

# REC TWINPEAK 2S 72 SERIES

## PREMIUM SOLAR PANELS WITH SUPERIOR PERFORMANCE

REC TwinPeak 2S 72 Series solar panels feature an innovative design with high efficiency and an industry-leading lightweight, yet robust construction, enabling customers to get the most out of the installation area.

Combined with the product quality and reliability of a strong and established European brand, REC TwinPeak 2S 72 panels are ideal for commercial rooftops worldwide.



**REDUCES BALANCE OF  
SYSTEM COSTS**



**IMPROVED PERFORMANCE  
IN SHADED CONDITIONS**



**INDUSTRY-LEADING  
LIGHTWEIGHT 72-CELL PANEL**



**100%  
PID FREE**



## *Ground Mount Solutions*



Driven



Ballasted



# Complete Single-Source Solutions

RBI Solar's ground mount solar systems are designed and engineered for each customer's site specific conditions to minimize the field installation labor by eliminating field welding, drilling, or other on-site fabrication. Our meticulous project planning and precise execution combine to provide you with solar racking solutions that are tailored to the unique conditions of your location while reducing your overall total project costs. RBI provides a wide range of PV mounting systems in various sizes to offer freedom and flexibility to support every type of PV module.

## *Why choose RBI Solar?*

- Single-source solutions aide in reduction of overall total project costs
- Streamlined production process
- Wider selection of component parts
- Higher strength steel with corrosion protection
- Uses less steel without sacrificing strength
- Pre-assembled components available
- Quick response & efficient communication
- Follow contours to mitigate civil/site work
- Nationwide installation services
- ETL Classified to UL Standard 2703
- 20-yr limited warranty
- 85+ years manufacturing experience & bankable financial backing





### Ground Mount Solutions

- Customizable, site-specific solutions
- Multiple foundations available
- ETL classified to UL Standard 2703



### Ballasted Mounting Solutions

- Two ballast foundation offerings
- Perfect for landfills, brownfields and non-penetrable sites



### Design & Engineering

- Licensed in-house engineers
- Stamped drawings, including foundations
- Code compliance
- Structural and foundation design
- On-site pile testing



### Manufacturing

- Multiple manufacturing facilities
- National & International capabilities
- ARRA compliant availability

### Installation

- Dedicated Project & Construction Managers
- Highly skilled & specialized installation crews
- Company-owned post driving equipment

*Our Job is to Make Yours Easier*

## 50/60kW, 1000Vdc String Inverters for North America

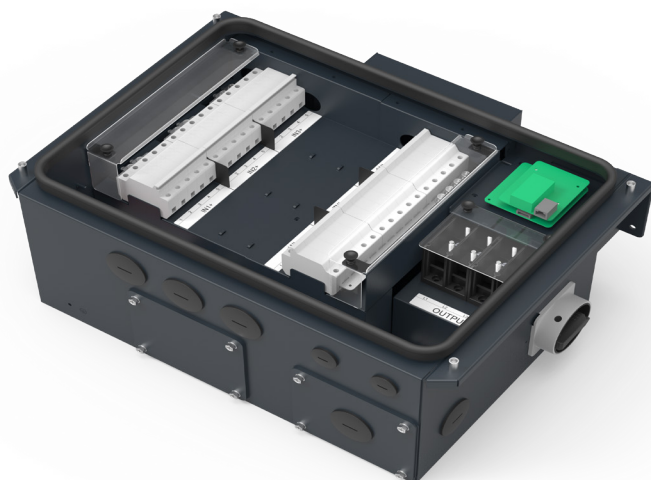
The 50 & 60kW (55 & 66kVA) medium power CPS three phase string inverters are designed for ground mount, large rooftop and carport applications. The units are high performance, advanced and reliable inverters designed specifically for the North American environment and grid. High efficiency at 98.8% peak and 98.5% CEC, wide operating voltages, broad temperature ranges and a NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications. The CPS 50/60KTL products ship with either the Standard wire-box or the Rapid Shutdown wire-box, each fully integrated and separable with touch safe fusing, monitoring, and AC and DC disconnect switches. The integrated PLC transmitter in the Rapid Shutdown wire-box enables PVRSS certified module-level rapid shutdown when used with the Tigo TS4-F/TS4-A-F products, APS RSD-S-PLC-A products, and NEP PVG-4 products. The CPS Flex Gateway enables monitoring, controls and remote product upgrades.

