

# PV-Guard Module-Level Rapid Shutdown and Monitoring

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## PV - GUARD



### Features

- Module level rapid shutdown
- Module level monitoring for service (option)
- IV curve trace operating mode
- Over temperature protection (auto RSD function)
- Optional enclosure for controller and data logger
- Certified for PVRSS with multiple inverters and for stand-alone independent RSD system



Auto shut-down whole PV site BEFORE fire or smoke



Compatible with SunSpec control signaling



Cable harness options to comply with NEC2020



Suitable for all commercial or residential applications



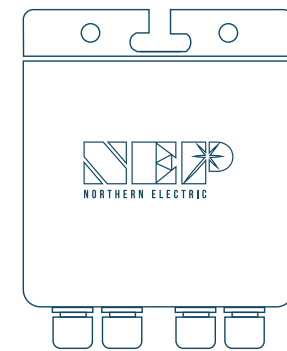
Multiple US patents pending



4.75'

6.60'

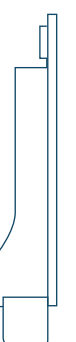
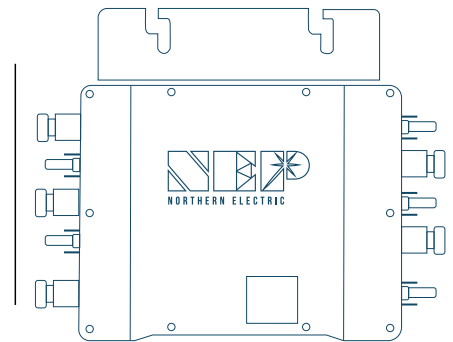
1.20'



8.25'

10.5'

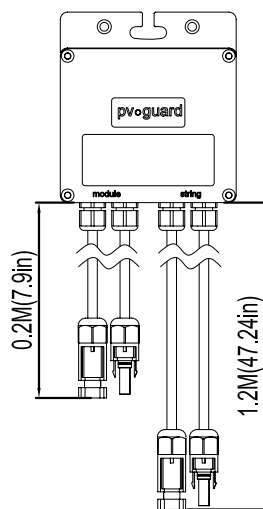
1.25'



# PVG Receivers

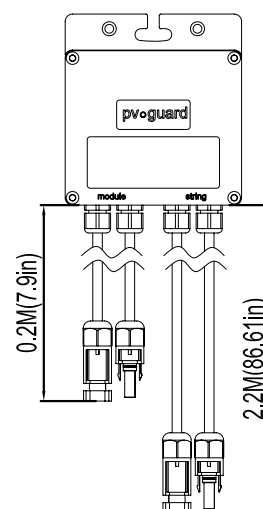
## PVG 1

### PVG-1-P



P=Portrait orientation

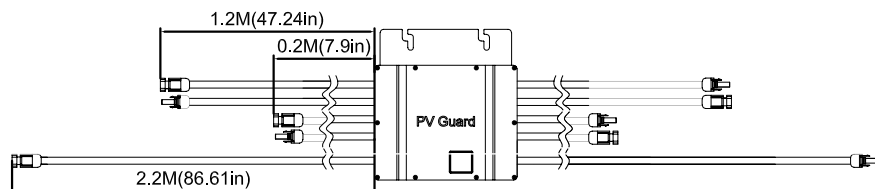
### PVG-1-L



Single PV module  
L=Landscape orientation

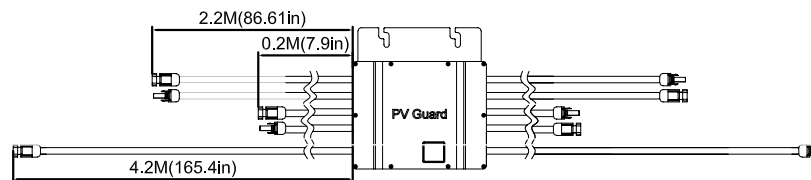
## PVG 4

### PVG-4-P



Four PV modules  
P=Portrait orientation

### PVG-4-L



Four PV modules  
L=Landscape orientation

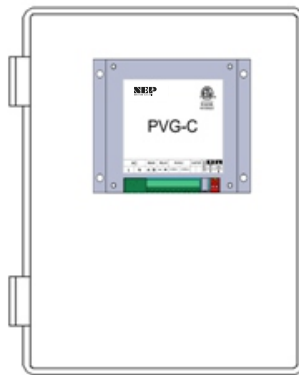
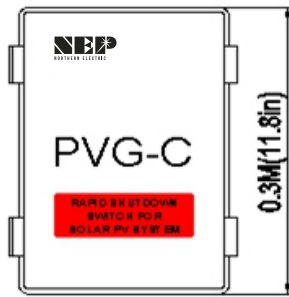
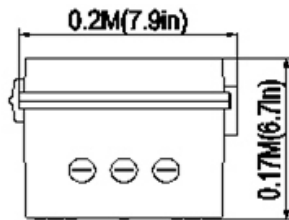
PANEL LEVEL  
RECEIVER  
DEVICES  
PVG-1  
PVG-4

