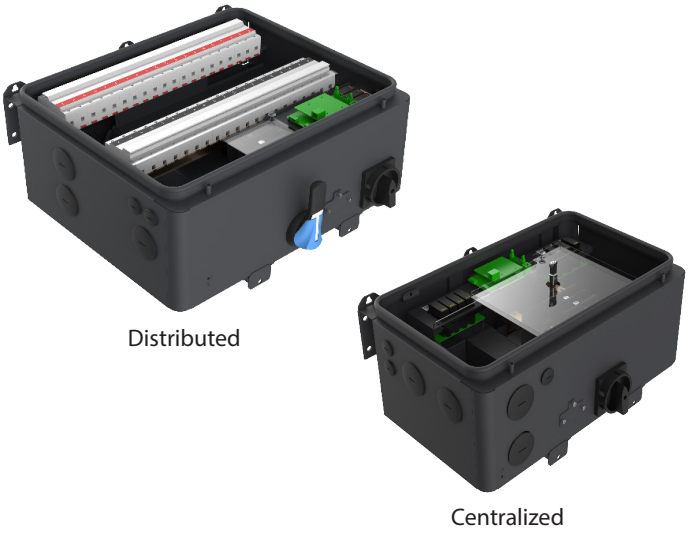
100/125 kW, 1500 Vdc String Inverters for North America

CPS SCH100/125KTL-DO/US-600

The 100 and 125 kW high power CPS three-phase string inverters are designed for ground mount and carport applications at 1500 Vdc. 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 100/125 kW products ship with the Distributed or Centralized Wire Box, each fully integrated and separable with AC and DC disconnect switches. Enhanced DC Wire Boxes are available to allow DC disconnection under short circuit conditions. The CPS FlexOM Gateway enables communication, controls, and remote product upgrades.

Key Features

- UL 1741-SA/SB and IEEE 1547-2018 certified
- Touch-safe DC Fuse holders add convenience and safety
- CPS FlexOM Gateway enables remote firmware upgrades
- Integrated AC and DC disconnect switches
- 1 MPPT with 20 fused inputs for maximum flexibility
- Copper- and aluminum-compatible AC connections
- NEMA Type 4X outdoor rated enclosure
- Advanced Smart-Grid features (CA Rule 21 certified)
- kVA headroom yields 100 kW @ 0.9 PF and 125 kW @ 0.95 PF
- Generous 1.87 (100 kW) and 1.5 (125 kW) DC/AC inverter load ratios
- Separable wire box design for fast service
- Enhanced DC wire boxes available



Distributed

Centralized

Standard Wire Boxes

Distributed

Centralized

Enhanced DC Wire Boxes

Chint Power Systems America
1380 Presidential Drive, Suite 100, Richardson, TX 75081
Tel: 855-584-7168 Mail: AmericaSales@chintpower.com Web: www.chintpowersystems.com

