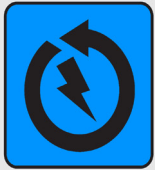


144 CELL SERIES

435W-445W



Class Leading Output:
445W top tier power performance



Advanced Technology:
Module efficiencies above 21%
MONO PERC 5 busbar cells



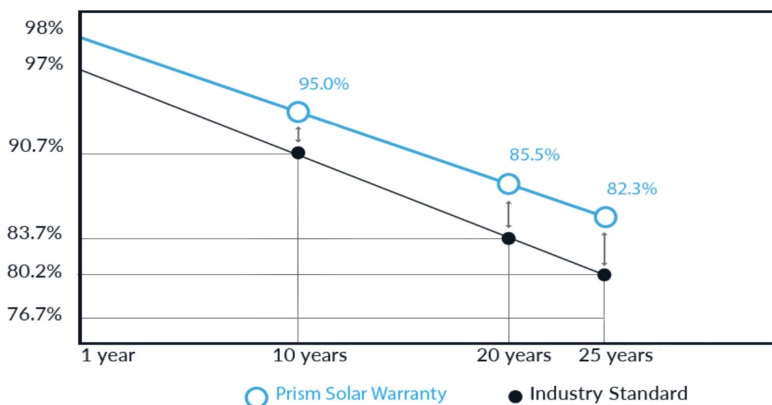
Reduced System Costs:
1500V robust framed design
drives lower installation costs



Certified Reliability:
Tested above and beyond
IEC Standards



Linear Performance Warranty



Proudly Engineering, Designed and Tested in the USA.



IEC 61215/ IEC 61730/ IEC 6170

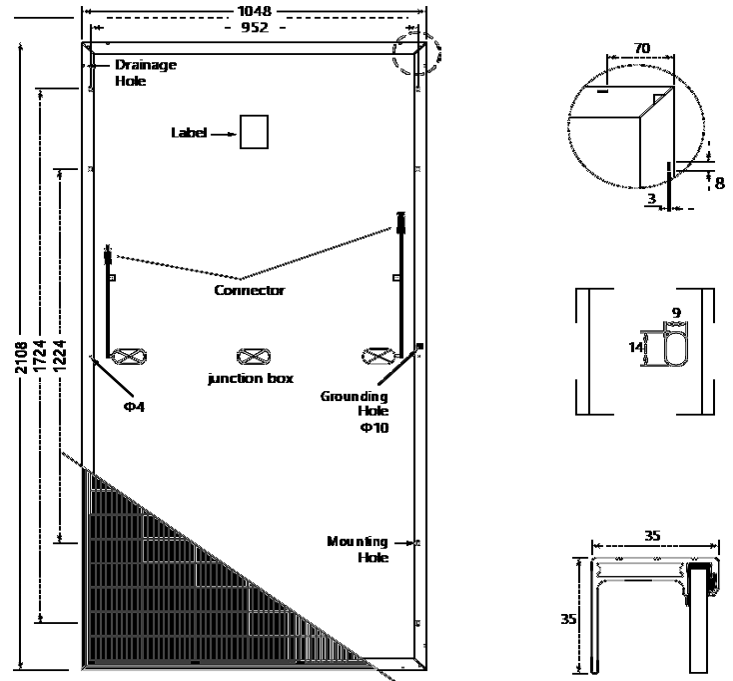
144 CELL SERIES

435-445W

Electrical Data PST-XXX-M72H 435W, 440W, 445W

Projected specifications @ STC

Parameters		STC ¹
Rated Power	P _{max} (W)	435/440/445
Rated Voltage	V _{mp} (V)	41.66/41.81/41.96
Rated Current	I _{mp} (A)	10.44/10.52/10.61
Open Circuit Voltage	V _{oc} (V)	50.35/50.50/50.58
Short Circuit Current	I _{sc} (A)	11.31/11.34/11.37
Module Efficiency	(%)	20.94/21.06/21.18
Max System Voltage	UL/IEC	1500V
Series Fuse Rating/Limiting Reverse Current		20A
Power Tolerance		-0/+5W
Electrical Parameter Tolerance		-5%/+5%
Power Temperature Coefficient		-0.37 %/°C
Voltage Temperature Coefficient (V _{oc})		-0.29 %/°C
Current Temperature Coefficient (I _{sc})		+0.05 %/°C
NOCT (C°)		45°C +/- 2°C



Dimensions, mm [in]

Length & width dimensions and j-box location are +/- 5mm.

