



CABLING GUIDE

Suggested approaches for common configurations

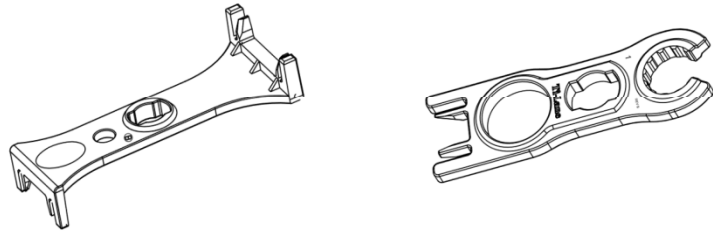
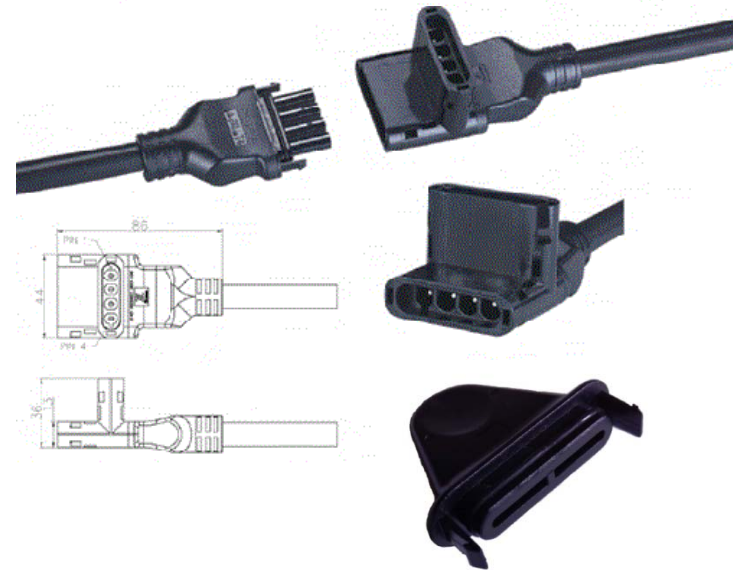
March 2020