Model Name	CPS SCH100KTL-DO/US-600	CPS SCH125KTL-DO/US-600
DC Input		
Max. PV power	187.5 kW	
Max. DC input voltage	1500 V	
Operating DC input voltage range	860-1450 Vdc	
Start-up DC input voltage / power	900 V / 250 W	
Number of MPP trackers	1	
MPPT voltage range[1]	870-1300 Vdc	
Max. PV short-circuit current[2]	220 A	
Number of DC inputs	Distributed Wire Box: 20 PV source circuits, positive and negative fused Centralized Wire Box: 1 input circuit, 1-2 terminations per pole, non-fused	
DC disconnection type	Load-rated DC switch	
DC surge protection	Type II MOV (with indicator/remote signaling)	
AC Output		
Rated AC output power[3]	100 kW	125 kW
Max. AC apparent power (selectable[4])	100 kVA / 111 kVA (PF>0.9)	125 kVA / 132 kVA (PF>0.95)
Rated output voltage	600 Vac	
Output voltage range[5]	528-660 Vac	
Grid connection type[6]	3Φ / PE / N (neutral optional)	
Max. AC output current @ 600 Vac	96.2 A (@ 100 kVA) / 106.8 A (@ 111 kVA)	120.3 A (@ 125 kVA) / 127.0 A (@ 132 kVA)
Rated output frequency	60 Hz	
Output frequency range[5]	57-63 Hz	
Power factor	>0.99 (±0.8 adjustable)	
Current TRD @ rated load	< 3%	
Max. fault current contribution (1 cycle RMS)	41.47 A	
Max. OCPD rating	200 A	
AC disconnection type	Load-rated AC switch	
AC surge protection	Type II MOV (with indicator/remote signaling)	
System		
Topology	Transformerless	
Max. efficiency	99.1%	
CEC efficiency	98.5%	
Standby / night consumption	< 4 W	
Environment		
Enclosure protection degree	NEMA Type 4X	
Cooling method	Variable speed cooling fans	
Operating temperature range[4]	-22°F to 140°F / -30°C to 60°C	
Non-operating temperature range	-40°F to 158°F / -40°C to 70°C	
Operating humidity	0-100%	
Operating altitude	8202 ft / 2500 m (no derating)	
Audible noise	< 65 dBA @ 1 m and 77°F (25°C)	
Display and Communication		
User interface and display	LED indicators, Wi-Fi and app	
Inverter monitoring	Modbus RS485	
Site-level monitoring	CPS FlexOM Gateway (1 per 32 inverters)	
Modbus data mapping	SunSpec / CPS	
Remote diagnostics / firmware upgrade functions	Standard / (with FlexOM Gateway)	
Mechanical		
Dimensions (W × H × D)	Distributed Wire Box: 45.28 × 24.25 × 9.84 in (1150 × 616 × 250 mm) Centralized Wire Box: 39.37 × 24.25 × 9.84 in (1000 × 616 × 250 mm)	
Weight	Inverter: 121 lbs (55 kg) Distributed Wire Box: 55 lbs (25 kg) Centralized Wire Box: 33 lbs (15 kg)	
Mounting / installation angle	15-90 degrees from horizontal (vertical or angled)	
AC termination	M10 stud type terminal [3Φ] (wire range: 1/0 AWG-500 kcmil CU/AL; lugs not supplied) Screw clamp terminal block [N] (#12-1/0 AWG CU/AL)	
DC termination	Distributed Wire Box: Screw clamp fuse holder (wire range: #12-#6 AWG CU) Centralized Wire Box: Busbar, M10 bolts (wire range: #1 AWG-500 kcmil CU/AL [1 termination per pole], #1 AWG-300 kcmil CU/AL [2 terminations per pole]; lugs not supplied)	
Fused string inputs	Distributed Wire Boxes: 20 A or 25 A fuses provided (fuse values up to 30 A acceptable)	
Safety		
Certifications and standards	UL 1741-SA/SB Ed. 3, CSA-C22.2 NO.107.1-01, IEEE 1547-2018, FCC PART15	
Selectable grid standards	IEEE 1547a-2014, IEEE 1547-2018[7], CA Rule 21, ISO-NE	
Smart-grid features	Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAR, Freq-Watt, Vol-Watt	
Warranty		
Standard	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) The sum of parallel-connected PV module short-circuit currents.
3) 100 kW active power derating begins at 113°F (45°C) when MPPT ≥ Vmin; 125 kW active power derating begins at 107.6°F (42°C) when PF = ±0.95 and MPPT ≥ Vmin, and at 113°F (45°C) when PF=1 and MPPT ≥ Vmin.
4) Inverters are factory set to 100 kVA and 125 kVA by default. Contact CPS to enable the higher kVA setting.
5) The "output voltage range" and "output frequency range" may differ according to the specific grid standard.
6) Delta configurations must not be corner-grounded.
7) Firmware version 12.0 or later required.

/ SHP 125-US-21 / SHP 150-US-21 / SHP 165-US-21 / SHP 172-US-21

Sunny Highpower PEAK3-US

125 / 150 / 165 / 172

A superior distributed generation solution for large-scale power plants

25 YEAR DESIGN LIFE

SMA Smart Connected

c UL us

Cost effective
- Modular architecture reduces BOS and maximizes system uptime
- Compact design and high power density maximize transportation and logistical efficiency

Maximum flexibility
- Scalable 1,500 VDC building block with best-in-class performance
- Flexible architecture creates scalability while maximizing land usage

Simple install, commissioning
- Ergonomic handling and simple connections enable quick installation
- Centralized commissioning and control with SMA Data Manager

Highly innovative
- SMA Smart Connected reduces O&M costs and simplifies field-service
- Powered by award winning ennexOS cross sector energy management platform

The Sunny Highpower PEAK3 1,500 VDC inverter offers high power density in a modular architecture that achieves a cost-optimized solution for large-scale PV integrators.

With fast, simple installation and commissioning, the PEAK3 is accelerating the path to energization. SMA has also brought its field-proven Smart Connected technology to the PEAK3, which simplifies O&M and contributes to lower lifetime service costs. The PEAK3 power plant solution is powered by the ennexOS cross sector energy management platform, 2018 winner of the Intersolar smarter E AWARD.

