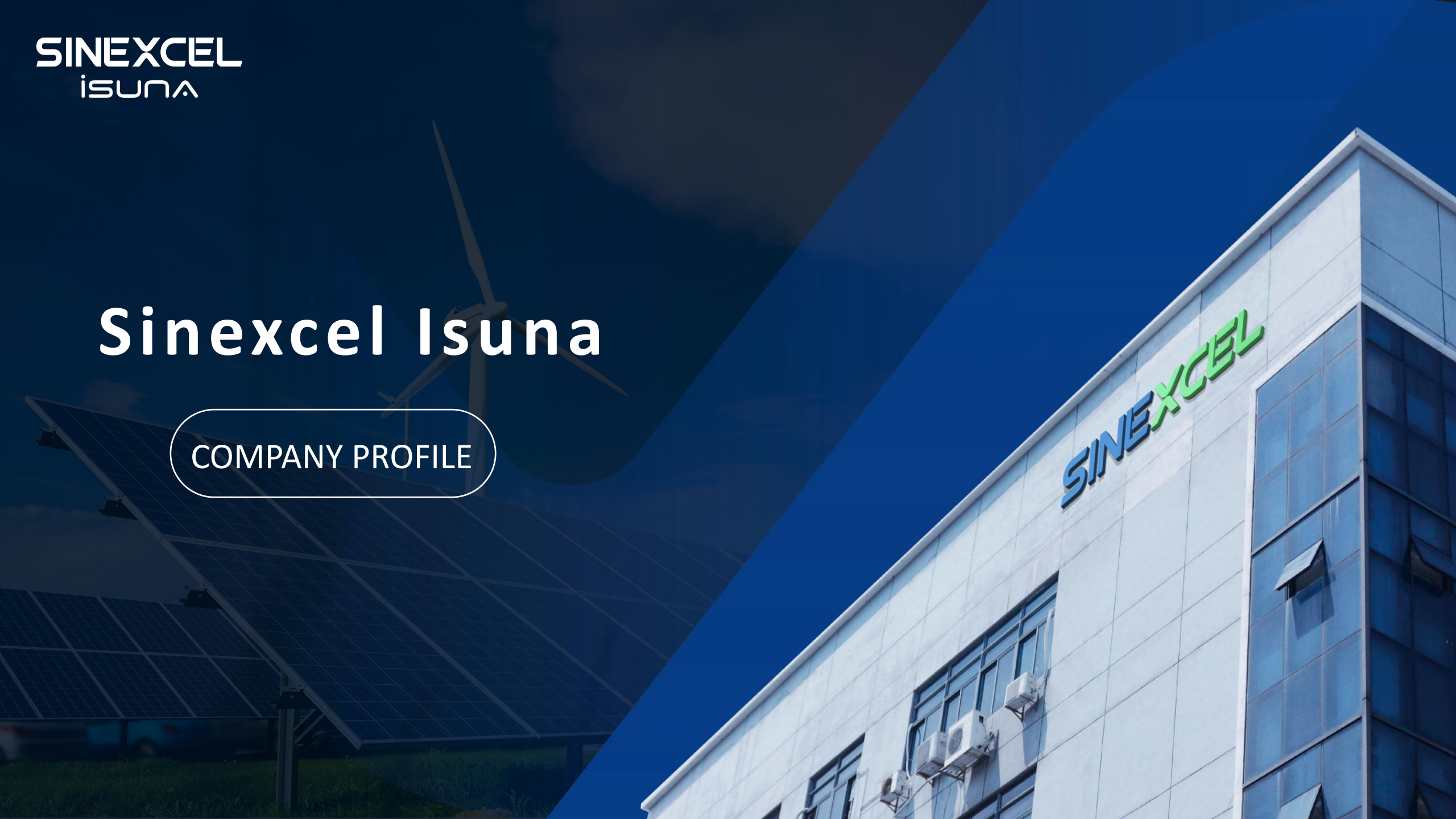
SINEXCEL
ISUNA

Sinexcel Isuna

COMPANY PROFILE



Catalogue

INDUSTRY TRENDS ANALYSIS

01

1.1 Industry Trend Analysis

SINEXCEL iSUNA

Policy Driven

Europe: **FIT** in residential solar storage system

America: Tax deduction in installation of residential solar storage system

Australia: Subsidy to reduce the installation cost of residential solar storage system

South Africa: Tax rebate on purchase of solar panel

Multiple Challenges
Consistent Incentives
Increasing Needs

2021-2025 Residential Solar System Installation Rate

Europe: 8% → 56%

America: 8% → 36%

Australia: 2% → 15%

Japan: 20.7% → 38.5%

Challenges

Rising Electricity prices

Europe: Shortage of energy, high electricity price.