www.chiliconpower.com

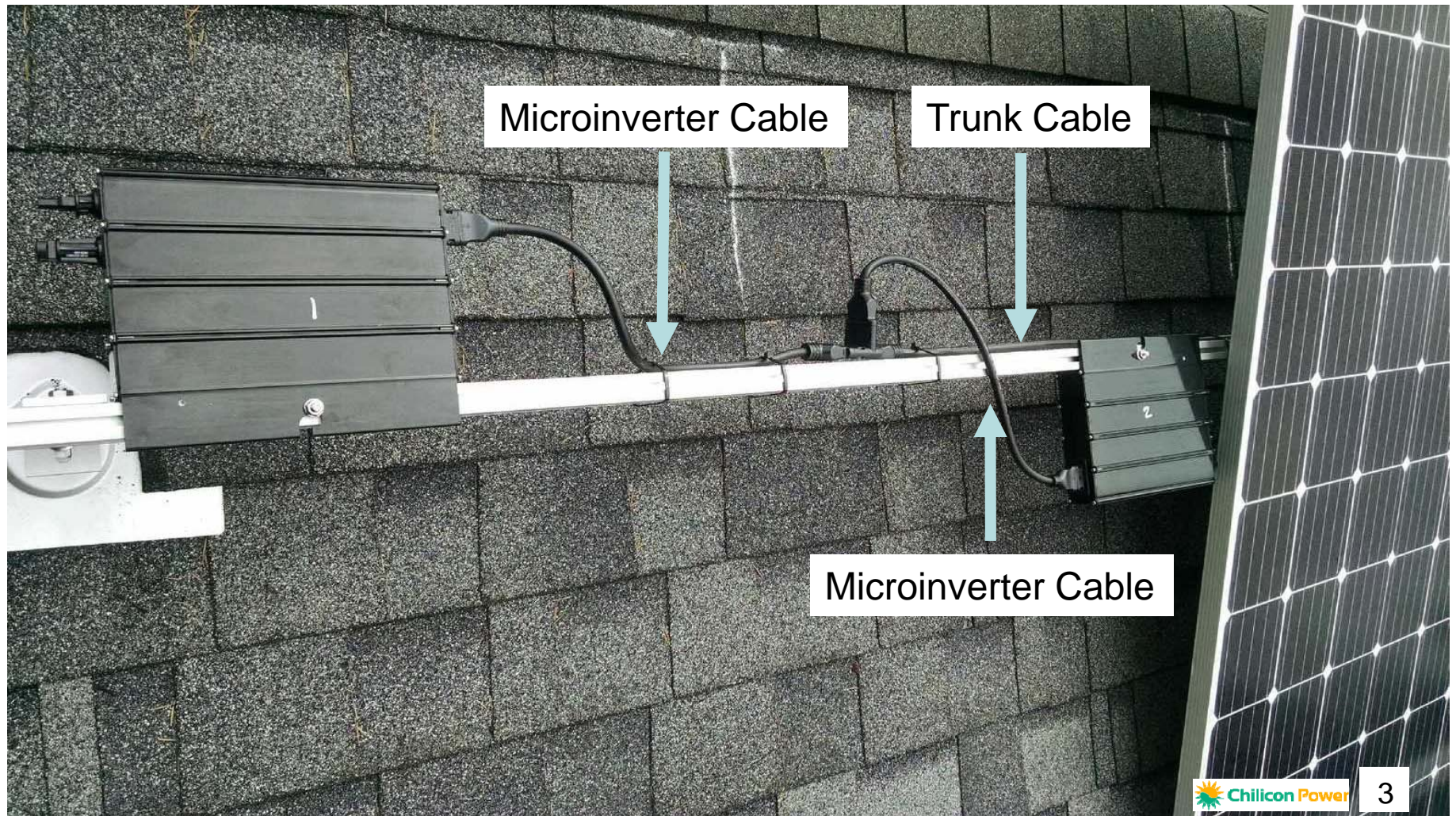
(310) 800-1396

CABLE & ACCESSORIES

- **MBC –Modular Branch Cable**
 - Connects each micro to the trunk cable
 - Now integrated into the microinverter
- **MTC – Modular Trunk Cable**
 - 1.025m, 1.7m & 2.15m
- **MTC-JBOX – J-Box whip**
- **T6-WTRPRF male end cap**
- **AC & DC disconnect tools**



MICROINVERTER CONNECTION TO TRUNK CABLE



LEGEND FOR COMMON CONFIGURATIONS PAGES

PART

COLOR CODE

Microinverter Cable



CP-MTC-1.025



CP-MTC-1.7



CP-MTC-2.15



CP-MTC-JBOX (whip)



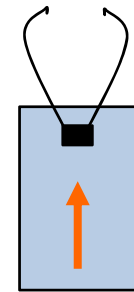
CP-WTRPRF-CAP (end cap)



CP-720-dBC (microinverter)

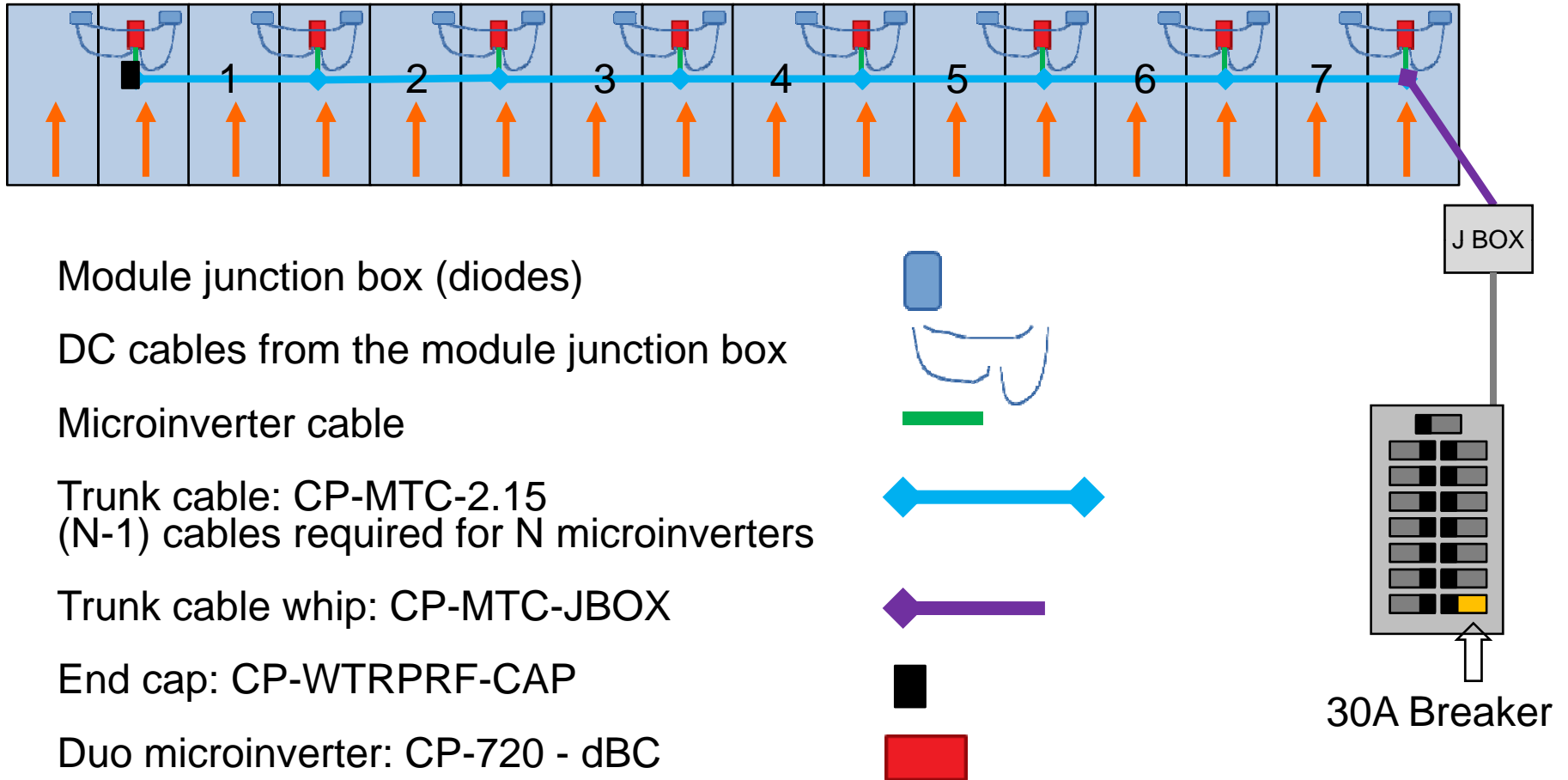


CP-250E-iBC (microinverter)