Technical Data	Sunny Highpower PEAK3 125-US	Sunny Highpower PEAK3 150-US	Sunny Highpower PEAK3 165-US	Sunny Highpower PEAK3 172-US
Input (DC)				
Maximum array power [1]	250 kWp	300 kWp	330 kWp	344 kWp
Maximum system voltage	1500 Vdc			
Rated MPP voltage range	705 V ... 1450 V	880 V ... 1450 V	924 V ... 1450 V	968 V ... 1450 V
MPPT operating voltage range	684 V ... 1500 V	855 V ... 1500 V	898 V ... 1500 V	941 V ... 1500 V
MPP trackers	1			
Maximum operating input current	180 A			
Maximum input short-circuit current	325 A			
Output (AC)				
Nominal AC power	125 kW	150 kW	165 kW	172 kW
Maximum apparent power	125 kVA	150 kVA	165 kVA	172 kVA
Output phases / line connections	3 / 3-PE			
Nominal AC voltage	480 V	600 V	630 V	660 V
Compatible transformer winding configuration	Wye-grounded			
Maximum output current	151 A			
Rated grid frequency	60 Hz			
Grid frequency / range	50 Hz, 60 Hz / -6 Hz ... +6 Hz			
Power factor at rated power / adjustable displacement	1 / 0.8 leading ... 0.8 lagging			
Harmonics (THD)	<3%			
Efficiency				
CEC efficiency	98.5 %	99.0 %	99.0 %	99.0 %
Protection and safety features				
Ground fault monitoring: Riso / Differential current	● / ●			
DC reverse polarity protection	●			
AC short circuit protection	●			
Monitored surge protection (Type 2): DC / AC	● / ●			
Protection class / overvoltage category (as per UL 840)	I / IV			
General data				
Device dimensions (W / H / D)	770 / 830 / 462 mm (30.3 / 32.7 / 18.2 in)			
Device weight	99 kg (218 lbs)			
Operating temperature range	-25°C ... +60°C (-13°F ... +140°F)			
Storage temperature range	-40°C ... +70°C (-40°F ... +158°F)			
Audible noise emission (full power @ 1m and 25°C)	< 69 dB(A)			
Internal consumption at night	< 5 W			
Topology	Transformerless			
Cooling concept	OptiCool (forced convection, variable speed fans)			
Enclosure protection rating	Type 4X			
Maximum permissible relative humidity (non-condensing)	100%			
Additional information				
Mounting	Rack mount			
DC connection	Terminal lug (up to 600 kcmil CU/AL)			
AC connection	Screw terminal (up to 300 kcmil CU/AL)			
LED indicators (Status/Fault/Communication)	●			
SMA Speedwire (Ethernet network interface)	● (2 x RJ45 ports)			
Data protocols: SMA Modbus / SunSpec Modbus	● / ●			
Integrated Plant Control / Q on Demand 24/7	● / ●			
Off-grid capable / SMA Hybrid Controller compatible	– / ●			
Monitoring				
SMA Sunny Portal (monitoring portal)	No cost for the lifetime of the system			
SMA Smart Connected (monitoring and remote O&M service)	No cost on inverters under warranty			
Supported protocols for outbound data	SMA external API, Modbus, FTP			
Certifications				
Certifications and approvals (pending)	UL 62109, UL 1998, CAN/CSA-C22.2 No.62109			
Manufacturer's Declaration of Design Life	25 years			
FCC compliance	FCC Part 15, Class A			
Grid interconnection standards	IEEE 1547:2018, UL 1741-SA - CA Rule 21, HECO Rule 14H, UL1741SB			
Advanced grid support capabilities	L/HFRT, L/HVRT, Volt-VAr, Volt-Watt, Frequency-Watt, Ramp Rate Control, Fixed Power Factor			
Warranty				
Standard	5 years			
Optional extensions (total warranty coverage cannot exceed 25 years)	+5 / +10 / +15 / +20 years			
1) Higher DC array power permitted via site inverter load modeling in SMA Sunny Design				
Type designation	SHP 125-US-21	SHP 150-US-21	SHP 165-US-21	SHP 172-US-21