Mechanical Data

Front Glass	3.2mm Tempered Low Iron, Anti-reflective coating
Frame Type	Anodized Aluminum Alloy
Bypass Diodes	3
Junction Box	IP68 with bypass-diodes
Cable (Type/Gauge/Length)	PV Wire 12 AWG 1400mm 4mm ²
Connectors	MC4 compatible
Exterior Glass Dimensions	2108mm X 1048mm X 35mm (83in X 41.26in X 1.38in)
Weight	25kg (55 lbs.)

Operating Conditions

Temperature	-40°C to 85°C (-40°F to 185°F)
Max Mechanical Load ³	5400 Pa wind load 5400 Pa snow load
Hail Safety Impact Velocity	

Certifications & Warranty

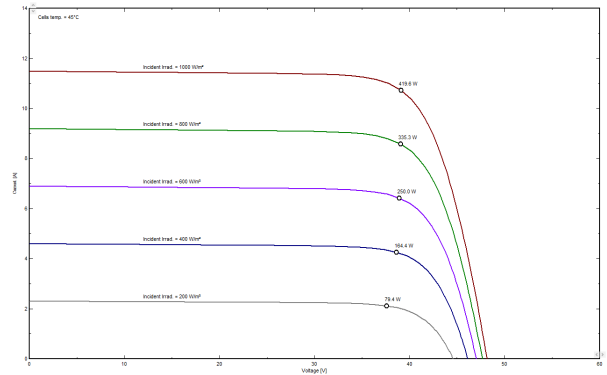
Certifications and Listings	IEC61215/61730, CEC, Salt Mist
Fire Rating	Type=1 ; Class C
Limited Warranty (Workmanship/Power)	25 Years/25 Years Output ⁴

1 - Measured at Standard Testing Conditions (STC): cell temp 25°C, AM1.5, 1000W/m².

2 - Length and width dimensions are +/- 5mm.

3 - To achieve this max weight loading, the support and racking system must meet the mechanical weight loading specified.

4 - Please see the Prism Solar Warranty for complete details.



Temperature Dependence PST-445W-M72H

Prism Solar
TECHNOLOGIES

520 Broad Street, Newark NJ 07102

845-883-4200

www.prismsolar.com

IMPORTANT: Prism modules are rated at STC conditions

CAUTION: Read the Installation Manual and Design Guide carefully before using this product. All specifications are subject to change without notice.

PST-xxxW-M72H specifications, all values subject to change without notice. All rights reserved. rev 1

100/125kW, 1500Vdc String Inverters for North America



The 100 & 125kW high power CPS three phase string inverters are designed for ground mount applications. The units are high performance, advanced and reliable inverters designed specifically for the North American environment and grid. High efficiency at 99.1% 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 100/125kW products ship with the Standard or Centralized Wire-box, each fully integrated and separable with AC and DC disconnect switches. The Standard Wire-box includes touch safe fusing for up to 20 strings. The CPS Flex Gateway enables communication, controls and remote product upgrades.

Key Features

- NFPA 70, NEC 2014 and 2017 compliant
- Touch safe DC Fuse holders adds convenience and safety
- CPS Flex Gateway enables remote FW upgrades
- Integrated AC & DC disconnect switches
- 1 MPPT with 20 fused inputs for maximum flexibility
- Copper and Aluminum compatible AC connections
- NEMA Type 4X outdoor rated, tough tested enclosure
- Advanced Smart-Grid features (CA Rule 21 certified)
- kVA Headroom yields 100kW @ 0.9PF and 125kW @ 0.95PF
- Generous 1.87 and 1.5 DC/AC Inverter Load Ratios
- Separable wire-box design for fast service
- Standard 5 year warranty with extensions to 20 years