### Key Features

- NEC 2017 PVRSS Certified Rapid Shutdown
- 55 & 66kVA rating allows max rated Active Power @ $\pm 0.91PF$
- Selectable Max AC Apparent Power of 50/55kVA and 60/66kVA
- NEC 2014/17 compliant & UL listed Arc-Fault circuit protection
- 15-90° Mounting orientation for low profile roof installs
- Optional Flex Gateway enables remote FW upgrades
- Integrated AC & DC disconnect switches
- 3 MPPT's with 5 inputs each for maximum flexibility
- Copper and Aluminum compatible AC connections
- NEMA Type 4X outdoor rated, tough tested enclosure
- UL1741 SA Certified to CA Rule 21, including SA14 FW and SA15 VW
- Separable wire-box design for fast service
- Standard 10 year warranty with extensions to 20 years
- Generous 1.8 and 1.5 DC/AC Inverter Load Ratios



CPS SCA50KTL-DO/US-480  
CPS SCA60KTL-DO/US-480



50/60KTL Standard Wire-box



50/60KTL Rapid Shutdown Wire-box

| Model Name                                            | CPS SCA50KTL-DO/US-480                                                                | CPS SCA60KTL-DO/US-480 |
|-------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------|
| DC Input                                              |                                                                                       |                        |
| Max. PV Power                                         | 90kW (33kW per MPPT)                                                                  |                        |
| Max. DC Input Voltage                                 | 1000Vdc                                                                               |                        |
| Operating DC Input Voltage Range                      | 200-950Vdc                                                                            |                        |
| Start-up DC Input Voltage / Power                     | 330V / 80W                                                                            |                        |
| Number of MPP Trackers                                | 3                                                                                     |                        |
| MPPT Voltage Range @ PF>0.99                          | 480-850Vdc                                                                            | 540-850Vdc             |
| Max. PV Short-Circuit Current (Isc x 1.25)            | 204A (68A per MPPT)                                                                   |                        |
| Number of DC Inputs                                   | 15 inputs, 5 per MPPT                                                                 |                        |
| DC Disconnection Type                                 | Load-rated DC switch                                                                  |                        |
| DC Surge Protection                                   | Type II MOV, 2800V <sub>C</sub> , 20kA I <sub>TM</sub> (8/20μS)                       |                        |
| AC Output                                             |                                                                                       |                        |
| Rated AC Output Power @ PF>0.99 to ±0.91 <sup>1</sup> | 50kW                                                                                  | 60kW                   |
| Max. AC Apparent Power (Selectable)                   | 50/55kVA                                                                              | 60/66kVA               |
| Rated Output Voltage                                  | 480Vac                                                                                |                        |
| Output Voltage Range <sup>2</sup>                     | 422 - 528Vac                                                                          |                        |
| Grid Connection Type                                  | 3Φ / PE / N (Neutral optional)                                                        |                        |
| Max. AC Output Current @480Vac                        | 60.2/66.2A                                                                            | 72.2/79.4A             |
| Rated Output Frequency                                | 60Hz                                                                                  |                        |
| Output Frequency Range <sup>2</sup>                   | 57 - 63Hz                                                                             |                        |
| Power Factor                                          | >0.99 (±0.8 adjustable)                                                               |                        |
| Current THD @ Rated Load                              | <3%                                                                                   |                        |
| Max. Fault Current Contribution (1 Cycle RMS)         | 64.1A                                                                                 |                        |
| Max. OCPD Rating                                      | 110A                                                                                  | 125A                   |
| AC Disconnection Type                                 | Load-break rated AC switch                                                            |                        |
| AC Surge Protection                                   | Type II MOV, 1240V <sub>C</sub> , 15kA I <sub>TM</sub> (8/20μS)                       |                        |
| System and Performance                                |                                                                                       |                        |
| Topology                                              | Transformerless                                                                       |                        |
| Max. Efficiency                                       | 98.8%                                                                                 |                        |
| CEC Efficiency                                        | 98.5%                                                                                 |                        |
| Stand-by / Night Consumption                          | <1W                                                                                   |                        |
| Environment                                           |                                                                                       |                        |
| Enclosure Protection Degree                           | NEMA Type 4X                                                                          |                        |
| Cooling Method                                        | Variable speed cooling fans                                                           |                        |
| Operating Temperature Range <sup>3</sup>              | -22°F to +140°F / - 30°C to +60°C                                                     |                        |
| Non-Operating Temperature Range <sup>4</sup>          | No low temp minimum to +158°F / +70°C maximum                                         |                        |
| Operating Humidity                                    | 0 to 100%                                                                             |                        |
| Operating Altitude                                    | 13,123.4ft / 4000m (derating from 9842.5ft / 3000m)                                   |                        |
| Audible Noise                                         | <60dBA @ 1m and 25°C                                                                  |                        |
| Display and Communication                             |                                                                                       |                        |
| User Interface and Display                            | LCD+LED                                                                               |                        |
| Inverter Monitoring                                   | SunSpec, Modbus RS485                                                                 |                        |
| Site Level Monitoring                                 | CPS Flex Gateway (1 per 32 inverters)                                                 |                        |
| Modbus Data Mapping                                   | CPS                                                                                   |                        |
| Remote Diagnostics / FW Upgrade Functions             | Standard / (with Flex Gateway)                                                        |                        |
| Mechanical                                            |                                                                                       |                        |
| Dimensions (HxWxD)                                    | 39.4 x 23.6 x 10.24in. (1000 x 600 x 260mm)                                           |                        |
| Weight                                                | Inverter: 123.5lbs/56kg; Wire-box: 33lbs/15kg                                         |                        |
| Mounting / Installation Angle <sup>5</sup>            | 15 to 90 degrees from horizontal (vertical or angled)                                 |                        |
| AC Termination                                        | M8 Stud Type Terminal Block (Wire range: #6 - 3/0AWG CU/AL, Lugs not supplied)        |                        |
| DC Termination <sup>6</sup>                           | Screw Clamp, Neg. Busbar (RSD version <sup>6</sup> ) Wire range: #14 - #6AWG CU       |                        |
| Fused String Inputs (5 per MPPT) <sup>7</sup>         | 15A fuses provided (Fuse values up to 30A acceptable)                                 |                        |
| Safety                                                |                                                                                       |                        |
| Certifications and Standards                          | UL1741SA-2016, UL1699B, CSA-C22.2 NO.107.1-01, IEEE1547a-2014; FCC PART15             |                        |
| Selectable Grid Standard                              | IEEE 1547a-2014, CA Rule 21, ISO-NE                                                   |                        |
| Smart-Grid Features                                   | Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAR, Freq-Watt, Volt-Watt |                        |
| Warranty                                              |                                                                                       |                        |
| Standard                                              | 10 years                                                                              |                        |
| Extended Terms                                        | 15 and 20 years                                                                       |                        |