● Standard features ○ Optional features – Not available

Toll Free +1 888 4 SMA USA
www.SMA-America.com

SMA America, LLC

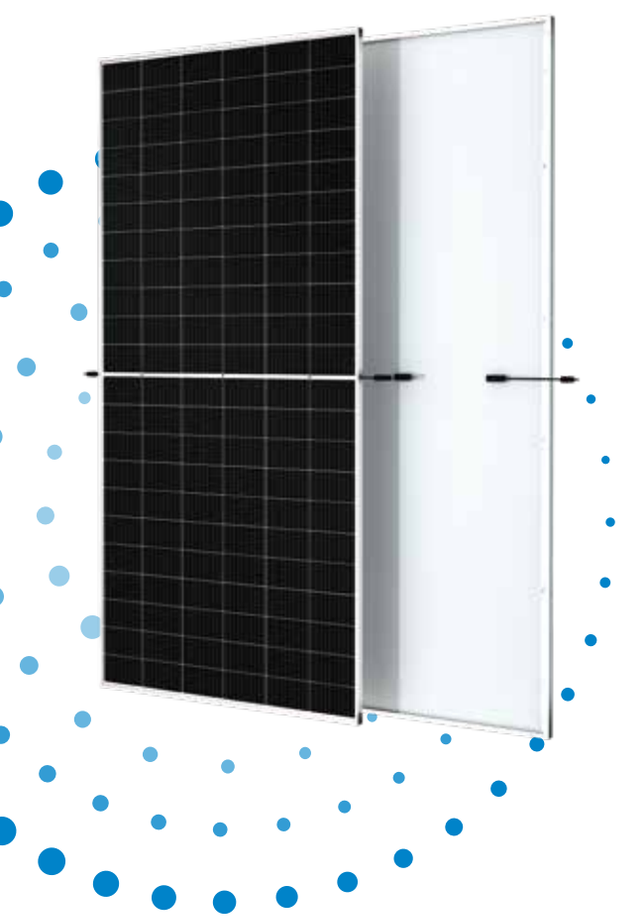
Vertex

BACKSHEET MONOCRYSTALLINE MODULE

PRODUCT: TSM-XXXDE19R

PRODUCT RANGE: 560-585W

585W	0~+5W	21.6%
MAXIMUM POWER OUTPUT	BINNING TOLERANCE	MAXIMUM EFFICIENCY



High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time
- Lower first year and annual degradation
- Designed for compatibility with existing mainstream system components
- Higher return on Investment

High power up to 585W

- Up to 21.6% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection

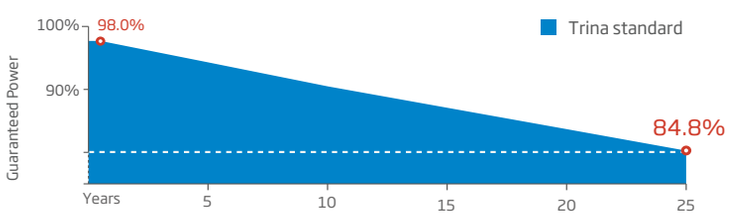
High reliability

- Minimized micro-cracks with innovative non-destructive cutting technology
- Resistant to harsh environments such as salt, ammonia, high temperature and high humidity areas and Fire class rating C
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load

High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions
- Lower temperature coefficient (-0.34%) and operating temperature

Trina Solar's Backsheet Performance Warranty



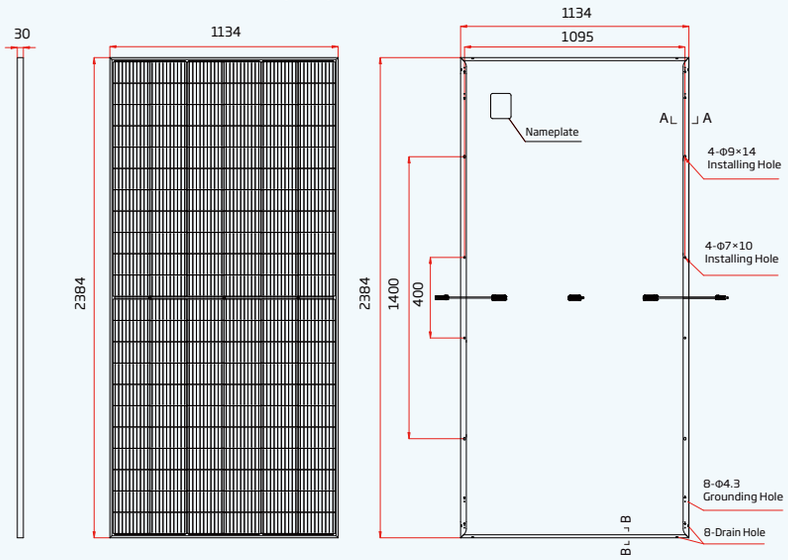
Comprehensive Products and System Certificates

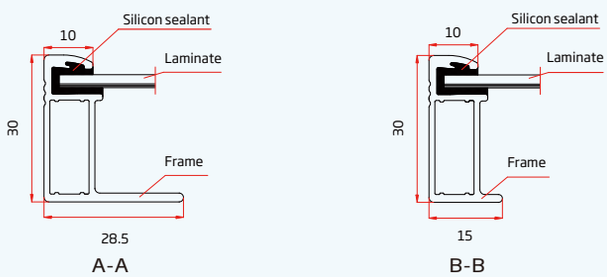
IEC61215/IEC61730/IEC61701/IEC62716
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse Gases Emissions Verification
ISO45001: Occupational Health and Safety Management System

Trinasolar

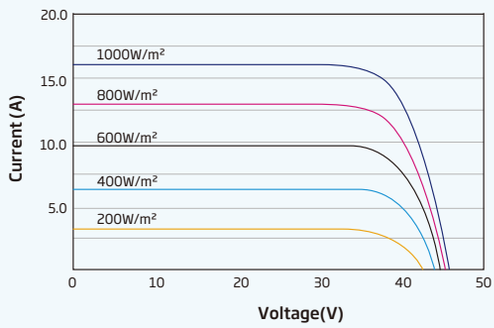
Vertex BACKSHEET MONOCRYSTALLINE MODULE

DIMENSIONS OF PV MODULE(mm)

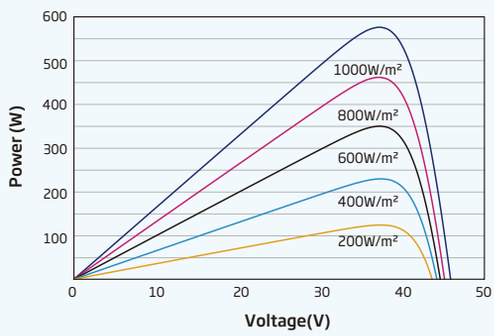




I-V CURVES OF PV MODULE(575 W)



