# Solar Power Systems

## Reliable DC Power For Fixed Gas Detectors and Controllers Sizes from 1.0 watt to 15 watts, five to seven day continuous supply

- Designed and sized for fixed gas detection systems
- Each system includes solar panel, controller, battery, enclosure, circuit breakers and interconnect cables
- \* Long life silicon solar panels with limited 10 year warranty
- Solid state controller with low-voltage load disconnect and dead battery recovery capability
- Temperature compensated,
   4-stage charging extends
   battery life
- \* Controller LEDs show state of battery charge / drain
- \* Gelled-electrolyte battery sized to match output current
- \* Optional Class I Div 2 rated circuit breakers and sealed battery box
- \* Includes 2" pole mounting hardware and power cables
- **★** Operating temperature from -40°C to +60°C



GDS Corp Solar Power Systems include a silicon nitride multicrystalline solar panel, solid state charge controller with automatic low voltage load disconnect, gelled-electrolyte storage battery (single or dual), aluminum battery enclosure, pre-wired circuit breakers and all the necessary interconnect cables and pole mounting hardware. Systems are sized to provide 1W, 3W, 5W, 12W or 15 watts of continuous 12VDC power for up to five days of low sun conditions. All systems include solar panels and charge controllers rated for use in hazardous areas, and systems designated "H" include a sealed battery box with breather and Class I Division 2 rated circuit breakers for additional protection.

### SP-1, SP-1H

The SP-1 and SP-1H systems are designed to deliver 1 watt (80mA) of DC power for up to five days of low sun conditions. One watt is sufficient to power a single loop-powered or wireless toxic gas detector. One watt is also sufficient to power devices that require more than 80mA, but only draw current on an intermittent basis.

#### SP-3, SP-3H

The SP-3 and SP-3H systems are designed to deliver 3 watts (250mA) of DC power for up to five days of low sun conditions, or one watt for up to ten days of low sun conditions. Three watts is sufficient to power a single wired or wireless combustible or  $CO_2$  gas detector with catalytic bead or infrared sensor.

#### SP-5, SP-5H

The SP-5 and SP-5H systems are designed to deliver 5 watts (430mA) of DC power for up to five days of low sun conditions, or 3 watts for up to 7 days of low sun conditions. Five watts is sufficient to power a GDS-58XP, GDS-68XP, C2 Protector or C2 Quad Protector with warning strobe and local or remote toxic or combustible sensors.

#### SP-12

The SP-12 system is designed to deliver 12 watts (1.0A) of DC power for up to five days of low sun conditions, or 5 watts for up to 10 days of low sun conditions. Twelve watts is sufficient to power a SiteMAX Rapid Deployment system with warning strobe and local or remote toxic sensors or combustible sensors.

#### SP-15

The SP-15 system is designed to deliver 15 watts (1.25A) of DC power for up to five days of low sun conditions, or 12 watts for up to seven days of low sun conditions. Fifteen watts is sufficient to power a SiteMAX Rapid Deployment system with warning strobe, local or remote toxic sensors or combustible sensors, and warning horn or other large-current-draw device.



Authorized Distributor: GasDetectorsUSA.com Houston, TX USA 832-615-3588 sales@GasDetectorsUSA.com

| SP-1H, SP-1 Solar Power System<br>SPECIFICATIONS |   |
|--|---|
| Power Output                                     | 1.0 W @ 12VDC (80 mA) 5 day low sun             |
| Solar Panel                                      | 20W high efficiency silicon nitride             |
|  | 16.6" x 19.7" x 0.9" (LxWxD)                    |
|  | 5.5 pounds / 2.5 kg                             |
| Controller                                       | Fully electronic series design with LED indica- |
|  | tors, self-diagnostics and LV shutoff           |
| Storage  | 36AH Gelled-Electrolyte Battery                 |
|  | 23 pounds / 10.5 kg                             |
| Temperature                                      | -40°C to +60°C system temperature               |
| Mounting   | Battery box and pole mount hardware included    |
| Rating   | SP-1H includes Class 1 Div 2 rated solar panel, |
|  | controller and circuit breakers.                |
| Warranty   | Two years from date of purchase                 |