Australia: High electricity price due to inflation, geopolitical conflicts, aging power plants.

America: **A**ging grid system, with more than 70% of the transmission system more than 25 years old, and power outages are common in severe weather.

Southeast Asia: Fragile power grid + extreme weather triggers electricity consumption conflicts.

South Africa: Frequent power outages and power. shortages have had a serious impact on residents' lives.

Frequent Power Black-out

INDUSTRY CHALLENGES
&
OUR VALUES

02

2.1 End User's Pain Points & Our Values

	01	02	03
	Poor user experience	**High cost in expansion**	**Long payback time cycle**
Pain Point	• Large in size • Heavy in weight • Annoying operation noise • Unfriendly to users	• Inconvenient to expand power of inverter • Need additional cost	• Low efficiency of inverter's power generation
Our Value	**Smart Experience** • SiC technology • Smaller size, Lighter weight • Better heat dissipation • Smart fan starts running when load is above 60%	**Smart Expansion** • 2 Independent battery ports, support mixture usage of new & old battery • Make power expansion easier, no additional cost	**Smart Security** • SiC technology, higher efficiency 0.5-1% higher(hybrid inverter) 3-5% higher(off-grid inverter) • Payback time cycle shortened

2.2 Business Client's Pain Points & Our Values

	01	02	03
	Difficult in Maintenance	**Difficult in After-sale service**	**Difficult in Match**
Pain Point	• High malfunction rate of inverter's LCD/LED display	• Need on-site after-sale service, low efficiency and high service cost	• Multiple market needs • Need customized match
	Easier in Maintenance	**Easier in After-sale Service**	**Easier in OEM service**
Our Value	• Design without LCD/LED display, without button, APP monitoring • Lower malfunction rate, lower after-sale service cost	• Remote OTA upgrade • Monitoring via cloud platform • Local after-sale service in Europe	• 3-50kW inverter power range • Open in communications protocols • One-stop solution in OEM service