|               |   |  |
|---------------|---|--|
| INPUT(DC)     | Max DC Open Circuit Voltage per Input (Vdc) | 90   |
|               | Max DC Current per input (Adc)              | 15   |
| OUTPUT(DC)    | Maximum Output Voltage (Vdc)                | $V_{oc} * n$ (n=1/2/3/4)   |
| SYSTEM        | Maximum System Voltage (Vdc)                | 1500   |
| MECHANICS     | PV Cable                                    | 12AWG  |
|               | PV Connectors                               | MC4, MC4 compatible, Amphenol  |
|               | Size (not including PV cable)               | 6.60' x 4.75' x 1.20' (PVG-1)      10.5' x 8.25' x 1.25' (PVG-4)                 |
|               | Protection Degree                           | NEMA 6   |
|               | Operating Ambient Temperature               | -40°C--+85°C   |
| SIGNAL        | Communications                              | DC Power Line<br>Compatible with SunSpec signaling                               |
| CERTIFICATION | Product Safety Compliance                   | UL 1741<br>CSA C22.2 No. 107.1<br>NEC 2014/2017 690.12<br>Canada CEC 2015 64-218 |

# PVG Controller Outdoor Enclosure

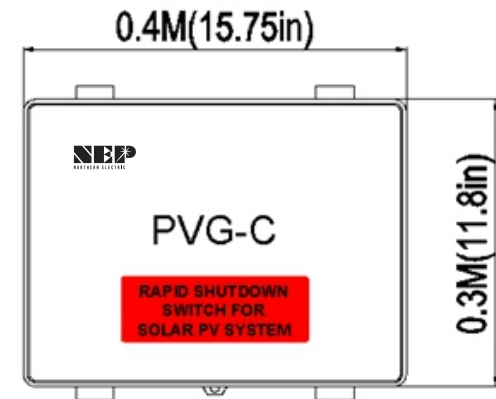
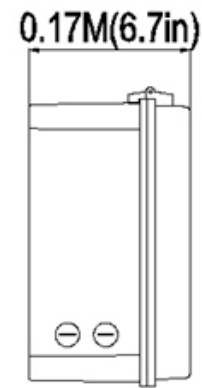
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## PVG-E (Outdoor Enclosure – 1)



Size: 200 x 300 x 170 (mm)  
7.9 x 11.8 x 6.7 (in)

## PVG-O (Outdoor Enclosure – 2)



Size: 400 x 300 x 170 (mm)  
15.79 x 11.8 x 6.7 (in)

# PVG-E

|                      |                               |  |
|----------------------|-------------------------------|--|
| <b>POWER SUPPLY</b>  | AC Input                      | 100 - 277 Vac. 200mA, 50/60 Hz   |
| <b>SYSTEM</b>        | Maximum System Voltage (Vdc)  | 1500   |
| <b>MECHANICS</b>     | Size                          | 7.9'x11.8'x6.7'  |
|                      | Protection Degree             | IP65   |
|                      | Operating Ambient Temperature | -20C----- +85C   |
| <b>SIGNAL</b>        | Communications                | DC Power Line, Compatible with SunSpec   |
| <b>CERTIFICATION</b> | Product Safety Compliance     | UL 1741<br>CSA C22.2 No. 107.1<br>NEC 2014/2017 690.12<br>Canada CEC 2015 64-218 |
| <b>CONTROLS</b>      | Optional Controls             | On-Grid / Off-Grid<br>Primary / Secondary<br>5Vdc output for relay               |
| <b>RESIDENTIAL</b>   | Alternative RSD control       | Built-in E-Stop button   |

# PVG-O (PANEL LEVEL MONITORING)

|                      |                               |  |
|----------------------|-------------------------------|--|
| <b>POWER SUPPLY</b>  | AC Input                      | 100 - 480 Vac. 200mA, 50/60 Hz   |
| <b>SYSTEM</b>        | Maximum System Voltage (Vdc)  | 1500   |
| <b>MECHANICS</b>     | Size                          | 15.79'x11.8'x6.7'  |
|                      | Protection Degree             | IP65   |
|                      | Operating Ambient Temperature | -20C----- +85C   |
| <b>SIGNAL</b>        | Communications                | DC Power Line, Compatible with SunSpec   |
| <b>CERTIFICATION</b> | Product Safety Compliance     | UL 1741<br>CSA C22.2 No. 107.1<br>NEC 2014/2017 690.12<br>Canada CEC 2015 64-218 |
| <b>MONITORING</b>    | Optional Monitoring           | Panel-by-Panel with BDG-256  |
| <b>RESIDENTIAL</b>   | Alternative RSD control       | Built -in E-Stop button  |