| SP             | SP-3H, SP-3 Solar Power System                  |  |
|----------------|---|--|
| SPECIFICATIONS |   |  |
| Power Output   | 3.0 W @ 12VDC (250mA), 5 day low sun            |  |
| Solar Panel    | 50W high efficiency silicon nitride             |  |
|                | 33" x 21" x 1.9" (LxWxD)                        |  |
|                | 13.2 pounds / 6.0 kg                            |  |
| Controller     | Fully electronic series design with LED indica- |  |
|                | tors, self-diagnostics and LV shutoff           |  |
| Storage        | 48AH Gelled-Electrolyte Battery                 |  |
|                | 32 pounds / 14.5 kg                             |  |
| Temperature    | -40°C to +60°C system temperature               |  |
| Mounting       | Battery box and pole mount hardware included    |  |
| Rating         | SP-3H includes Class 1 Div 2 rated solar panel, |  |
|                | controller and circuit breakers.                |  |
| Warranty       | Two years from date of purchase                 |  |

| SP-5H, SP-5 Solar Power System SPECIFICATIONS |   |
|---|---|
| Power Output                                  | 5.0 W @ 12VDC (0.42A), 5 day low sun  |
| Solar Panel                                   | 80W high efficiency silicon nitride<br>48" x 21" x 1.9" (LxWxD)<br>17 pounds / 7.7 kg |
| Controller                                    | Fully electronic series design with LED indicators, self-diagnostics and LV shutoff   |
| Storage                                       | 99AH Gelled-Electrolyte Battery<br>63 pounds / 28.6 kg                                |
| Temperature                                   | -40°C to +60°C system temperature   |
| Mounting                                      | Battery box and pole mount hardware included  |
| Rating  | SP-5H includes Class 1 Div 2 rated solar panel, controller and circuit breakers.      |
| Warranty                                      | Two years from date of purchase   |



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|              | SP-12 Solar Power System SPECIFICATIONS   |  |
|--------------|---|--|
| Power Output | 12.0 W @ 12VDC (1.0A), 5 day low sun  |  |
| Solar Panel  | 140W high efficiency silicon nitride<br>59.4" x 26.5" x 1.9" (LxWxD)                |  |
|              | 26.5 pounds / 12 kg   |  |
| Controller   | Fully electronic series design with LED indicators, self-diagnostics and LV shutoff |  |
| Storage      | 2x 84AH Gelled-Electrolyte Battery<br>Total 107.2 pounds / 48.6 kg                  |  |
| Temperature  | -40°C to +60°C system temperature   |  |
| Mounting     | Battery box and pole mount hardware included  |  |
| Rating       | Solar panel & charge controller only rated for Class I Division 2 hazardous areas   |  |
| Warranty     | Two years from date of purchase   |  |

|                     | SP-15 Solar Power System                        |  |  |
|---------------------|---|--|--|
|                     | SPECIFICATIONS                                  |  |  |
| <b>Power Output</b> | 15.0 W @ 12VDC (1.25A), 5 day low sun           |  |  |
| Solar Panel         | 140W high efficiency silicon nitride            |  |  |
|                     | 59.4" x 26.5" x 1.9" (LxWxD)                    |  |  |
|                     | 26.5 pounds / 12 kg                             |  |  |
| Controller          | Fully electronic series design with LED indica- |  |  |
|                     | tors, self-diagnostics and LV shutoff           |  |  |
| Storage             | 2x 108AH Gelled-Electrolyte Battery             |  |  |
|                     | Total 139 pounds / 63 kg                        |  |  |
| Temperature         | -40°C to +60°C system temperature               |  |  |
| Mounting            | Battery box and pole mount hardware included    |  |  |
| Rating              | Solar panel & charge controller only rated for  |  |  |
|                     | Class I Division 2 hazardous areas              |  |  |
| Warranty            | Two years from date of purchase                 |  |  |



Note: Solar power output varies with geographic location and time of year. Power specifications are based on proper installation in winter sun in locations defined as "4.5" shown above. Actual power output may be higher or lower then specified. Contact GDS Corp for an analysis of your solar power requirements or for a fully custom system designed to meet your exact needs.