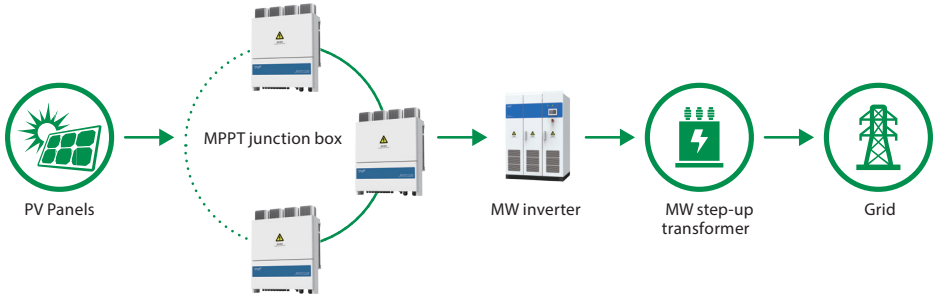
KEHUA TECH

Central-Distributed PV Solution



+3%↑ Higher Efficiency

-10%↓ Cost Reduction

48 MPPT Increase Productivity

Complex Environment

No Resonance

Ecological Power Network

Central-Distributed PV Solution

+3% Efficiency 3% higher than the centralized solution

-10% System cost 10% lower than string inverter solution

48 MPPT 1MW with 48 MPPT, increase power generation

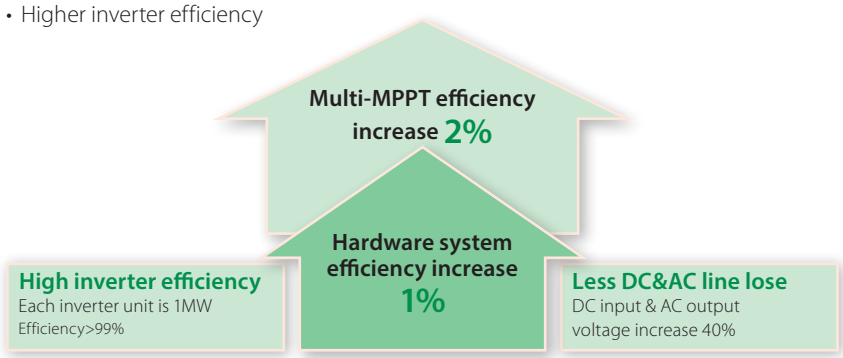
Suitable for complex environment like uneven ground

Compared with string inverter solution, no multimachine parallel harmonic, no resonance, easy dispatching

Yield 50,000kWh/MW/Year more

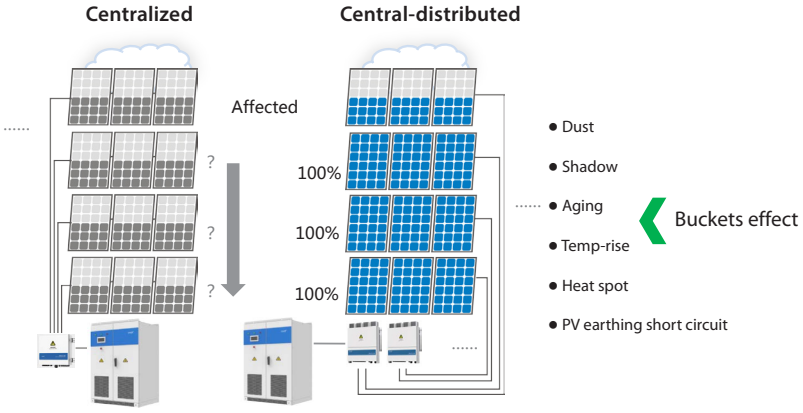
Higher System Efficiency:

- Multi-MPPT with higher MPPT efficiency
- DC input & AC output voltage increase 40%
- Reduce the DC&AC line lose
- Higher inverter efficiency



Reduce system mismatch caused by single string fault:

- If one PV string is affected by dust, shadow, aging, heat spot or short circuit, etc., for Centralized solution, it would cause buckets effect
- For Central-Distributed solution, other parts of the system will not be affected



Excellent Central Inverter:

- Efficiency up to 99.2%, compact design, high power density
- Three-level circuit topology + high reliable drive technology
- High altitude design, working temperature range: -40°C~ +60°C
- Grid-friendly with LVRT and easy dispatching
- Best components ensure reliability and long life
- Efficient patent thermal design, intelligent fan speed control
- Inverter fault wave record function, failure rapid positioning

Specification	SPI1000K-BS
DC side	
Max. PV Array Power (kW)	1123
Max. PV Array Open Circuit Voltage (VDC)	1000
Max. DC Current (A)	1404
Integrated DC Distribution Strings	12~14
Input Voltage Range (V)	720~950
AC side	
Rated Output Power (kW)	1000
Max Output Power (kW)	1100
Rated Output Voltage (V)	520
Output Voltage Range(V)	442~572
Rated AC Frequency (Hz)	50/60
THDi	<3%
Power Factor	>0.99 / -0.9~+0.9adjustable
Isolation Type	Transformerless
Efficiency	
Maximum Efficiency	99.2%
Europe Efficiency	98.9%
Others	
IP Grade	IP20
Environment Temperature	-40°C ~ +60°C
Humidity	0~95%, no condensation
Altitude	3000m (>3000m derating)
Cooling	Forced air cooling(fans speed control)
Communication Ports	RS485/Ethernet (optional) / GPRS (optional)
Dimension(W×D×H) (mm)	1400x800x2000
Weight (kg)	1100

Central-Distributed PV Solution

Excellent Smart MPPT Junction Box:

- Multi-channel MPPT control design, improve system efficiency
- PV panels fault detection function and auto isolation from grid, ensure the safe operation and maximum power output
- Intelligent self-checking, fault detection and safety protection function
- Each MPPT branch intelligent blocking(anti-reverse) function
- No external fan, natural cooling; internal fan using uniform temperature design, prolong the lifetime of junction box
- Advanced SIC technology, higher efficiency

Specification	SPC1000120-B
Input	
Number of MPPTs	4
Number of PV Strings per MPPT	4
Max. Input Power per String	6kW
Rated Input Power per String	5.5kW
Input Voltage Range	250~950Vdc
Output	
Rated Output Voltage	820Vdc
Output Voltage Range	720~980Vdc
Max. Output Current	120A
Features	
Maximum Efficiency	99.7% (bypass), 99.5% (rated PV voltage is 600V)
IP Grade	IP65
Cooling	Natural cooling
Others	
Working Temperature	-35℃ ~+60℃
Communication	RS485
Dimension(W×D×H)	750x280x930(mm)
Weight	70(kg)
Installation	Wall-mounted

Xiamen Kehua Hengsheng Co., Ltd.

Add: No. 457, Malong Road, Torch High-Tech Industrial Zone, Xiamen Fujian China

Tel: +86-592-5160516 Fax: +86-592-5162166 www.kehua.com

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