

# PRACTICAL. CLEAN. AUTONOMOUS.

## MEET SOLIS ENERGY'S **SOLAR** POWER PLANT.



**No grid power? No problem.** Solis Energy's Solar Power Plants (SPP) deliver reliable solar generated electricity – anytime and anywhere. Perfect for remote installations where trenching is too costly or impractical. Our SPPs are ideal for remote wireless networking and communications, security applications such as perimeter surveillance and access control, smart grid and metering infrastructure, telemetry equipment, and more.

## SOLAR POWER PLANT



### FEATURES

- Wide Operating Temperature (-40 to 60°C)
- Hydraulic-Magnetic Breakers
- Powder Coated Aluminum Enclosure
- Clean DC Power Output
- Online Battery Connection - Zero Transfer Time
- Suited for Multiple Battery Types
- Sophisticated Multi-Stage Charging



### APPLICATIONS

- Remote Communications Equipment
- Perimeter Security and Surveillance
- Emergency Call Boxes and Mustering Stations
- PLCs and RTU Systems
- Wellhead Controls
- Obstruction Lighting
- Environmental Monitoring



## POWER WHEN YOU NEED IT.

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Rev 26.09

| OVERVIEW          | Model Number                    | SPP12050-B U1G1                                  | SPP12150-E 31G2  | SPP24400-E 31G2  | SPP24400-3 31G4                    | SPP24800-3 31G4     | SPP48800-3 31G4     | SPP48800-6 31G8 |
|-------------------|---------------------------------|--------------------------------------------------|------------------|------------------|------------------------------------|---------------------|---------------------|-----------------|
|                   | System Voltage (Handoff)        | 12 VDC Nominal                                   |                  |                  | 24 VDC Nominal                     |                     | 48 VDC Nominal      |                 |
|                   | Type                            | PWM                                              |                  |                  |                                    | MPPT                | MPPT                |                 |
|                   | Charging Algorithm              | Multi Stage                                      |                  |                  |                                    |                     |                     |                 |
|                   | Surge Protection                | Transient                                        |                  |                  |                                    |                     |                     |                 |
|                   | Total Weight (lb)               | 63.5                                             | 215.0            | 243.0            | 382.0                              | 476.0               | 483.0               | 781.0           |
| SOLAR ARRAY       | Minimum Watts Power Max         | 50                                               | 150              | 400              | 400                                | 800                 | 800                 | 800             |
|                   | Minimum Volts Power Max         | 17                                               | 17               | 34               | 34                                 | 34                  | 68                  | 68              |
|                   | Nominal Array Voltage           | 12                                               | 12               | 24               | 24                                 | 24                  | 48                  | 48              |
|                   | Weight (lb)                     | 29                                               | 44               | 72               | 72                                 | 129                 | 129                 | 129             |
| CHARGING          | Absorption Charge Voltage       | 14.1V                                            | 14.1V            | 28.2V            | 28.2V                              | 28.0V               | 56.0V               | 56.0V           |
|                   | Float Charge Voltage            | 13.7V                                            | 13.7V            | 27.4V            | 27.4V                              | 27.4V               | 54.8V               | 54.8V           |
|                   | Output Current                  | 10A                                              | 20A              | 20A              | 20A                                | 30.0A               | 30.0A               | 30.0A           |
|                   | Load % @ 55°C                   | 100%                                             |                  |                  |                                    |                     |                     |                 |
|                   | Load % @ 70°C                   | 60%                                              |                  |                  |                                    |                     |                     |                 |
| PROTECTION        | Input Protection                | Hydraulic-Magnetic Circuit Breaker               |                  |                  |                                    |                     |                     |                 |
|                   | Battery Protection              | Hydraulic-Magnetic Circuit Breaker               |                  |                  |                                    |                     |                     |                 |
|                   | Load Protection                 | Hydraulic-Magnetic Circuit Breaker               |                  |                  |                                    |                     |                     |                 |