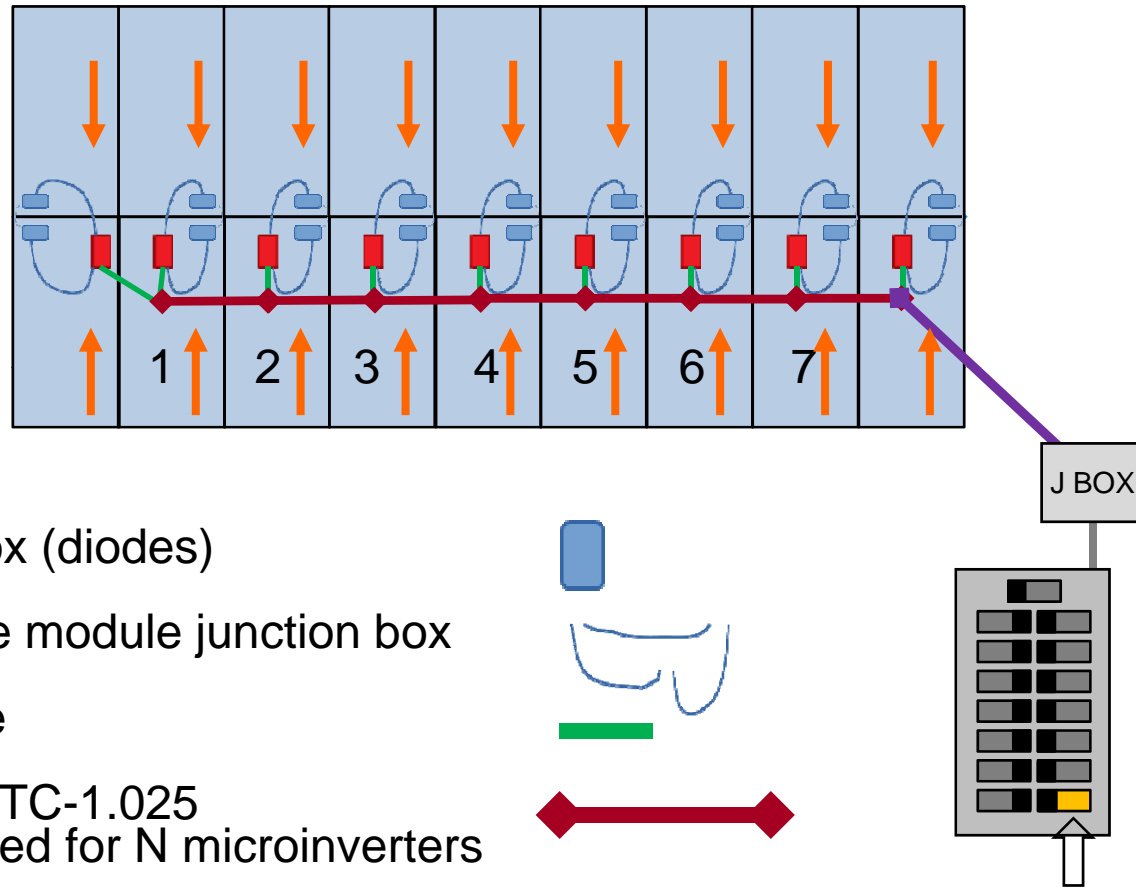


Module orientation

C60 OR 72 CELL PORTRAIT-ONE ROW



C60 OR 72 CELL PORTRAIT-TWO ROWS



Module junction box (diodes)

DC cables from the module junction box

Microinverter cable

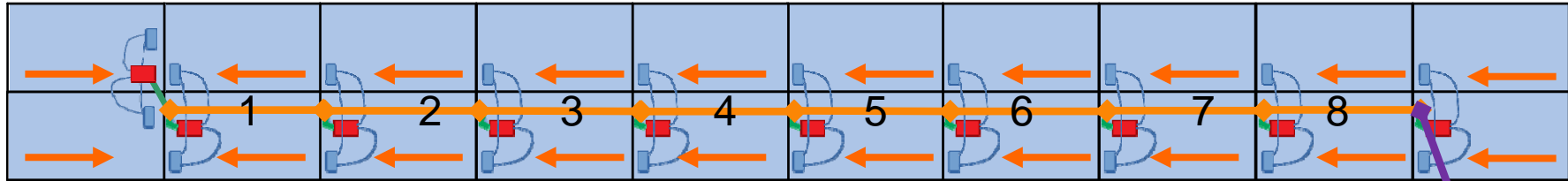
Trunk cable: CP-MTC-1.025
(N-2) cables required for N microinverters

Trunk cable whip: CP-MTC-JBOX

Duo microinverter: CP-720 - dBC

30A Breaker

60 CELL LANDSCAPE-TWO ROWS



Module junction box (diodes)

