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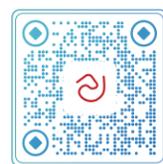
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PV Inverters

PSI1100 Series (33/40/50kW)



Pingalax Digital Energy Technology Co., Ltd.

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ABOUT PINGALAX

Pingalax Digital Energy Technology Co., Ltd. is a technology enterprise dedicated to the R&D, production, sales and service of products in new energy fields such as electric vehicle charging, power supplies, photovoltaics, and energy storage. PINGALAX is committed to deeply integrating research accumulation in the semiconductor field and digital AIoT technology with the new energy industry, building a more efficient, cleaner, more economical and safer modern energy system, and providing global customers with full-scenario digital energy solutions.

PINGALAX makes layouts on the entire chain of chips, modules, core components, software and system design, and has a well-proportioned and experienced innovative R&D team. As of now, the proportion of the company's R&D personnel exceeds 60%, among which the proportion of masters and doctors exceeds 30%. The company has applied for and obtained hundreds of patents.

PINGALAX's main products include electric vehicle charging equipment, photovoltaic inverters, mobile energy storage power supplies, household and industrial and commercial energy storage systems, etc. The company's core products have successively passed many domestic and foreign authoritative certifications and tests such as TÜV, CNAS, CE, CCC, and UN38.3, and have been sold to more than 30 countries and regions around the world.

PINGALAX has been successively approved as a national high-tech enterprise, a national post-doctoral scientific research workstation, and a national "specialized, refined, peculiar and new" little giant, and has passed certifications such as the IATF16949 automotive industry quality management system, ISO9001 quality management system, and ISO/IEC27001 information security management system.

PINGALAX always adheres to the corporate culture of "customer-centric", adheres to the development concepts of technological innovation, low-carbon intelligent manufacturing, green development, and digital empowerment, adheres to open cooperation, and is willing to jointly develop clean energy technologies with global partners, accelerate the green energy revolution, and build a better future.

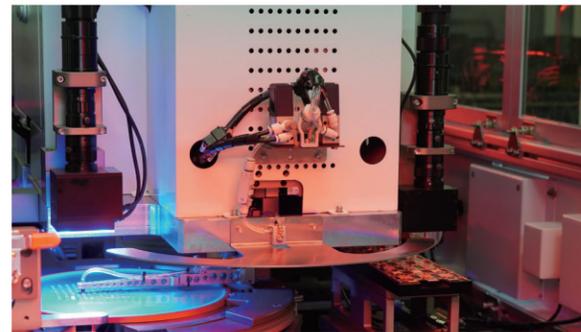
// R&D strength, Scientific innovation

PINGALAX adheres to independent R&D and innovation. We invest a large amount of resources in the entire chain of chips - application end products - system integration - cloud services, builds a complete R&D system, and sets up R&D centers in Chongqing, Shenzhen and Southeast Asia to gather top global talents. In the field of digital energy, we are committed to creating technologies and products with core competitiveness and creating greater value for customers.

◆ Professional chip design



◆ Advanced manufacturing technology



◆ Comprehensive performance testing



◆ Complete R&D process



R&D personnel



Master&PhD

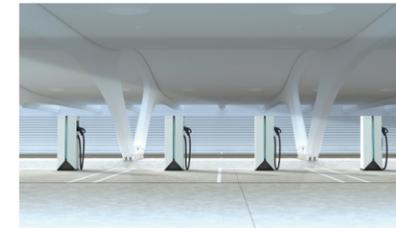


Patent applications



R&D invest

// Main Business



Intelligent charging network



Distributed energy system



Portable&Home energy



New energy application solutions



Digital energy AIoT service

// Our Global Partners



30+



Coverage countries/regions

200+



Global customers

70000+



Product registered users

70000+



Energy terminal connections

PSI1100 Series

33/40/50kW PV Inverters

The PSI1100 series can be used for industrial and commercial rooftops, public buildings, etc. Multiple protection mechanisms and IP66 protection level ensure adaptability in various environments. Their 3/4 MPPT design and 98.5% efficiency brings higher yields. PINGALAX OS offers a smoothy site monitoring solution, making your plant more efficient and simplifying O&M.