1) Active Power Derating begins; at PF=±0.91 to ±0.8 when Max AC Apparent Power is set to 55 or 66kVA.

2) The "Output Voltage Range" and "Output Frequency Range" may differ according to the specific grid standard.

3) Active Power Derating begins; at 40°C when PF=±0.9 and MPPT ≥V<sub>min</sub>, at 45°C when PF=1 and MPPT ≥V<sub>min</sub>, and at 50°C when PF=1 and MPPT V ≥ 700Vdc.

4) See user manual for further requirements regarding non-operating conditions.

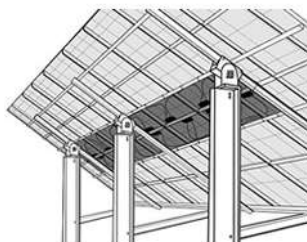
5) Shade Cover accessory required for installation angles of 75 degrees or less.

6) RSD wire-box only includes fuses/fuseholders on the positive polarity, compliant with NEC 2017, 690.9 (C).

7) Fuse values above 20A have additional spacing requirements or require the use of the Y-Comb Terminal Block. See user manual for details.



SOLARSCRIM is a simple, economical and functional barrier for electric code compliance of photovoltaic (PV) solar systems. We have two solution options; 1) for utilitarian (under the array), 2) for more aesthetic purposes (perimeter skirts). National Electric Code (NEC) Section 690.31(A) requires the wiring of all systems with voltage greater than 30 volts to not be "readily accessible." Depending on code interpretation of inspectors in your jurisdiction, SOLARSCRIM addresses this code requirement in a unique and aesthetically pleasing way.



**Under the Array**



**Perimeter Skirt**