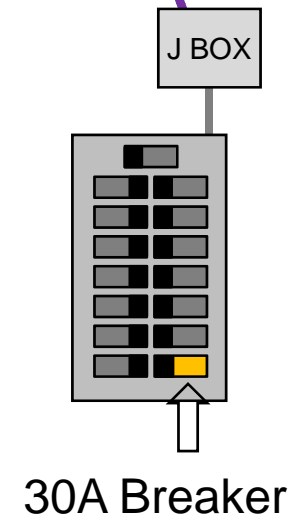
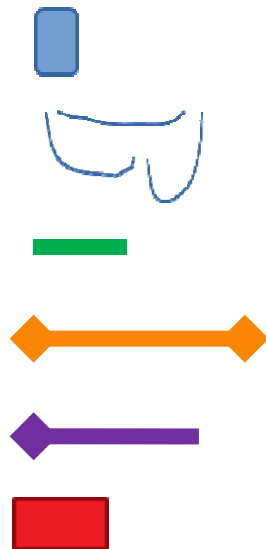
DC cables from the module junction box

Microinverter cable

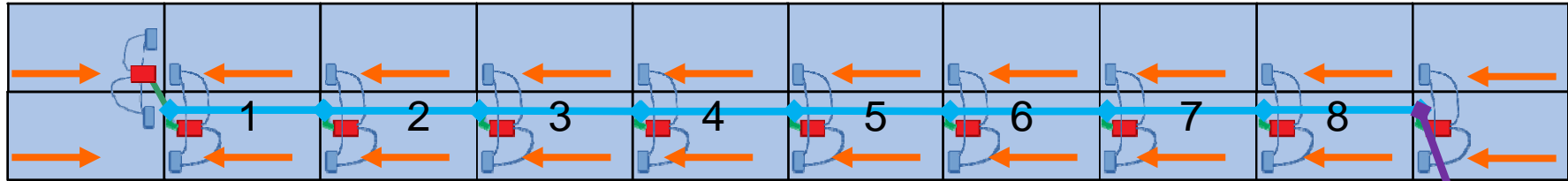
Trunk cable: CP-MTC-1.7
(N-2) cables required for N microinverters

Trunk cable whip: CP-MTC-JBOX

Duo microinverter: CP-720



72 CELL LANDSCAPE-TWO ROWS



Module junction box (diodes)

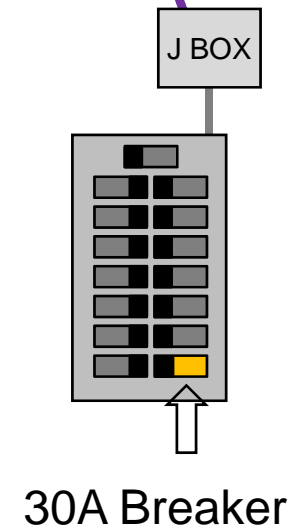
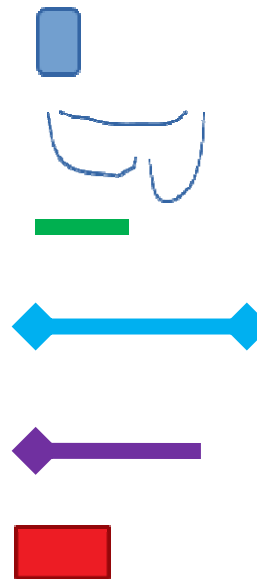
DC cables from the module junction box

Microinverter cable

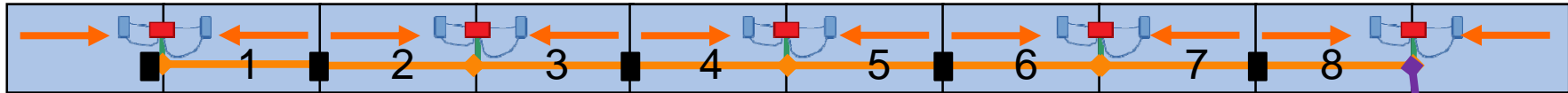
Trunk cable: CP-MTC-2.15
(N-2) cables required for N microinverters

Trunk cable whip: CP-MTC-JBOX

Duo microinverter: CP-720-dBC



60 CELL LANDSCAPE-ONE ROW



Module junction box (diodes)



DC cables from the module junction box



Microinverter's MBC cable



Trunk cable: CP-MTC-1.7
2(N-1) cables required for N microinverters



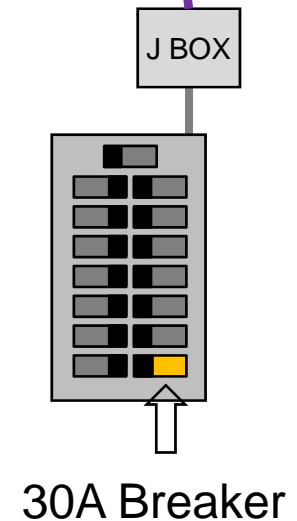
Trunk whip: CP-MTC-JBOX



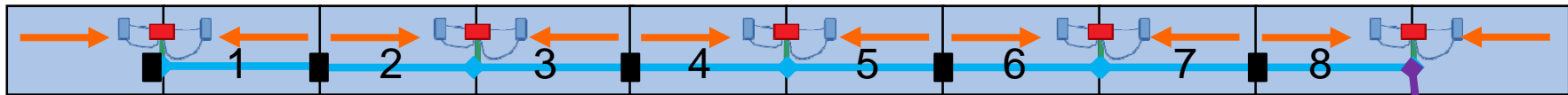
End cap: CP-WTRPRF-CAP
(N) caps required for N microinverters