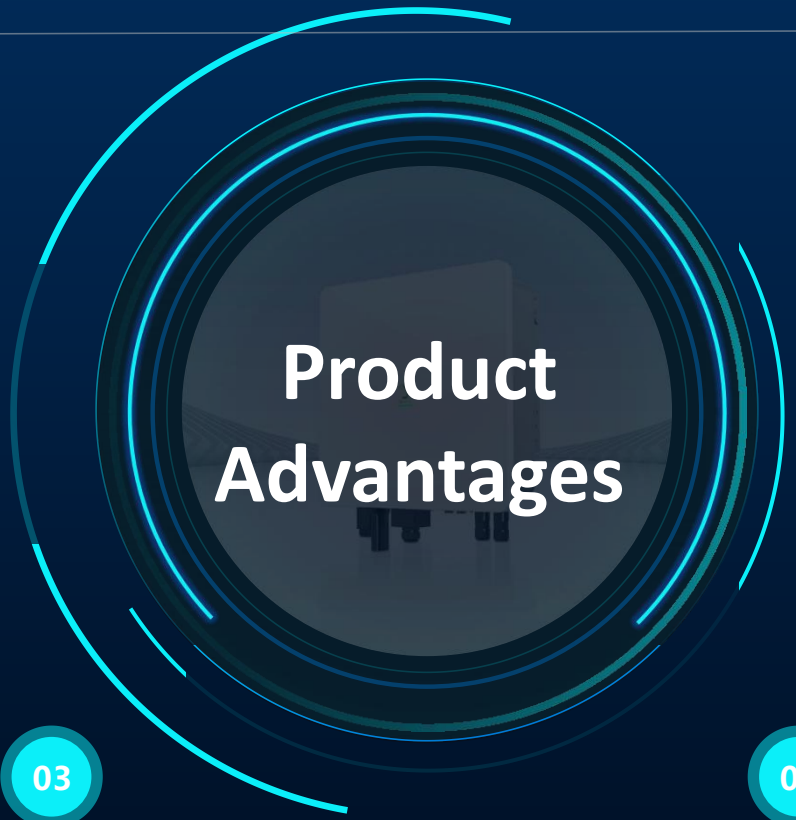
SINEXCEL
iSUNA

PRODUCT INTRODUCTION

03

3.1 Product Advantages

SINEXCEL iSUNA



01 SiC Technology

- Higher efficiency
- Better heat dissipation
- Longer lifespan

02 2 independent battery ports

- New & Old battery mixture usage
- Easier & cheaper in power expansion
- Meet end user's flexible power needs

03 Support 3rd-party monitoring & VPP

- VPP interface ready
- Support 3rd-party in customized software to satisfy local energy management

04 Wide power range coverage

- 3-50kW power coverage
- Make OEM service easier
- One-stop service, multiple inverter series

05 100% three-phase unbalance

- Off-grid mode, support 100% rated power output
- Support power supply to single phase load
- Effectively optimize output voltage variance

06 OTA upgrade

- Benchmark with market needs and prompt to optimization.
- Make after-sale service easier & more efficient.

07 Setting of 6 charging/discharging times period

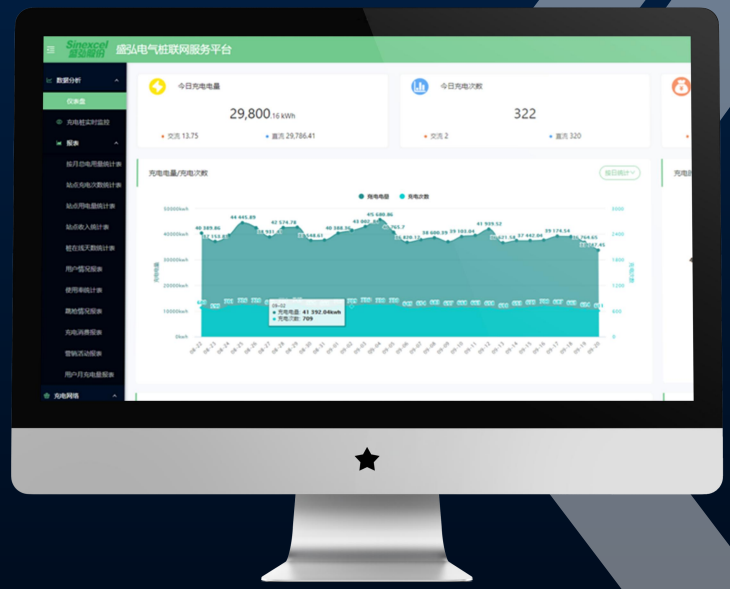
- Set up 6 different charging/discharging time period in APP.
- Better usage of different electricity prices in peak and valley.

3.1.1 Product Advantages – Self-owned cloud platform & Self-developed APP

Sinexcel Self-developed APP

- 3 types of account--Different rights for end user & professional
- 7 languages, support language adding
- 6 different charging/discharging time period

Sinexcel Self-owned Cloud Platform



- High efficiency in after-sale service
- OTA upgrade and remote monitoring
- Support PC+ phone control

3.1.2 Product Advantages – Silicon Carbide Technology

01 **Higher** voltage withstand capability

Load allow capability increased by 3 times,
critical breakdown strength increased by 10 times,
output power is larger

02 **Higher** power density

Thinner device drift area, cost savings by improved module power density,

03 **Higher** thermal conductivity

Heat conductivity increased by 3 times, the system heat dissipation reduced, application scenarios are wider

04 **Higher** switch frequency

The carrier saturation rate increased by 10+ times,
product response speed is greatly improved