|                   | Low Voltage Disconnect          | Yes                                              | Yes              | Yes              | Yes                                | Optional            | Optional            |                 |
|                   | Environmental                   | Over Voltage / Over Temperature                  |                  |                  |                                    |                     |                     |                 |
| ENVIRONMENTAL     | Working Temperature             | -40°C - 60°C                                     |                  |                  |                                    |                     |                     |                 |
|                   | Storage Temperature             | -40°C - 85°C                                     |                  |                  |                                    |                     |                     |                 |
|                   | Working Humidity                | 20 - 95% RH non-condensing                       |                  |                  |                                    |                     |                     |                 |
| ENCLOSURE         | Dimensions (H x W x D)          | 18.2 X 11.7 X 8.2                                | 27.875 X 16 X 15 | 27.875 X 16 X 15 | 27.875 X 16 X 15                   | 31.25 x 30 x 18.875 | 31.25 x 30 x 18.875 | 49.00 x 32 x 19 |
|                   | Weight, Empty (lb)              | 8                                                | 30               | 30               | 30                                 | 67                  | 67                  | 91              |
|                   | Weight, with Controller (lb)    | 11                                               | 34               | 34               | 36                                 | 73                  | 80                  | 104             |
|                   | Material                        | A5052-H32 Aluminum Alloy                         |                  |                  |                                    |                     |                     |                 |
|                   | Finish                          | Polyester Powder Coat                            |                  |                  |                                    |                     |                     |                 |
|                   | Fastener                        | Stainless Steel Draw Latch with Padlockable Hasp |                  |                  |                                    |                     |                     |                 |
|                   | Hinge                           | Door Length Stainless Steel Piano Hinge          |                  |                  |                                    |                     |                     |                 |
|                   | Cable Ingress / Egress          | 1/2" NPT Polyamide Cord Grips                    |                  |                  |                                    |                     |                     |                 |
|                   | Environmental                   | NEMA 3R - Field Upgradable to NEMA 4X            |                  |                  |                                    |                     |                     |                 |
|                   | Mounting                        | Pole / Wall / Truss Tower                        |                  |                  | Pole / Wall / Ground / Truss Tower |                     |                     |                 |
| BATTERY ARRAY     | Shelf                           | N/A                                              | Optional         | Optional         | Yes                                | Yes                 | Yes                 | Yes             |
|                   | Array Total Energy Storage (Wh) | 432                                              | 2952             | 2952             | 5904                               | 5904                | 5904                | 5904            |
|                   | Array Voltage (Nominal)         | 12VDC                                            |                  |                  | 24VDC                              |                     | 48VDC               |                 |
|                   | Array Capacity @ C100           | 36                                               | 216              | 108              | 216                                | 216                 | 108                 | 108             |
|                   | Chemistry                       | Sealed Thixotropic Gel VRLA                      |                  |                  |                                    |                     |                     |                 |
|                   | Quantity                        | 1                                                | 2                | 2                | 4                                  | 4                   | 4                   | 8               |
|                   | Weight, Total (lb)              | 23.5                                             | 137              | 137              | 274                                | 274                 | 274                 | 548             |
| Weight, Each (lb) | 23.5                            | 68.5                                             | 68.5             | 68.5             | 68.5                               | 68.5                | 68.5                |                 |

Note: The information contained herein is subject to change without notice.