Duo microinverter: CP-720-dBC



72 CELL LANDSCAPE-ONE ROW



Module junction box (diodes)



DC cables from the module junction box



Microinverter cable



Trunk cable: CP-MTC-2.15
2(N-1) cables required for N microinverters



Trunk cable whip: CP-MTC-JBOX



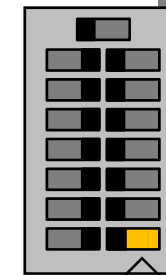
End cap: CP-WTRPRF-CAP
(N) caps required for N microinverters



Duo microinverter: CP-720-dBC

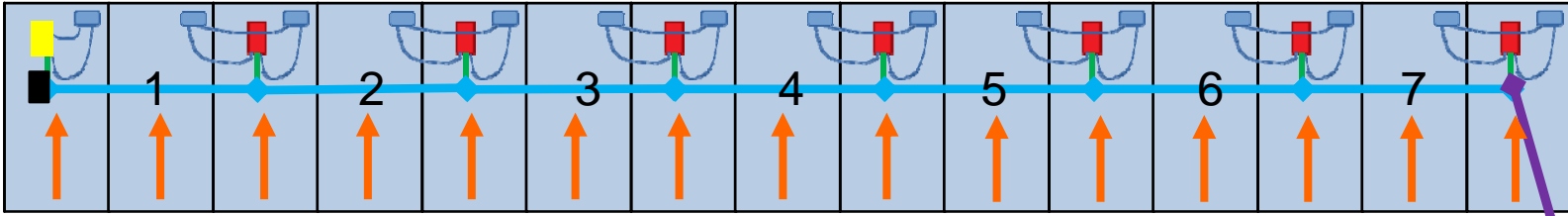


J BOX



30A Breaker

60 OR 72 CELL PORTRAIT-ONE ROW -ODD PANEL COUNT



Module junction box (diodes)

DC cables from the module junction box

Microinverter cable

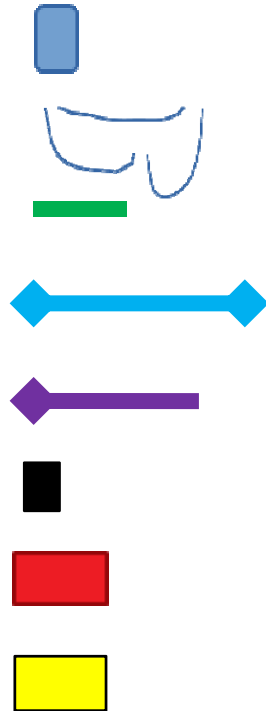
Trunk cable: CP-MTC-2.15
(N-1) cables required for N microinverters