05 **Lower** power loss

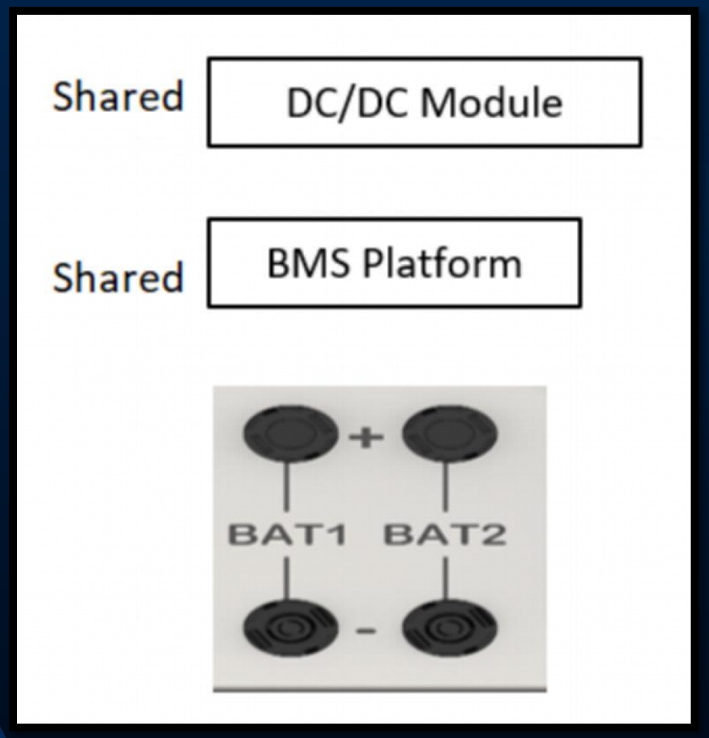
Smaller on-resistance, reduce on-loss,
improve product efficiency

Advantage of SiC Technology in Hybrid Inverter

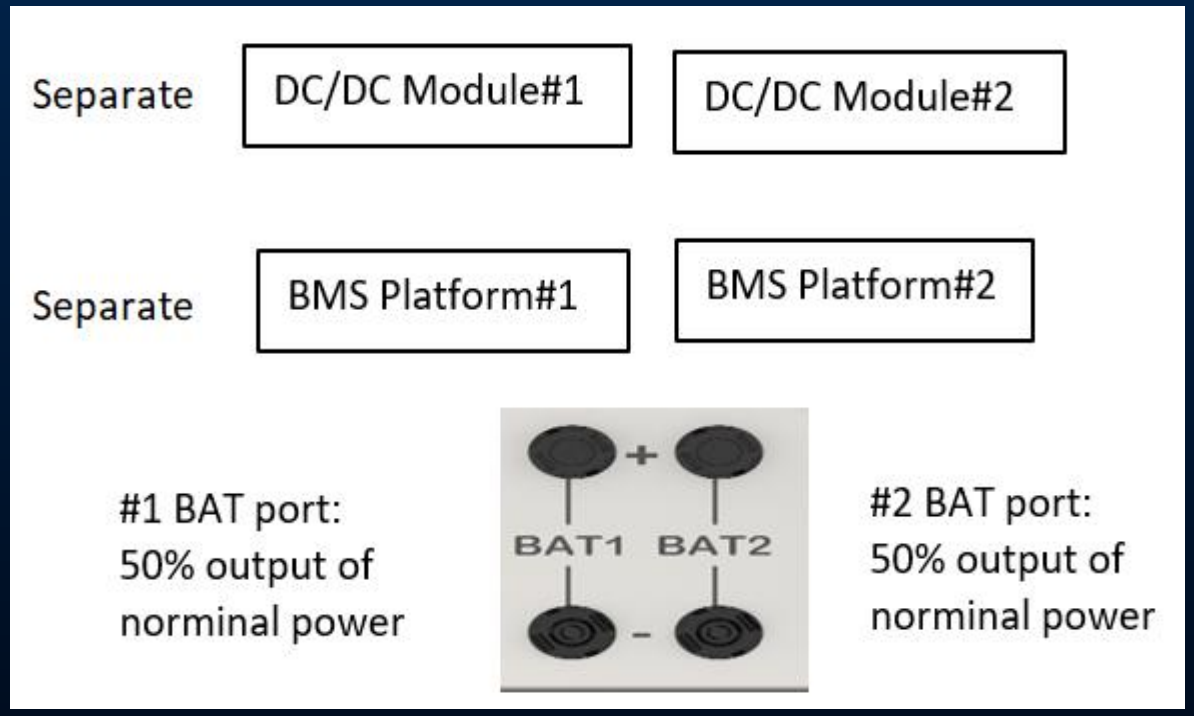
- Higher efficiency **0.5-1%**
- **Smaller** in size & weight
- **Better** heat dissipation
- **Longer** lifespan
- Derating ≥ **3000** meters latitude