P-V CURVES OF PV MODULE(575W)



ELECTRICAL DATA (STC) TSM-XXXDE19R(XXX=560-585)

Peak Power Watts-PMAX (Wp)*	560	565	570	575	580	585
Binning Tolerance-PMAX (W)	0 ~ +5					
Maximum Power Voltage-VMPP (V)	38.0	38.3	38.5	38.8	39.0	39.3
Maximum Power Current-IMPP (A)	14.72	14.76	14.79	14.83	14.86	14.90
Open Circuit Voltage-VOC (V)	45.3	45.6	45.8	46.1	46.3	46.6
Short Circuit Current-ISC (A)	15.76	15.81	15.85	15.90	15.94	15.99
Module Efficiency η m (%)	20.7	20.9	21.1	21.3	21.5	21.6

STC: Irrdiance 1000W/m2, Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%.

ELECTRICAL DATA (NOCT)

Maximum Power-PMAX (Wp)	423	428	431	435	439	443
Maximum Power Voltage-VMPP (V)	35.1	35.3	35.5	35.8	35.9	36.2
Maximum Power Current-IMPP (A)	12.06	12.10	12.13	12.17	12.20	12.24
Open Circuit Voltage-VOC (V)	42.6	42.9	43.1	43.4	43.6	43.9
Short Circuit Current-ISC (A)	12.70	12.74	12.77	12.81	12.84	12.88

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
No. of cells	132 cells
Module Dimensions	2384×1134×30 mm (93.86×44.65×1.18 inches)
Weight	28. 8kg (63.49 lb)
Glass	3.2 mm (0.13 inches), High Transmission, Tempered Glass
Encapsulant material	EVA/POE
Backsheet	White
Frame	30mm(1.18 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: 350/280 mm(13.78/11.02 inches) Length can be customized
Connector	Staubli MC4 EVO2 / Trina Solar TS4 Plus/ Trina Solar TS4

TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of PMAX	- 0.34%/°C
Temperature Coefficient of VOC	- 0.25%/°C
Temperature Coefficient of ISC	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	30A

WARRANTY

12 year Product Workmanship Warranty

25 year Power Warranty

2% first year degradation

0.55% Annual Power Attenuation

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 36 pieces

Modules per 40' container: 720 pieces

Trinasolar

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

Version number: TSM_EN_2023_Aus_B
Country of Origin: China

www.trinasolar.com

TIGER Neo III

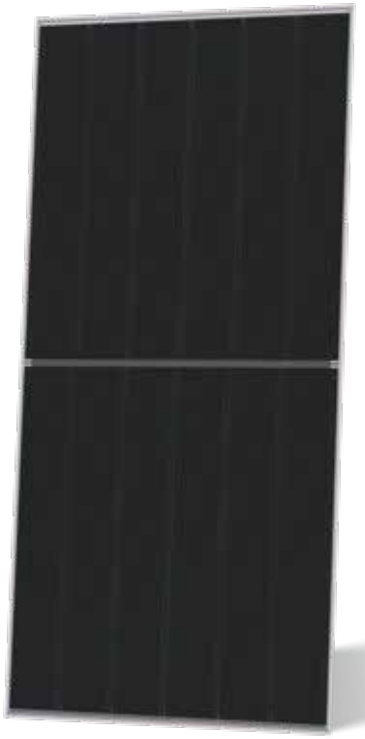
Solar JinKO

66QL6-BDV

650-670 Watt

85±5% Bifaciality

BIFACIAL MODULE

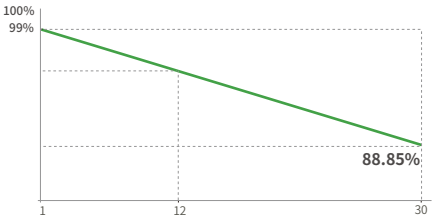


Higher Power on Front Side

Leading power class based on the enhanced N-type TOPCon platform, through cutting-edge technology and an optimized layout that captures more sunlight.

Better Generation on Rear Side

Enabling industry-leading bifaciality in TOPCon cells through an improved structure that enhances light absorption and trapping.



12Year Product Warranty | **30**Year Linear Power Warranty | **1**% First-year Degradation | **0.35**% Annual Degradation Over 30 Years

Optimized Heat Resistance

Optimized temperature coefficient via advanced graphical patterning, busbar and multi-cells technology.

Proven Low Light Performance

Enhanced cell structure ensures superior module performance under low-light conditions.

- IEC61215:2021 / IEC61730:2023
- IEC61701 / IEC62716 / IEC60068 / IEC62804
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environment Management System
- ISO45001:2018: Occupational health and safety management systems

Industry Leading Warranty

Advanced metallization and iterated module encapsulation deliver superior resistance to PID, LID / LeTID, and UV degradation.