## POWER WHEN YOU NEED IT.

# SPP



| OVERVIEW      | Model Number                    | SPP12150-E 27L2                                  | SPP24400-E 27L2  | SPP24400-3 27L4                    | SPP24800-3 27L4     | SPP48800-3 27L4     | SPP48800-6 27L8 |
|---------------|---------------------------------|--------------------------------------------------|------------------|------------------------------------|---------------------|---------------------|-----------------|
|               | System Voltage (Handoff)        | 12 VDC Nominal                                   |                  | 24 VDC Nominal                     |                     | 48 VDC Nominal      |                 |
|               | Type                            | PWM                                              |                  |                                    | MPPT                |                     |                 |
|               | Charging Algorithm              | Multi Stage                                      |                  |                                    |                     |                     |                 |
|               | Surge Protection                | Transient                                        |                  |                                    |                     |                     |                 |
|               | Total Weight (lb)               | 130.0                                            | 158.0            | 212.0                              | 306.0               | 313.0               | 441.0           |
| SOLAR ARRAY   | Minimum Watts @ Max Power       | 150                                              | 400              | 400                                | 800                 | 800                 | 800             |
|               | Minimum Volts @ Max Power       | 17                                               | 34               | 34                                 | 34                  | 68                  | 68              |
|               | Nominal Array Voltage           | 12                                               | 24               | 24                                 | 24                  | 48                  | 48              |
|               | Weight (lb)                     | 44                                               | 72               | 72                                 | 129                 | 129                 | 129             |
| CHARGING      | Absorption Charge Voltage       | 14.1V                                            | 28.2V            | 28.2V                              | 28.0V               | 56.0V               | 56.0V           |
|               | Float Charge Voltage            | 13.7V                                            | 27.4V            | 27.4V                              | 27.4V               | 54.8V               | 54.8V           |
|               | Output Current                  | 20A                                              | 20A              | 20A                                | 30.0A               | 30.0A               | 30.0A           |
| PROTECTION    | Input Protection                | Hydraulic-Magnetic Circuit Breaker               |                  |                                    |                     |                     |                 |
|               | Battery Protection              | Hydraulic-Magnetic Circuit Breaker               |                  |                                    |                     |                     |                 |
|               | Load Protection                 | Hydraulic-Magnetic Circuit Breaker               |                  |                                    |                     |                     |                 |
|               | Low Voltage Disconnect          | Yes                                              |                  |                                    |                     |                     |                 |
|               | Environmental                   | Over Voltage / Over Temperature                  |                  |                                    |                     |                     |                 |
| ENVIRONMENTAL | Working Temperature             | -40°C - 60°C                                     |                  |                                    |                     |                     |                 |
|               | Storage Temperature             | -40°C - 85°C                                     |                  |                                    |                     |                     |                 |
|               | Working Humidity                | 20 - 95% RH non-condensing                       |                  |                                    |                     |                     |                 |
| ENCLOSURE     | Dimensions (H x W x D)          | 27.875 X 16 X 15                                 | 27.875 X 16 X 15 | 27.875 X 16 X 15                   | 31.25 x 30 x 18.875 | 31.25 x 30 x 18.875 | 49.00 x 32 x 19 |
|               | Weight, Empty (lb)              | 30                                               | 30               | 30                                 | 67                  | 67                  | 91              |
|               | Weight, with Controller (lb)    | 34                                               | 34               | 36                                 | 73                  | 80                  | 104             |
|               | Material                        | A5052-H32 Aluminum Alloy                         |                  |                                    |                     |                     |                 |
|               | Finish                          | Polyester Powder Coat                            |                  |                                    |                     |                     |                 |
|               | Fastener                        | Stainless Steel Draw Latch with Padlockable Hasp |                  |                                    |                     |                     |                 |
|               | Hinge                           | Door Length Stainless Steel Piano Hinge          |                  |                                    |                     |                     |                 |
|               | Cable Ingress / Egress          | 1/2" NPT Polyamide Cord Grips                    |                  |                                    |                     |                     |                 |
|               | Environmental                   | NEMA 3R - Field Upgradable to NEMA 4X            |                  |                                    |                     |                     |                 |
|               | Mounting                        | Pole / Wall / Truss Tower                        |                  | Pole / Wall / Ground / Truss Tower |                     |                     |                 |
|               | Shelf                           | Optional                                         |                  | Yes                                |                     |                     |                 |
| BATTERY ARRAY | Array Total Energy Storage (Wh) | 2400                                             | 2400             | 4800                               | 4800                | 4800                | 9600            |
|               | Array Voltage (Nominal)         | 12VDC                                            | 24VDC            |                                    | 48VDC               |                     |                 |
|               | Array Capacity @ C100 (Ah)      | 200                                              | 100              | 200                                | 200                 | 100                 | 200             |
|               | Chemistry                       | LiFePO <sub>4</sub>                              |                  |                                    |                     |                     |                 |
|               | Quantity                        | 2                                                | 2                | 4                                  | 4                   | 4                   | 8               |
|               | Weight, Total (lb)              | 52                                               | 52               | 104                                | 104                 | 104                 | 208             |
|               | Weight, Each (lb)               | 26.0                                             | 26.0             | 26.0                               | 26.0                | 26.0                | 26.0            |

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