3.1.3 Product Advantages – 2 independent battery ports

2 battery ports design of other brand



2 independent battery ports design of Sinexcel



Easier in battery capacity expansion

Support mixture usage of new battery and old battery of different voltage/current/BMS protocols

3.1.5 Product Advantages – No LCD/LED display design

SINEXCEL iSUNA

Disadvantage of LCD/LED display

01 **High malfunction rate**

Ultraviolet ray and 24 hours continuous operation cause high malfunction rate.

02 **Short lifespan**

- Average lifespan of LCD display is around 2-3 years.
- Scenario in high latitude or seaside area with high humidity, reduce lifespan.

03 **High repair cost**

Manpower cost in repair and replacing LCD/LED display is much higher than the LCD/LED display cost.

04 **Bad experience for end user**

End user would judge inverter's quality based on what they see, based on the unworkable LCD/LED display.

No LCD/LED display design for Longer inverter lifespan and lower after-sale cost

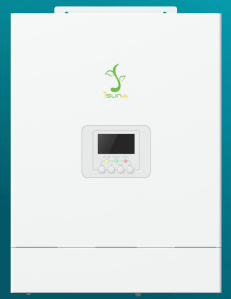
Our solution for visible display

- Standard solution: APP monitoring
- Optional solution: Panel

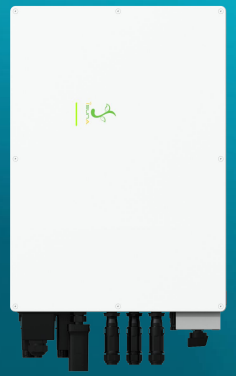
3.2 Product Series

SINEXCEL iSUNA

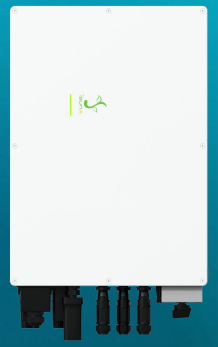
Single Phase LV hybrid inverter 3-6kW



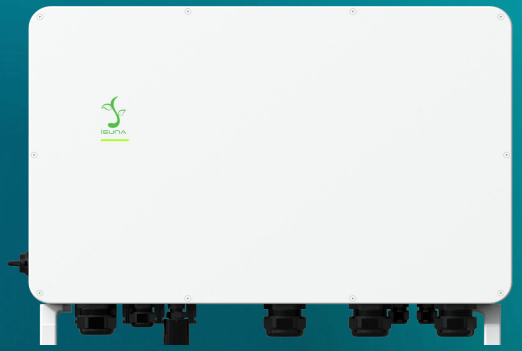
Single Phase LV Off-grid 3-12kW



Single Phase LV hybrid inverter 5-12kW



Three Phase LV hybrid inverter 5-12kW



Three Phase HV hybrid inverter 22-50kW

Launched | 2024/Q4 | 2025/Q1

Three Phase HV hybrid inverter 10-20kW

Series in Sale

Single Phase HV hybrid inverter 5-12kW

Three Phase HV hybrid inverter 5-12kW

Split-phase HV 5-20kW

3.2 Product Series

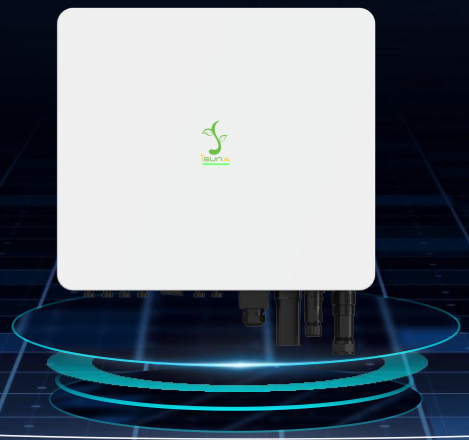
SINEXCEL iSUNA

Single Phase LV Hybrid Inverter 3-6kW

- Max. efficiency 98%
- 1.5 ~ 2 times PV power, 18A PV current
- 6 units in parallel (off-grid mode)
- AC Coupled
- IP 65 (sands protection certificate)
- Natural heat dissipation (noise <25dB)