Trunk cable whip: CP-MTC-JBOX

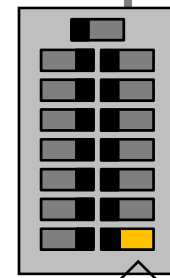
End cap: CP-WTRPRF-CAP

Duo microinverter: CP-720-dBC

Single microinverter: CP-250E-iBC

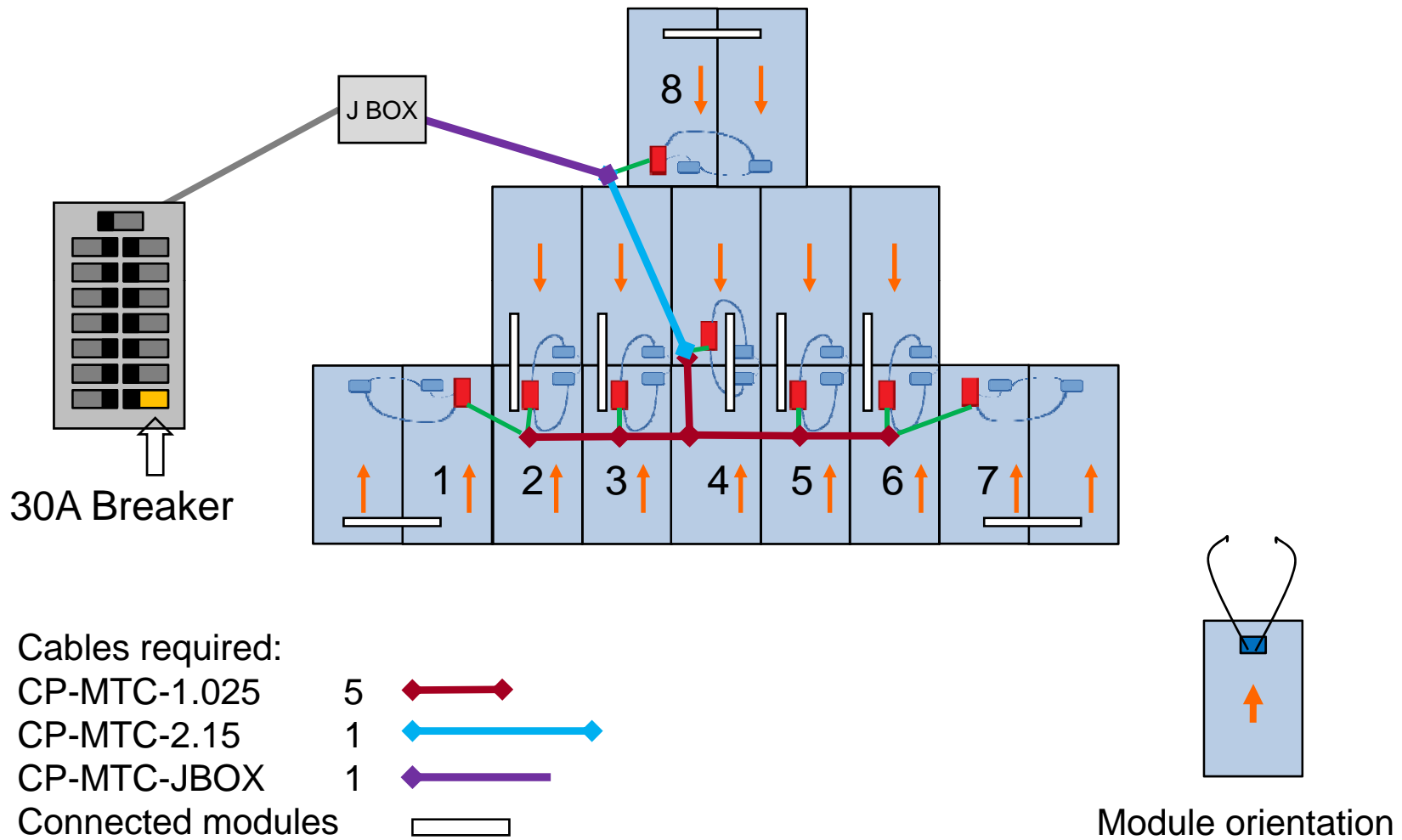


J BOX

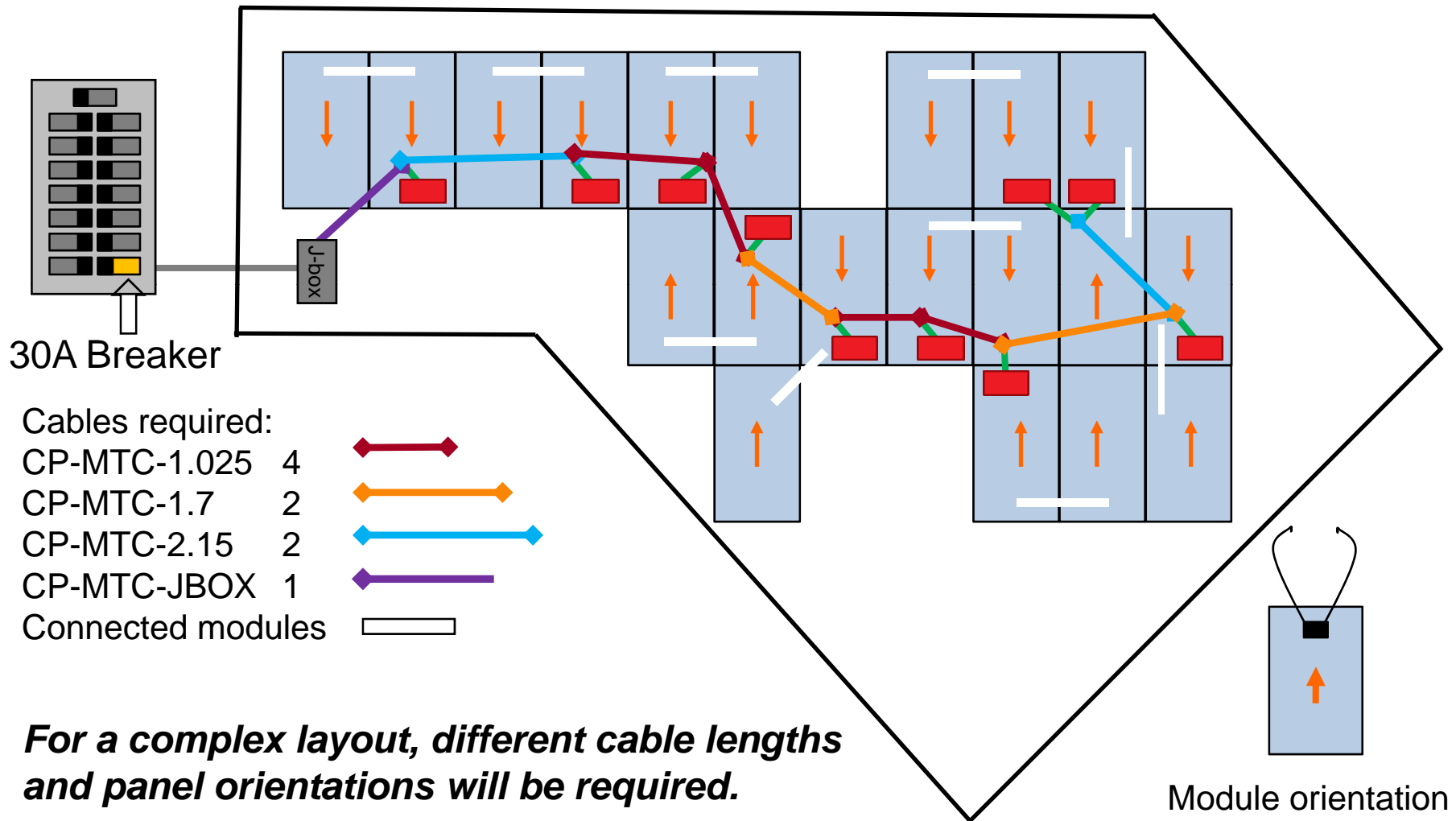


30A Breaker

60 OR 72 CELL PORTRAIT “INVERTED T” CONFIGURATION



60 OR 72 CELL - COMPLEX LAYOUT

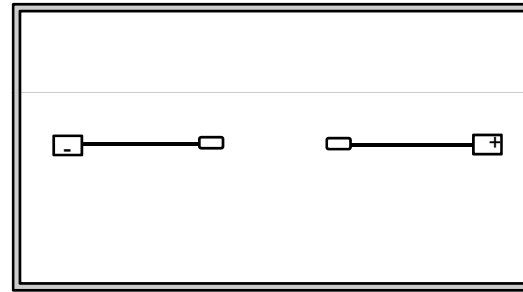
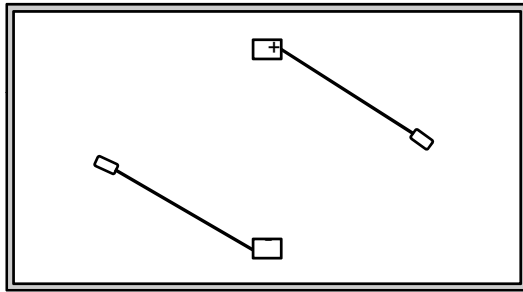


For a complex layout, different cable lengths and panel orientations will be required.

Contact Chilicon Power at (310) 579-2449 if you require assistance.