100/125KTL Standard Wire-box



100/125KTL Centralized Wire-box



Model Name	CPS SCH100KTL-DO/US-600	CPS SCH125KTL-DO/US-600
DC Input		
Max. PV Power	187.5kW	
Max. DC Input Voltage	1500V	
Operating DC Input Voltage Range	860-1450Vdc	
Start-up DC Input Voltage / Power	900V / 250W	
Number of MPP Trackers	1	
MPPT Voltage Range ¹	870-1300Vdc	
Max. PV Input Current (Isc x1.25)	275A	
Number of DC Inputs	20 PV source circuits, pos. & neg. fused (Standard Wire-box) 1 PV output circuit, 1-2 terminations per pole, non-fused (Centralized Wire-box)	
DC Disconnection Type	Load-rated DC switch	
DC Surge Protection	Type II MOV (with indicator/remote signaling), Up=2.5kV, In=20kA (8/20uS)	
AC Output		
Rated AC Output Power	100kW	125kW
Max. AC Output Power ²	100kVA (111KVA @ PF>0.9)	125kVA (132KVA @ PF>0.95)
Rated Output Voltage	600Vac	
Output Voltage Range ³	528-660Vac	
Grid Connection Type ⁴	3Φ / PE / N (Neutral optional)	
Max. AC Output Current @600Vac	96.2/106.8A	120.3/127.2A
Rated Output Frequency	60Hz	
Output Frequency Range ³	57-63Hz	
Power Factor	>0.99 (±0.8 adjustable)	>0.99 (±0.8 adjustable)
Current THD	<3%	
Max. Fault Current Contribution (1-cycle RMS)	41.47A	
Max. OCPD Rating	150A	175A
AC Disconnection Type	Load-rated AC switch	
AC Surge Protection	Type II MOV (with indicator/remote signaling), Up=2.5kV, In=20kA (8/20uS)	
System		
Topology	Transformerless	
Max. Efficiency	99.1%	
CEC Efficiency	98.5%	
Stand-by / Night Consumption	<4W	
Environment		
Enclosure Protection Degree	NEMA Type 4X	
Cooling Method	Variable speed cooling fans	
Operating Temperature Range	-22°F to +140°F / -30°C to +60°C (derating from +113°F / +45°C)	
Non-Operating Temperature Range ⁵	-40°F to +158°F / -40°C to +70°C maximum	
Operating Humidity	0-100%	
Operating Altitude	8202ft / 2500m (no derating)	
Audible Noise	<65dBA@1m and 25°C	
Display and Communication		
User Interface and Display	LED Indicators, WiFi + APP	
Inverter Monitoring	Modbus RS485	
Site Level Monitoring	CPS Flex Gateway (1 per 32 inverters)	
Modbus Data Mapping	SunSpec/CPS	
Remote Diagnostics / FW Upgrade Functions	Standard / (with Flex Gateway)	
Mechanical		
Dimensions (WxHxD)	45.28x24.25x9.84in (1150x616x250mm) with Standard Wire-box 39.37x24.25x9.84in (1000x616x250mm) with Centralized Wire-box	
Weight	Inverter: 121lbs / 55kg; Wire-box: 55lbs / 25kg (Standard Wire-box); 33lbs / 15kg (Centralized Wire-box)	
Mounting / Installation Angle	15 - 90 degrees from horizontal (vertical or angled)	
AC Termination	M10 Stud Type Terminal Block [3Φ] (Wire range: 1/0AWG - 500kcmil CU/AL, Lugs not supplied) Screw Clamp Terminal Block [N] (#12 - 1/0AWG CU/AL)	
DC Termination	Screw Clamp Fuse Holder (Wire range: #12 - #6AWG CU) - Standard Wire-box Busbar, M8 PEMserts (Wire range: #1AWG - 250kcmil CU/AL, Lugs not supplied) - Centralized Wire-box	
Fused String Inputs	15A or 20A fuses provided (Determined by product SKU)	
Safety		
Safety and EMC Standard	UL1741-SA-2016, 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 ⁶	5 years	
Extended Terms	10, 15 and 20 years	

1) See user manual for further information regarding MPPT Voltage Range when operating at non-unity PF

2) "Max. AC Apparent Power" rating valid within MPPT voltage range and temperature range of -30°C to +40°C (-22°F to +104°F) for 100KW PF ≥0.9 and 125KW PF ≥0.95

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

4) Wye neutral-grounded, Delta may not be corner-grounded.

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

6) 5 year warranty effective for units purchased after October 1st, 2019.