Three Phase HV Hybrid Inverter 10-20kW

- Support 100% three-phase unbalance
- 2 independent battery ports, support mixture usage of new & old battery
- 1.5 ~ 2 times PV power
- 15 units in parallel (off-grid mode)
- Support 130-200% overload (60s)
- Maximum grid current ratio 1:1.8
- Support altitude 5000 meters (>3000 meters derating)



Single Phase LV Off-grid Inverter 3-12kW

- Max. efficiency 97.5%, 3-5% higher
- Grid input up to 2 times of rated power
- 2-4 MPPT
- 1.5 ~ 2 times PV power, 18A PV current
- 50℃ ambient temperature without derating
- Support OTA upgrade & APP monitoring
- 4 operation mode for multiple scenario
- 5-year standard warranty

3.2 Product Series

SINEXCEL iSUNA

Single Phase HV / LV Hybrid Inverter 5-12kW

- Independent GEN port, smart monitoring
- 2 independent battery ports, support mixture use of new & old battery
- AFCI/PID function
- PV input current 20A, 3 MPPT
- 120% off-grid overload
- Grid input up to 1.5 times of rated power
- 165mm ultra-thin design

Three Phase HV / LV Hybrid Inverter 5-12kW

- Independent GEN port, smart monitoring
- 2 independent battery ports, support mixture use of new & old battery
- AFCI/PID function
- PV input current 20A, 3 MPPT
- 200% off-grid overload
- Grid input up to 1.5 times of rated power
- 165mm ultra-thin design

Split Phase LV 5-20kW

- 200% off-grid overload (100ms), 110%(60s)
- 200A grid input current
- 180mm Ultra-thin
- 2 independent battery ports , support mixture use of old & new battery
- Independent Generator Port, smart monitoring
- 4 MPPT, PV current 36A
- Support altitude 5000m(>3000m Derating)
- ATS built-in, integrated design

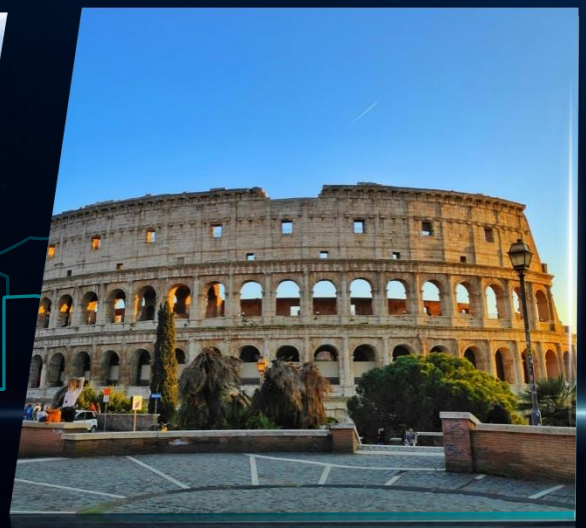
SINEXCEL iSUNA

CASE 1

China. Tibet

- Projects in latitude of 4700 meters
- Community scenario, supply power for 500+ users

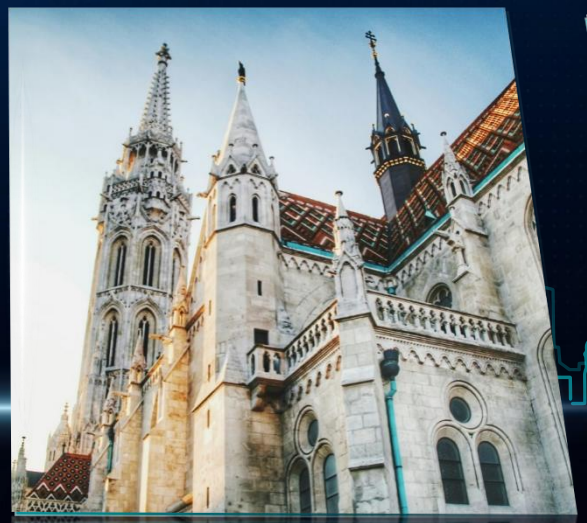
CASE 2



Italy

- Single phase LV hybrid inverter series
- 4.16MW export and delivery

CASE 3



Hungary

- Three phase HV hybrid inverter series
- 4.03 MW export and delivery

CASE 4

Middle East & Africa

- Off-grid inverter series
- 5.58 MW export and delivery

ABOUT
SINEXCEL ISUNA

04

Sinexcel Electric Group

- EV Charger
- C&I Storage Inverter/ PCS
- **Isuna** Residential Storage Inverter
- Power Quality Management Equipment
- Battery Testing Equipment
- UPS