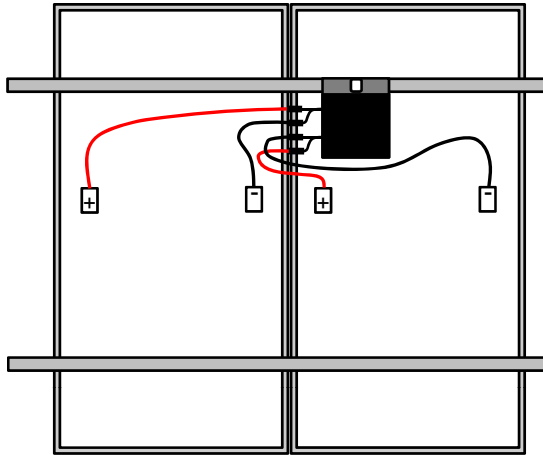
CONNECTING TO SPLIT CELL MODULES

- Split cell modules require more careful consideration of microinverter placement.
- Split cell options: side-by-side or top-bottom

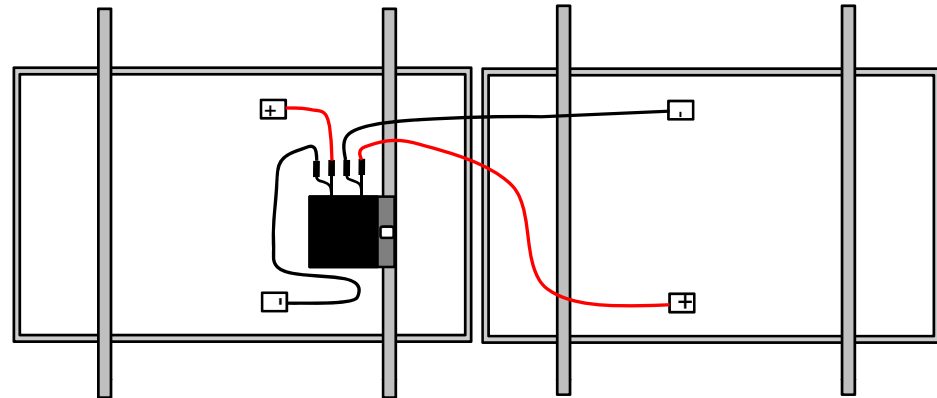


- Minimum DC lead length needed: 1.1 m (>1.2 m recommended)
- Shorter leads will require an additional DC MC4 jumper cable
- Top-bottom may still require an additional DC MC4 jumper cable in some configurations.
- Connection to the module frame may eliminate need for a jumper

