

CP-720 dBC MC4 & MTC CONNECTION PROCEDURE

STEP 1: DC CONNECTIONS

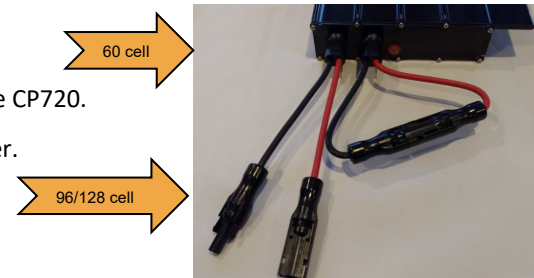
IMPORTANT: ALWAYS CONNECT DC FIRST. DO NOT ENERGIZE THE AC BUS TO THE INVERTERS UNTIL ALL INVERTERS HAVE BEEN DC POWERED **WITH ENOUGH SUN LIGHT** (LEDs blinking continuously).



60 Cell Modules: Connect the pair of inverter DC leads next to the LED together. SERIES combine the two PV modules by connecting one male and one female MC4 from each panel together. Connect the remaining two PV module MC4s into the pair of inverter connectors AWAY from the LED.

72 Cell Modules: Plug each panel into one of the two pairs of MC4 connectors of the CP720.

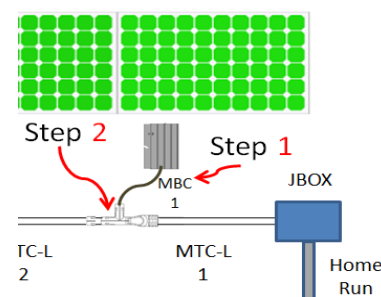
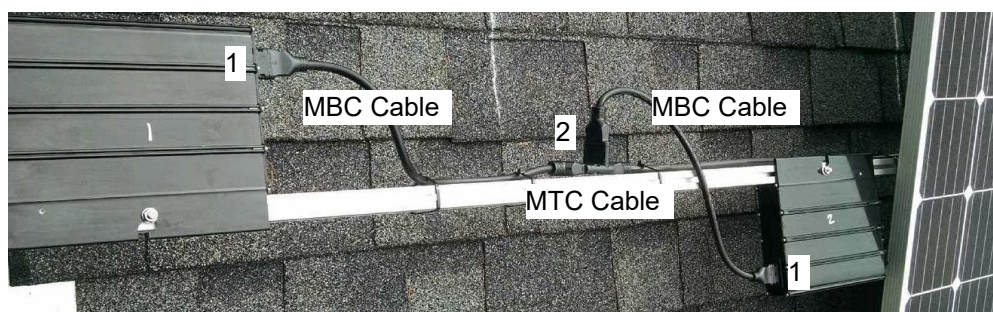
96/128 Cell Modules: Connect the pair of inverter DC leads next to the LED together. Combine the two PV modules in PARALLEL using two Y Combiners. Connect the Y combiner outputs to the pair of inverter connectors AWAY from the LED.



STEP 2: AC CONNECTOR – INSTALLATION PROCEDURE

1) Join the integrated AC cable from the microinverter to a trunk cable T-Junction.
NOTE: The connector pins should easily glide into the socket. A small click indicates that the connector is properly seated.

IMPORTANT: do not try to force in the connector! Insertion resistance indicates improper orientation. Rotate the connector 180° before trying again.



LED CODES

After DC is applied:

Blink Sequence	Meaning
Slow, 1 blink every 4 seconds	DC Connected, but Micro NOT READY for AC to be applied- WAIT
Continuous blinking	DC Connected and Micro now ready for AC to be applied.

After AC is applied:

Blink Sequence	Meaning
1 blink every 8 seconds	Normal production, inverter not bound to gateway
1 blink every 16 seconds	Normal production, inverter bound to gateway
2 blink every 4 seconds	Microinverter initializing after grid present- WAIT
3 or 4 blinks every 4 seconds	Error- Grid voltage out of range
5 blinks every 4 seconds	Error- PV module voltage out of range

WIRING FOR COMMUNICATION TO THE GATEWAY

Chilicon Power trunk cables have 4 color-coded conductors: **RED**, **BLACK**, **WHITE**, **GREEN**.

BLACK and **WHITE** conductors are for the PLC communication. The same grid line (**BLACK**) must be used to connect the inverter to the Gateway to ensure robust communication. Specifically, the Gateway inside the home (120 V) should be powered using **GRID HOT LINE B** (= **BLACK** trunk conductor) and **GRID NEUTRAL** (= **WHITE** trunk conductor).

NOTE: Communication with the Gateway is usually fine even if the Gateway is connected in the wall socket to the **RED** and **WHITE** trunk-equivalent wires. However, the signal will be weaker (- 10 dB). The Gateway socket survey screen indicates the strength of the signal. In the worst case, you simply have to swap the **RED** and **BLACK** trunk wires on the breaker or at the AC disconnect.

NOTE: Miswiring AC grid lines to the inverter trunk (for instance swapping a GRID L1 for GRID NEUTRAL) will not damage the inverters. However, they will not export power in this configuration. If inverters are miswired, LED single blink export confirmation from the LED will never be established.

WARNING: NEVER CONNECT **GREEN** to a Live Wire

Max 8 CP720/String (16 Modules) – 240V full current

Max 10 CP720/String (20 Modules) – 240V@ 2.4A current limit

Max 7 CP720/String (14 modules) – 208V full current