Mechanical Load Enhanced

Certified to withstand:
5400 Pa front side max static test load
2400 Pa rear side max static test load

CLEAN ENERGY COUNCIL MEMBER

POSITIVE QUALITY™ Continuous Quality Assurance

JKM650-670N-66QL6-BDV-F2-EN

66QL6-BDV 650-670 Watt

Mechanical Characteristics

Cell Type	N- type Mono-crystalline
No. of Cells	264 (66×4)
Dimensions	2382×1134×30 mm
Weight	32.5 kg
Front Glass	2.0 mm, Anti-reflection Coating
Back Glass	2.0 mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Protection Class	Class II
IEC Fire Type	Class C
Connector Type	JK03M / JK03M2 / Others*
Output Cables (Including Connector)	4.0 mm^2 (+): 600 mm , (-): 400 mm or Customized Length

*MC4-EVO2 available upon request and subject to availability

Packaging Configuration

Pallet Dimensions	2396×1110×1251 mm
Packing Detail (Two pallets = One stack)	36 pcs/pallet, 72 pcs/stack, 720 pcs/ 40'HQ Container

Specifications (STC)

Maximum Power - Pmax [Wp]	650	655	660	665	670
Maximum Power Voltage - Vmp [V]	42.57	42.70	42.83	42.96	43.09
Maximum Power Current - Imp [A]	15.27	15.34	15.41	15.48	15.55
Open-circuit Voltage - Voc [V]	50.26	50.44	50.62	50.80	50.98
Short-circuit Current - Isc [A]	15.98	16.04	16.10	16.16	16.22
Module Efficiency STC [%]	24.06	24.25	24.43	24.62	24.80
Bifacial Factor	85 ± 5%				
Power Tolerence	0 ~ +3 %				
Temperature Coefficient of Pmax	-0.26 %/°C				
Temperature Coefficient of Voc	-0.24 %/°C				
Temperature Coefficient of Isc	0.046 %/°C				

STC: Irradiance 1000W/m^2, Cell Temperature 25°C, AM=1.5

Specifications (BNPI)

Maximum Power - Pmax [Wp]	724	729	735	741	746
Maximum Power Voltage - Vmp [V]	42.52	42.69	42.86	43.03	43.20
Maximum Power Current - Imp [A]	17.04	17.10	17.17	17.23	17.30
Open-circuit Voltage - Voc [V]	50.38	50.56	50.74	50.92	51.10
Short-circuit Current - Isc [A]	17.80	17.87	17.94	18.00	18.07

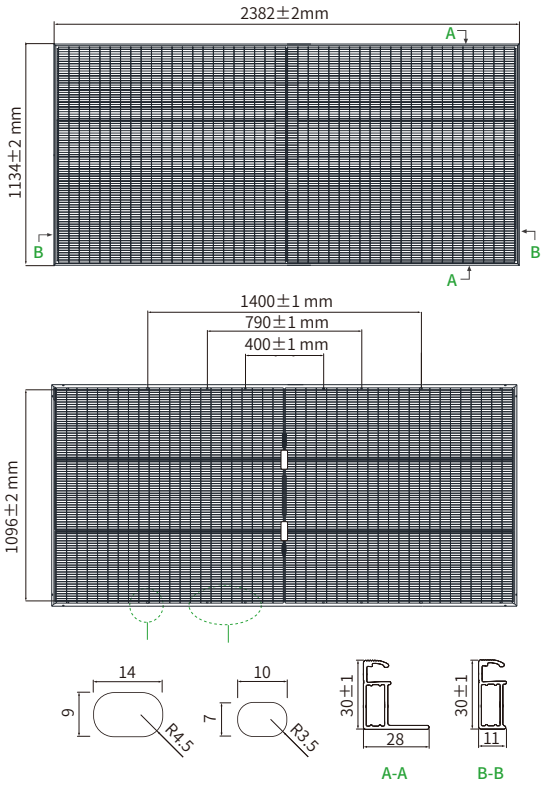
BNPI: Irradiance: Front 1000W/m^2, Rear 135W/m^2, Cell Temperature 25°C, AM=1.5

Application Conditions

Level T_{98} ⩽ 70 °C	-40 °C ~ +70 °C*
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	35 A
Bifaciality Coefficents	φVoc: 98±5 %, φIsc: 85±5 %, φPmax: 85±5 %

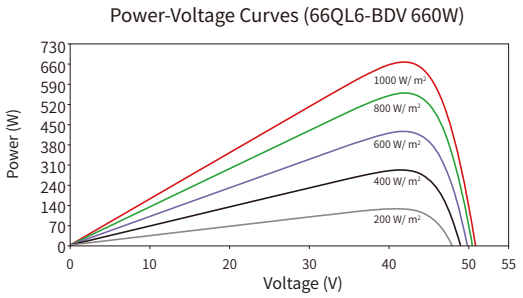
*Short-term up to 85°C; higher operation requires IEC TS 63126 testing

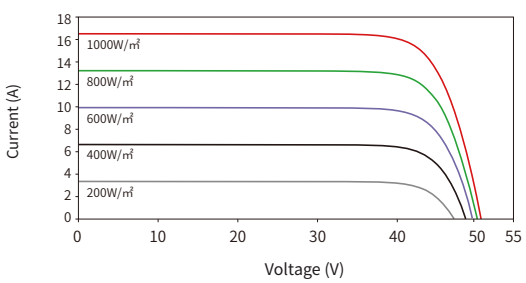
Engineering Drawings



Note: For specific dimensions and tolerance ranges, please refer to the corresponding detailed module drawings.

