Ethernet RJ45 Connectors

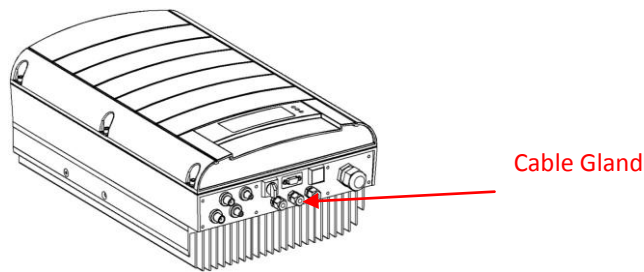


3. Crimping tool for Ethernet connectors

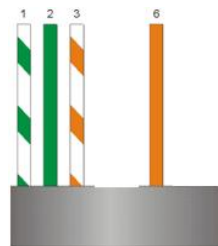


Procedure

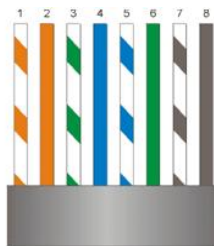
1. Open the inverter cover
2. Insert the Ethernet cable (without a connector) into the inverter via one of the small cable glands at the bottom of the inverter



3. Remove the cable external isolation using the crimping tool and expose the wires. Standard cable includes 8 wires, 4 twisted pairs.
4. For Ethernet communication use 2 pairs (4 wires).
1st pair should be connected to pins 1 and 2.
2nd pair should be connected to pins 3 and 6.
Pairs are indicated by similar color wire. The rest of the wires should not be connected.

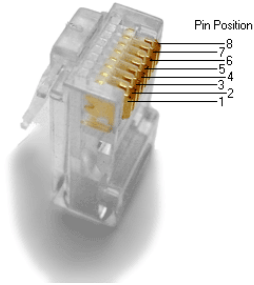


Wires to be used

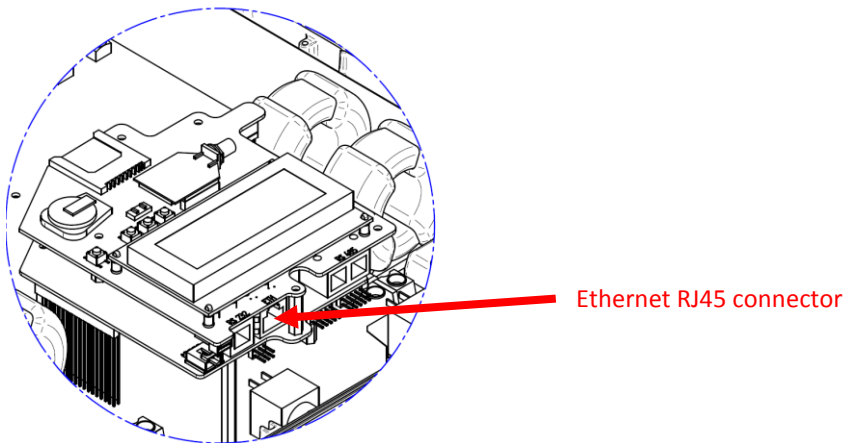


8 wires in a typical
CAT5 cable

5. Insert the 4 wires into the RJ45 connector, take care to use pins 1, 2, 3 and 6



6. Crimp the cable using the Ethernet crimper
7. Connect the cable to the Ethernet RJ45 connector inside the inverter



8. Connect the other side of the cable to the site router or hub.
9. Verify that the green LED next to the Ethernet connector (Inverter side) is lit.
10. Close the inverter cover