4.2 Milestones of Sinexcel

2007

SINEXCEL established in Shenzhen

2008

Launched the first modular active power filter (APF) in China

2011

Established the electric vehicle charging business line

2012

Established the energy storage microgrid BU & battery testing BU

2017

Listed in the ChiNext with stock code of 300693 after 10 years of progress

2020

Annual revenue exceeded RMB 1 billion (USD 145 million)

2023

Annual revenue exceeded USD 380 million. Sinexcel Isuna established for residential storage inverter

4.3 Ranking in the Industry

SINEXCEL iSUNA

TOP1
Power Quality

No.1 market share in APF in the world

Data source: Asian Power Quality Alliance
Enterprise Survey Statistics

TOP4
C&I Solar Storage Inverter

Top 4 Chinese manufacturer
in global shipment of C&I Solar storage inverter

Data source: Energy Storage Leaders Alliance (EESA)

TOP5
EV Charger

Top 5 market share
of charging equipment in China

Data source: Inengyuan statistics

Power Electronics Product

4.4 Honors & Qualifications

Honors »

National technologically advanced small and medium-sized enterprise, Guangdong Provincial Specialized, Refined, Characteristic and Innovative Enterprise, Guangdong Provincial Contract-abiding and Trustworthy Enterprise, and Guangdong Provincial Science and Technology Progress Award

Qualifications »

ISO three-system/high-tech enterprise/AAA-level enterprise credit/after-sales service certification, Guangdong Provincial Industrial Design Center, SGS recognized cooperative supplier, and certification by authoritative institutions such as China Electric Power Research Institute, Ministry of Industry and Information Technology, China Quality Certification Center, China General Certification Center, IEEE, ETL, TUV, CE, SAA, and UL

Patents »

210+ patented technologies

Including 40+ patents for invention and 70+ utility models

Standards »

Participated in the development of multiple national/industry technical standards GB/T 37293-2019, GB/T 37295-2019, JG/T 417-2013, T/CPSS 1003—2018, and T/CPSS 1002—2018

Awards »

- EV Charger: Top 10 core module brands; Top 10 influential brands in China's charging and swapping industry; Top 10 charging equipment brand enterprises in China; Top 50 enterprises in China's charging and swapping industry; Annual Swapping Technology Award, etc.
- C&I solar storage inverter: Annual Excellent Energy Storage Converter Brand; Top 30 in the energy storage industry chain; Most Influential Enterprise Award in China's energy storage industry; Top 10 energy storage PCS enterprises in China; Best Energy Storage PCS Supplier Award, etc.

Y2024 Budget in certification

USD 8 Million

4.5 Sites in the World

SINEXCEL iSUNA

Headquarter

Shenzhen, China

R&D Centers

Shenzhen, China
Xi’an, China

East China Operation Center

Suzhou, China

Manufacturing Base

Huizhou, China
Suzhou, China

Manufacturing Base

Los Angeles, USA
Dusseldorf, Germany
Brisbane, Australia
Singapore city, Singapore
India

After-sales service

Poland
Turkey

4.6 Our Partners

4.6 Key Data of Sinexcel

Integrated R&D organization for rapid resources allocation
Quick to respond to customer needs

Total Staff
3000+

RD Engineers
500+

Collaboration among R&D centers
in Shenzhen, Xi'an and Suzhou

21%
Proportion of R&D engineers

20%
Proportion of R&D engineers with more than 10 years of experience

6.5 years
Average serving age of R&D engineers in Sinexcel

11%
Proportion of R&D expenses budget in new technology & products

4.7 Production Capability

Huizhou Sinexcel Electric Co., Ltd.

61358m²	3.5 billion/year 200MW/month	July of 2021
Building area	Capacity	Launch for production

Sinexcel factory in Huizhou (in Pearl River Delta)

Huizhou Sinexcel is equipped with an smart production management system, with standardized, refined and transparent warehouse management system to improve the production capability.

