# UL 3741 | APPLICATIONS

UNIRAC
BETTER SOLAR STARTS HERE

**UNIRAC lands 3741 with the largest number of racking & inverter combinations in the industry.**

By adding UL 3741 to 7 of our racking systems and 38 inverter models, we're making solar installations across the country easier than ever! UL 3741 has opened the doors for a new standard of "PV Hazard Control" that meets the National Electrical Code (NEC) rapid shutdown requirements without module-level rapid shutdown. NEC provides two rapid shutdown options for rooftop PV systems: Module-level shutdown with MLPE or UL 3741 PV hazard control system listing.

## Systems that qualify for UL 3741 listing must follow these 3 steps

1. Ensure PV racking and inverter models have been certified and listed together.
2. Design the PV array layout according to one of the 4 use cases on the next page.
3. Ensure wires are managed according to the racking specific install manual.

### UNIRAC SYSTEMS:

- RM10 EVO
- RM10 LEGACY
- RMDT
- RM5
- ECOFOOT 2+
- ECOFOOT 5D
- GRIDFLEX 5

### INVERTER MANUFACTURERS AND MODELS

**FRONIUS SYMO ADVANCED**

10.0-3 208-240/Lite
12.0-3 208-240/Lite
15.0-3 480/Lite
20.0-3 480/Lite
22.0-3 480/Lite
22.7-3 480/Lite
24.0-3 480/Lite

**GOODWE**

GW50K-SMT-US
GW60K-SMT-US
GW6000A-MS
GW7600A-MS
GW8600A-MS
GW9600A-MS

**CHINT**

CPS SCA50KTL-DO/US-480
CPS SCA60KTL-DO/US-480
CPS SCA36KTL-DO/US-480
CPS SCA25KTL-DO-R/US-480
CPS SCA25KTL-DO/US-208

**SMA AMERICA**

CORE1 STP 33-US-41
CORE1 STP 50-US-41
CORE1 STP 62-US-41

**SUNGROW**

SG36CX-US
SG60CX-US

**CANDIAN SOLAR**

CSI-75k-T480GL03-U
CSI-80k-T480GL03-U
CSI-90k-T480GL03-U
CSI-100k-T480GL03-U

**SOLECTRIA RENEWABLES**

PVI 25 TL-208
PVI 25TL-480-R
PVI 50TL-480
PVI 60TL-480

**SOLIS**

Solis-25K-US (may be followed by -SW)
Solis-30K-US (may be followed by -SW)
Solis-36K-US (may be followed by -SW or F)
Solis-40K-US (may be followed by -SW or F)
Solis-50K-US (may be followed by -F, -F-SW, or -SW)
Solis-60K-US (may be followed by -F, or -F-SW)
Solis-66K-US (may be followed by -F, or -F-SW)

# UL 3741 | USE CASES

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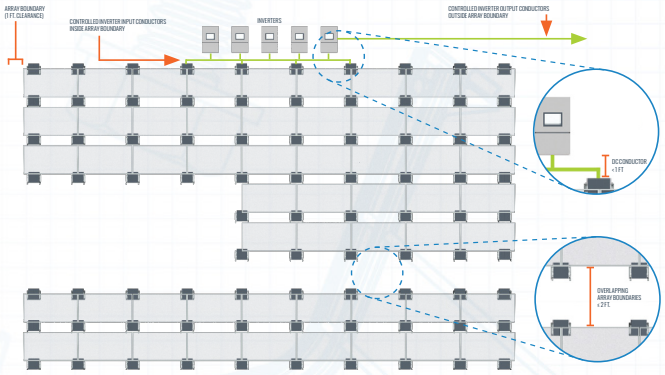
## CASE 1

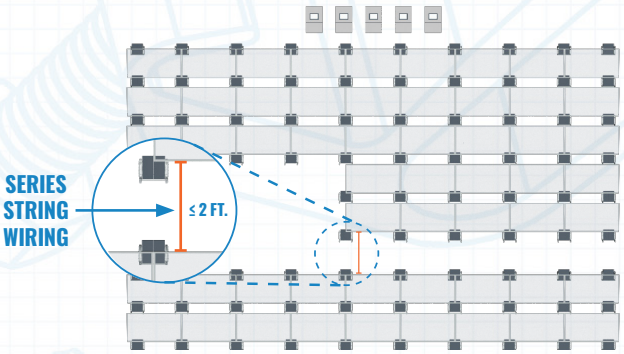
a. The inverter is placed within 1ft of the main array boundary.



## CASE 2

a. The inverter is placed within 1 ft of the main array boundary.

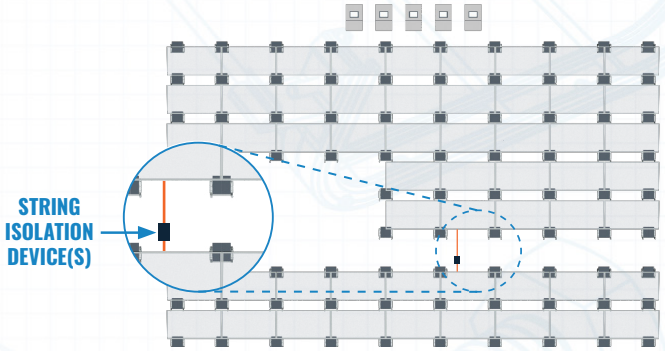
b. Maximum 2 ft spacing between all array components ensuring a “single array.”




## CASE 3

a. The inverter is placed within 1 ft of the main array boundary.

b. Sub-array exceeds 2 ft spacing thus making it separated from the main array – a string isolation device is needed (typically offered by inverter manufacturers).

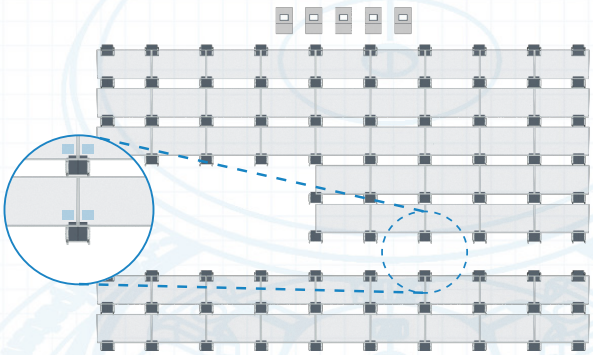



## CASE 4

a. The inverter is placed within 1 ft of the main array boundary.

b. Sub-array exceeds 2 ft spacing thus making it separated from main array & no string isolation device is used.

i. Must use MLPE’s on the sub array.



## ELEMENTS OF WIRE MANAGEMENT:

1. Ensure wires are protected when exposed between PV array rows & columns.

2. Wires beneath modules must be handled to prevent contact with metallic surfaces.

Detailed methods for each of these two wire management elements are shown in each racking system’s installation manual.