Electrical Performance





Note: Please read the safety and installation manual before using the product. We reserve the right of final interpretation. The specifications in this datasheet are subject to change without notice.

TrinaStorage

Storage

Elementa 2 Pro

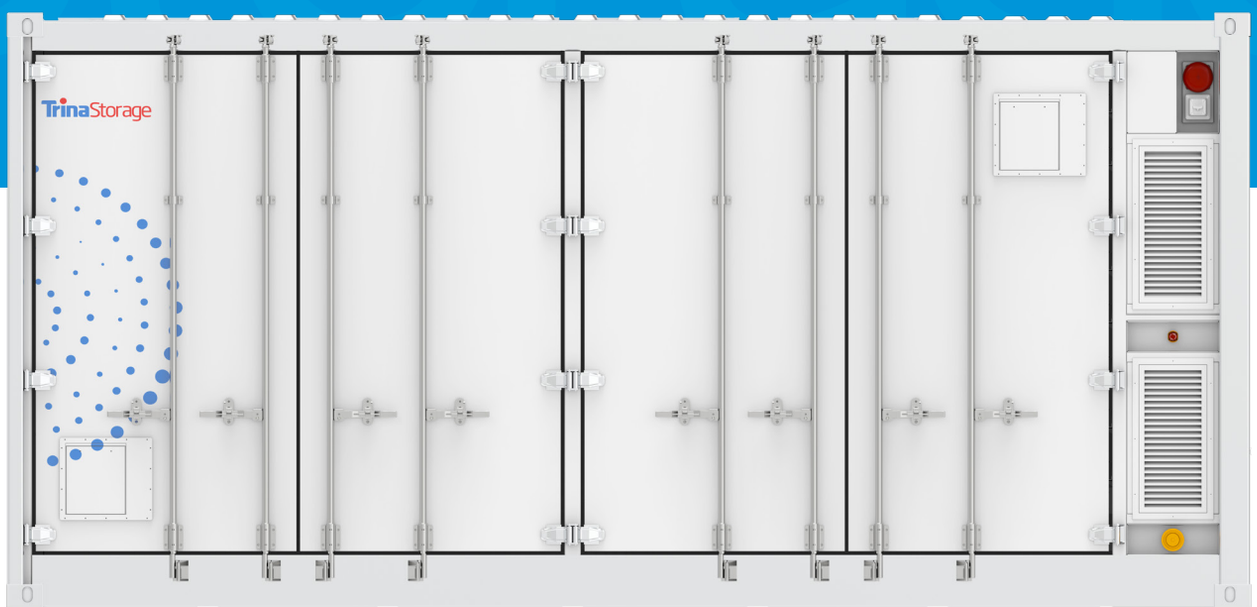
Trinasolar

TrinaStorage

Preliminary

Elementa 2 Pro

5.015 MWh | 12000 cycles | 314 Ah Ultra-Performance Battery Cell



Enhanced Efficiency

- Ultra-long lifecycle and high-performance 314Ah cell,delivering up to 12,000 cycles
- Flexible installation options, supporting side-by-side and back-to-back layouts, increasing site energy density by 12%
- Advanced intelligent temperature control, maintaining cell ΔT within ≤2.5°C using hybrid air-liquid cooling technology, reducing average auxiliary power consumption by 30% in low-temperature conditions

Intelligent Design

- 1:1 Negative Temperature Coefficient (NTC) monitoring with millisecond-level response can ensure early warning and effective protection
- Supporting master-slave architecture, enhancing system performance for multi-cabinet parallel configuration
- One-click upgrades and real-time monitoring improve O&M efficiency

Comprehensive Safety

- EV-grade battery cells undergo rigorous abuse testing to ensure intrinsic safety
- Electrical protection with an emergency stop button, enabling multi-layered safety linkage across the cabinet, PCS, and EMS
- Multi zone monitoring enables precise measurement of internal temperatures, achieving accurate thermal management and protection
- Sandwich-type composite wall and multi-detector design, compliant with NFPA 855, 68, and 69 standards

Improved Flexibility

- High-temperature refrigerant technology ensures full power output even at temperatures exceeding 50°C
- Noise level as low as 70dB, improving suitability for sites under strict noise limitation with a 12.5% reduction compared to industry benchmarks
- IP67-rated modules and an IP55-rated cabinet with C5-level anti - corrosion coating and IEEE693 high level seismic standards, ensuring durability in diverse and challenging environments