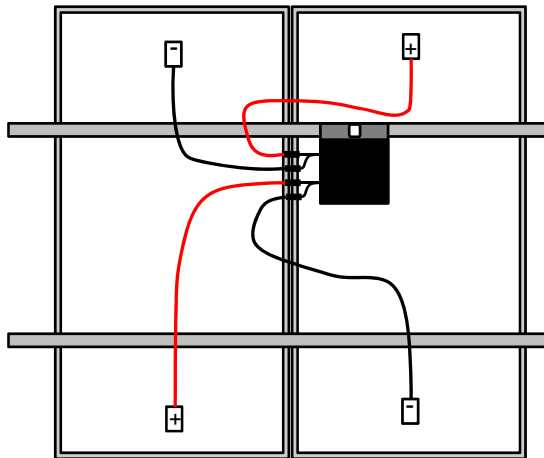
TYPICAL SPLIT CELL CONNECTIONS



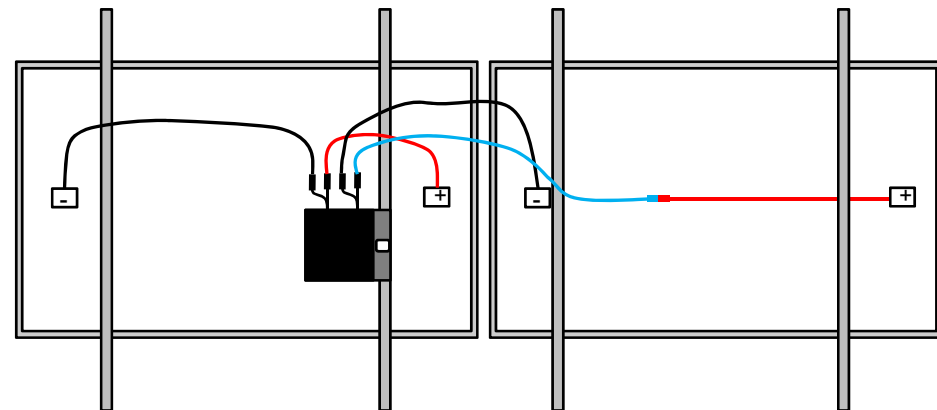
Place micro DC connectors at edge of PV module



Place micro DC connectors at middle of PV module

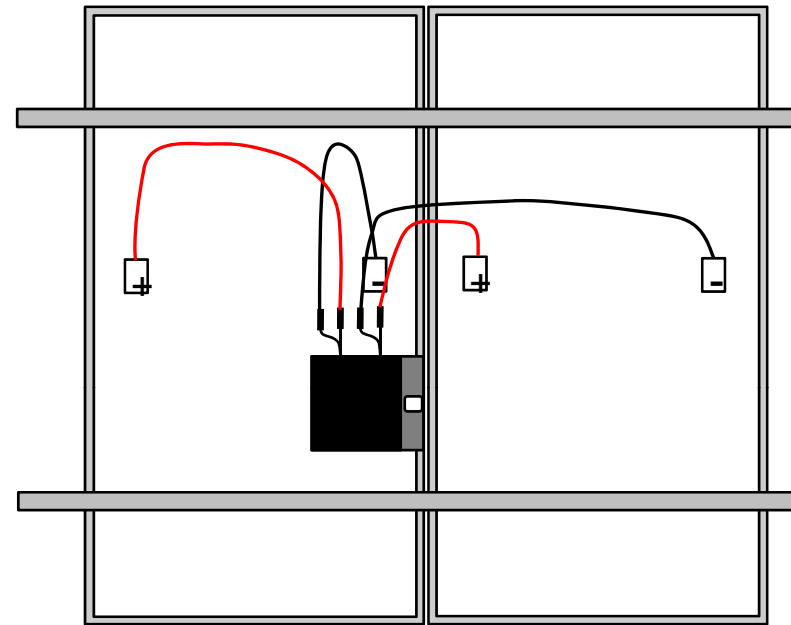
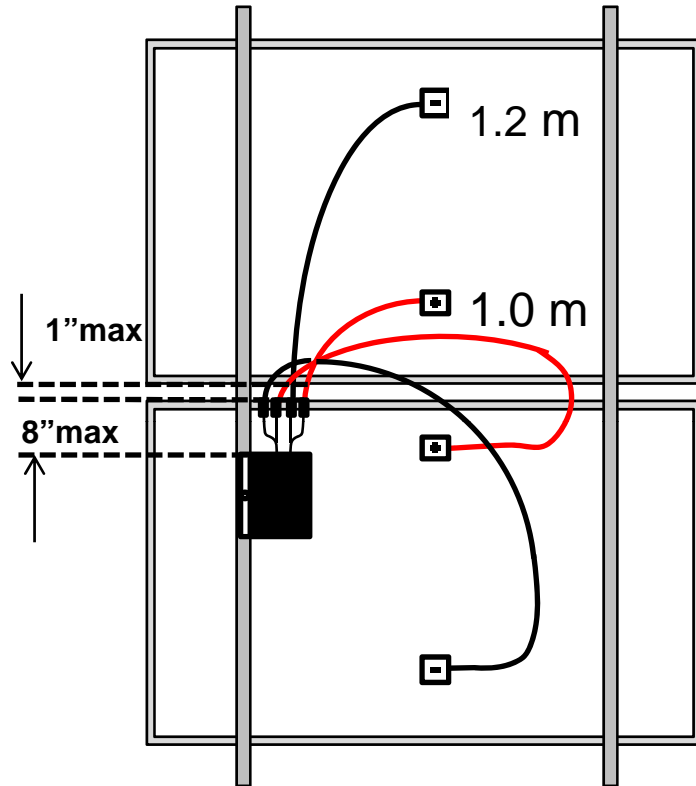


Portrait



Landscape

OTHER CONFIGURATIONS



Modules with uneven cable lengths

Note: Modules must be rotated and shorter DC lead must be closest to the micro.



Frame attach option

Attach micro to frame using either M8 -1.25 or 1/4" dia. bolt or MLPE Mount (such as Unirac 008114M)