SINEXCEL iSUNA

Suzhou Sinexcel Technology Co., Ltd.

82,619m²
Building area

USD 5 billion/year
400MW/month
Capacity

July of 2023
Launch for production

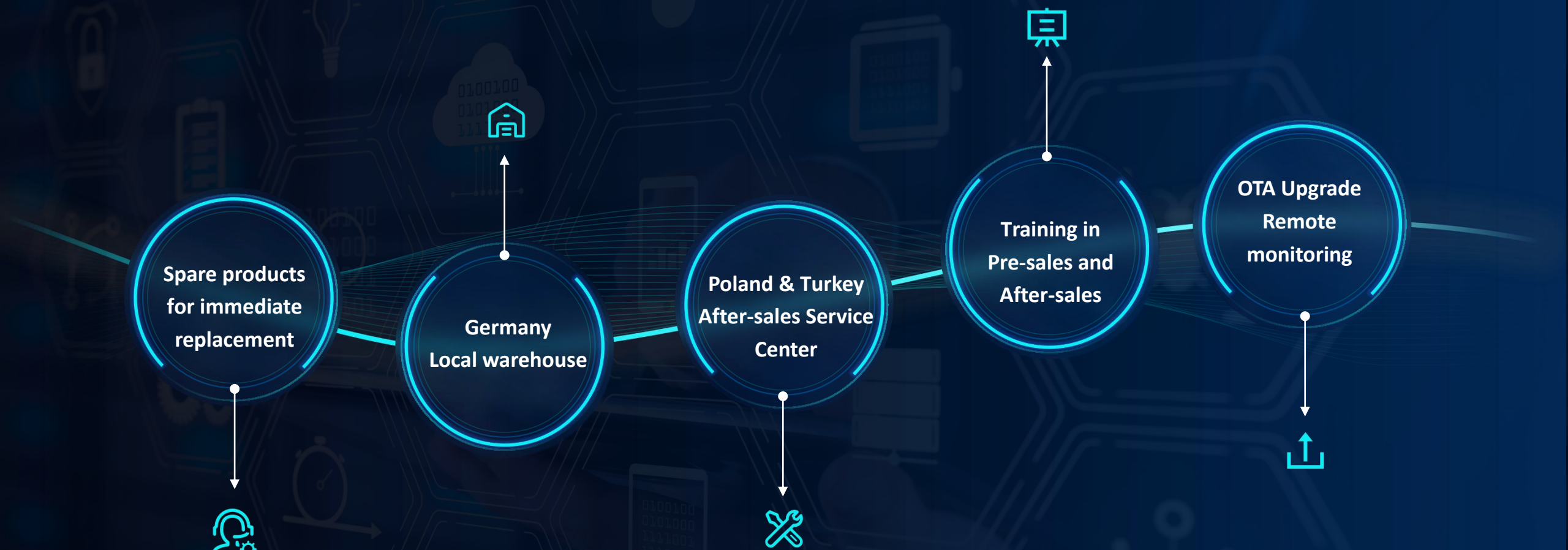
Operation Center in Suzhou (Yangtze River Delta)

Suzhou Sinexcel's specialized in development, design, production and sales of commercial & industrial storage inverter, PCS.
Smart factory of production lines with integrating information technology, digitalization and automation, with R&D base.

4.7 Production Capability

Production Line Overview

4.9 Service System



SINEXCEL
isuna

Shenzhen Sinexcel Isuna Energy Technology Co.,Ltd

Become a world-class leader in power electronics products

THANKS

- Headquarters: 1002 Songbai Rd,Nanshan Shenzhen China 518000
- Huizhou factory: No. 31, Huifeng West 2nd Road, Zhongkai High-tech Zone, Huizhou City, Guangdong Province
- Suzhou factory: No.1818, Songlu Road, Wuzhong District, Suzhou City, Jiangsu Province
- Xi'an RD center: 1st-2nd floor, North Building, Fenghuo Science and Technology Park, No. 28 Gaoxin 6 Road, High-tech Zone, Xi 'an city, Shanxi province

Wechat public account

Company website

Contact us

Email: hes@sinexcel.cn

Hotline: 0755-8651-1588