Trinasolar

Elementa 2 Pro

TECHNICAL DATA

Preliminary

BATTERY PARAMETERS

Cell Type	3.2V, 314Ah
Battery Configuration	416S12P
Nominal Capacity	5015 kWh
Typical Operational Duration	2-8 hours
Nominal Voltage Range	1123.2V - 1497.6 V

SYSTEM PARAMETERS

Dimensions (W*H*D)	6058*2896*2438 mm (Standard 20ft High Cube Container)
Weight	40.5 T
Degree of Protection	IP55-Container IP67-Module
Operating Ambient Temperature	-30°C - 55°C (>50°C Derating)
Altitude	≤4000 m
Operation Humdity Range	0 - 100% (Non-condensing)
Cooling Mode	Liquid Cooling
Fire Safety	Dry pipe, heat and smoke sensors, active ventilation system with hydrogen gas sensor (Carbon Monoxide Sensor Optional), automatic aerosol-based fire suppression system, fire resistant enclosure (2h Optional), deflagration panel (Optional)
Anti-corrosion Design	C4 (C5 Optional)
Noise	70dB (25°C) 65dB (Optional)
Communication protocols	CAN/Modbus TCP
Standard	IEC61000-6-2/4 , IEC62619, IEC62477-1, IEC62933-5-2, UL1973, UL9540, UL9540A, NFPA68&69 (Optional) etc.

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Note: Please read the safety and installation instructions before using this product.

Version: 2025_A

Trinasolar

Gotion GRID 5015

Liquid-Cooled Energy Storage System III

5015kWh
High Energy

10,000 cycles
Long Life Span

3-Layer Protection
High Safety

20ft
Standard Container

3°C
Intelligent Temperature Control

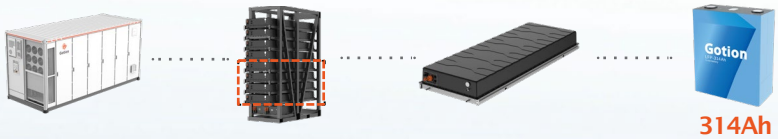
600MWh per acre
Optimized Energy Density

- High-Energy-Density System
- Optional Battery Container
- Optimal Space Utilization
- Integrated BMS
- Low Cost with Minimal Footprint

ESS Product Solution

- Thermal Energy Storage
- Wind and Solar Energy Storage
- Shared Energy Storage
- Peak-valley Arbitrage

System-5015 | *Rack×12 | Pack×48 | Cell×4992



314Ah

*The image illustrates two electrical racks physically mounted together to fit into the container, and one electrical rack comprises four battery packs connected in series.

Model	ESD1331-05P5015
Electrical Parameters	
Cell Type	LFP-314Ah
Cell Cycle Life	> 10,000*
Rated Voltage of Single Cell	3.2Vdc
Pack Configuration	1P104S
Rack Configuration	1P416S
System Configuration	12P416S
System Nominal Energy	5015kWh
System Rated Voltage	1331.2Vdc
System Voltage Range	1040Vdc ~ 1497.6Vdc
Charge / Discharge Rate	≤0.5p @ 25°C/77°F
Components	
High Voltage Box	Integrated
Confluence Cabinet	Integrated
Monitoring System (HMI)	Integrated
Fire Suppression System	• Explosion-proof exhaust and ventilation system • Temperature/smoke/combustible gas detection system • **PACK-level submerged** fire extinguishing system • Aerosol fire extinguishing system • Prefabricated water sprinkler system (optional)
Thermal Management System	• Integrated Liquid Cooler 60kW cooling capacity for battery • Air-cooling for other equipment
EMS	Not Integrated
BMS	Integrated option: U.S. manufactured
Conditions	
Storage Temperature	-30°C ~ 60°C/-22°F ~ 140°F
Working Ambient Temperature	-30°C ~ 45°C/-22°F ~ 113°F(>45°C/113°F Derating)
Working Relative Humidity	0% ~ 95% (Non-condensing)
Working Altitude	≤3000m/9842ft (>3000m/9842ft Derating)
Other Parameters	
Ingress Protection	IP55 (except liquid cooler)
Communication Interface	CAN, RS-485, Ethernet
Communication Protocol	CAN, Modbus-TCP/IP, Modbus RTU, IEC104
Dimensions (W×D×H)	6058mm×2438mm×2896mm/238.5in×96in×114in (20ft Container)
Weight	44t
Standards & Certification	UL9540A, UL9540, UL1973, UN38.3, UN3536, NFPA855, NFPA69, RoHS, Reach, (EU) 2023/1542; IEC 62477-1, IEC 60529, IEC 61000-6-2, IEC 61000-6-4, IEC 62933-5-2, IEC 63056, IEC 62619, GB/T 36276

Gotion High-Tech Co., Ltd.
www.gotion.com
Email:sales@gotion.com

*70% capacity retention after 10,000 cycles (0.5P charge/discharge, 90% DoD at 25±2°C)