Industrial and Commercial Roofs



Public Buildings

►► Self-developed Chips, More Efficient and Intelligent

Advanced Power Electronics

Equipped with the latest self-developed power chips



Cloud-based Intelligence

Connected to PINGALAX OS

Powered by PINGALAX OS

Efficient Power Generation

3/4 MPPT design
Wide MPPT Voltage Range
Maximum efficiency 98.5%

Modular Design

Strong scalability and easy maintenance

User Centric Design

Easy installation and optimized operation process

Efficient Cooling

Active heat dissipation and intelligent temperature control



98.5%
Maximum Efficiency



55 kW
Maximum Output Power



30 A
Maximum Input Current



160~1000 V
MPPT Voltage Range



3/4
MPPT



IP66
High Protection Level

►► More Product Features



User-Friendly Design



- **Easy Installation:** Integrated MC4 connections ensure faster install times.
- **Flexible Communications:** Flexible configuration through the cloud, with access to key information such as operating status and power yields, etc.
- **User-Friendly Interface:** The LED indicator indicates the working status of the inverter.

System-level Security



- **Multi-layered Safety Mechanism:** Anti-Islanding Protection, DC reverse polarity protection, AC short circuit protection, leakage current protection, etc.
- **OTA Upgrading:** Cloud-based operations & management enables remote OTA upgrades, with lower operation and maintenance costs.
- **Multilevel Monitoring Systems:** Branch monitoring, online fault analysis; wired/wireless redundant networking monitoring solutions.

Maximum yields



- **3/4 MPPTs:** Provide a more flexible configuration scheme.
- **Ultra-wide MPPT Voltage Range:** Adaptable to complex environments.
- **High Efficiency Rate:** Maximum efficiency 98.5%, less power loss.

Smart and Flexible



- **Broad Range of Connectivity Options:** Support 4G, and RS485 connections.
- **Smart PV Management Platform:** Direct access to PINGALAX OS improves the operation and maintenance efficiency of your plant.
- **Tailored Service:** Full-stack R&D enables tailored appearance, functions and solutions.

►► Technical Parameters

PV Inverters

PSI1100 (033-040-050KE1)

	PSI1100033KE1	PSI1100040KE1	PSI1100050KE1
DC Input			
Maximum Input Voltage	1100V		
Minimum Input Voltage / Start-Up Voltage	160V/200V		
Rated Input Voltage	600V		
MPPT Voltage Range	160V~1000V		
Maximum Number of Strings per MPPT Input	2		
Maximum Input Current	30A/30A/30A	30A/30A/30A/30A	
Number of MPP Trackers	3	4	
Maximum Allowed Current per Input Terminal	30A		
Maximum DC Short-Circuit Current	120A (3×40A)	160A (4×40A)	
AC Output			
Rated Output Power	33kW	40kW	50kW
Maximum Output Power	36.3kW	44kW	55kW
Maximum Apparent Power Output	36.3kVA	44kVA	55kVA
Maximum Output Current	55.2A	66.9A	83.6A
Rated Grid Voltage	3/PE, 220/380V		
Grid Voltage Range	312V~480V		
Rated Grid Frequency / Grid Frequency Range	50Hz/45Hz~55Hz		
THDi	< 3% (at rated power)		
DC Current Injection	< 0.5% of rated current		
Power Factor	0.99 (at rated power)		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Number of Phases (Grid-Tied / Output)	3/3		
Efficiency			
Maximum Efficiency	98.5%		
China Efficiency	98.0%		
General Parameters			
Dimensions (W x H x D)	594mm x 569mm x 254mm		
Weight	40kg		
Isolation Type	Transformerless		
Ingress Protection Rating	IP66		
Nighttime Power Consumption	≤ 1W		
Operating Temperature Range	-30°C to +60°C (derated above +45°C)		
Operating Humidity Range	0~100%		
Cooling Method	Intelligent Forced Air Cooling		
Maximum Operating Altitude	4000 m (derated above 2000 m)		
Display	LED, App (Optional)		
Communication	RS485 / 4G Communication Dongle (Optional)		
DC Connector Type	MC4		
AC Connector Type	SC35-8 Terminal		
Standards Compliance	NB/T 32004-2018, GB/T 37408-2019		
Grid Support Features	Anti-Islanding, Active/Reactive Power Control, Power Factor Control, Soft Start/Stop		
Certification and Reports	CE (SGS), CB, CNAS		

▶ PINGALAX OS Integration Platform of Digital and Energy

PINGALAX OS Integration Platform of Digital and Energy

Committed to providing enterprises and operators with efficient and convenient Digital Energy management, supporting their transformation and development.



System data visualization

KPI large screen enables full visualization of real-time and historical data of power stations and equipment.



Intelligent O&M

Cloud data services for PV string and energy storage cells, together with our EMS, enable accurate and rapid O&M of power stations.



All-in-One Solution

An integrated solar-storage-charging-consumption solution, with features covering data collection, real-time monitoring, equipment management, big data-based predictive maintenance and safety warning, etc.

▶ Application Cases

◆ Industrial & Commercial Distributed PV Solution

Mianyang, Sichuan, China



◆ An integrated solar, storage, and charging power station

Tongliang, Chongqing, China

