

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

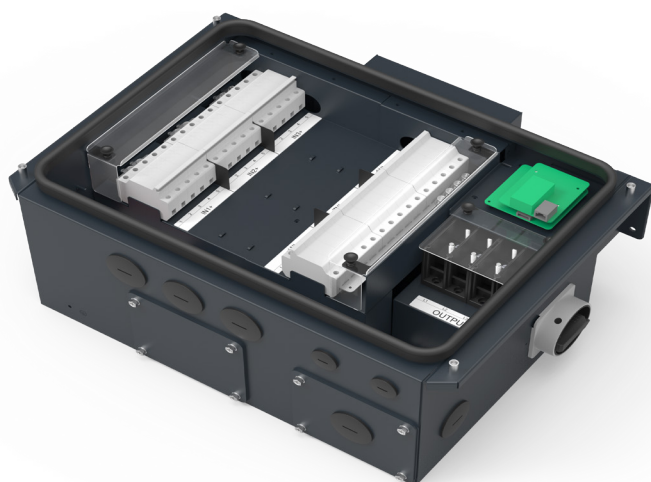
The 50 & 60kW (55 & 66kVA) medium power CPS three phase string inverters are designed for ground mount, large rooftop and carport applications. The units are high performance, advanced and reliable inverters designed specifically for the North American environment and grid. High efficiency at 98.8% peak 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 _C , 20kA I _{TM} (8/20μS)	
AC Output		
Rated AC Output Power @ PF>0.99 to ±0.91 ¹	50kW	60kW
Max. AC Apparent Power (Selectable)	50/55kVA	60/66kVA
Rated Output Voltage	480Vac	
Output Voltage Range ²	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 ²	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 _C , 15kA I _{TM} (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 ³	-22°F to +140°F / - 30°C to +60°C	
Non-Operating Temperature Range ⁴	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 ⁵	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 ⁶	Screw Clamp, Neg. Busbar (RSD version ⁶) Wire range: #14 - #6AWG CU	
Fused String Inputs (5 per MPPT) ⁷	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_{min}, at 45°C when PF=1 and MPPT ≥V_{min}, and at 50°C when PF=1 and MPPT V ≥ 700Vdc.

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

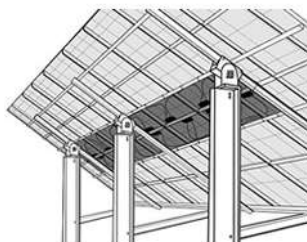
5) Shade Cover accessory required for installation angles of 75 degrees or less.

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