Engineering Center PV Test System

Wiring Diagram Notes

Note 1 Room EC370: Use existing spare two pole breaker, if available, in Panel L370, (3.9 kW connected, 19 Amps peak at 208VAC). Size wiring appropriately for a maximum 24 Amps for this inverter.

Note 2 Room EC370: Mount inverter (Part# SE5000A-US)on wall adjacent to Panel L370 using provided wall bracket.

Note 3 Room EC370: wire cat.5 network cable to inverter. coordinate with OU UTS on connection to building network.

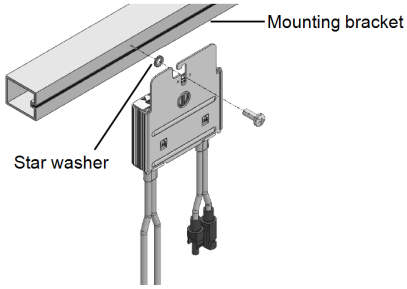
Note 4 Room EC370: DC wiring to Power Optimizers, run two circuits using PV rated DC cable, 2 conductor 10 AWG. Route through existing 2 inch conduit adjacent to panel L370.

Note 5 Room EC370: RS-485 communication wiring, run two 2 conductor shielded twisted pair to the Hoffman panel located out on the roof. Route through existing 3/4 inch conduit located in NE corner of room. Provide conduit from inverter up to ceiling and from exiting 3/4 inch conduit to ceiling.

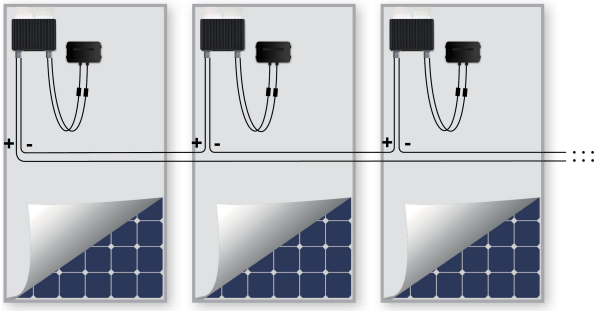
Note 6 Roof: Mount Hoffman enclosure on the roof to the rear of the solar panels on uni-strut. Provide 120VAC to the panel from the exiting 120VAC circuit. Provide liquid tight conduit and boxes for all roof connections to the Hoffman panel. (panel interior, by others)

Note 7 Roof: Install a 3/4 inch conduit run with 4x4 junction boxes along the full length of the solar panel array. This will be for future temperature sensor wiring (by others). Provide liquid tight conduit and boxes for all roof connections to the Hoffman panel.

Note 8 Roof: Power Optimizers will be installed by others. Provide sufficient cable length to reach the first panel of each of the two strings. Provide 10 sets of MC4 PV connectors. Bring 2 inch conduit up from the roof deck and provide weather tight cable exit from a junction box. Coordinate with final panel layout.



optimizer mounting



series connection of optimizers

inverter in EC370