



Year 2023 Launch

New Beginning, New Power Quality Compensation Era

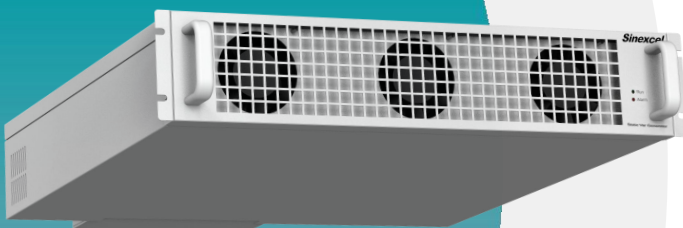
 ***Sinexcel***

P5 SVG Series

Sinexcel had been on the technology summit of power quality industry.

Now, Sinexcel P5 SVG Series had broken own ceiling again with brilliant innovations.

P5 SVG series will release to mass production to market on **March 2023**



- **P5 Series SVG 100kVAR**

P5 SERIES



- Ultra-Low Loss
- High Withstand Voltage
- High Power Density
- High Heat Conduction Rate
- High Switching Frequency

Big Breakthrough

Peak Efficiency 99%

Power electronics, every 0.5% increase in efficiency, is a great technological improvement. **Silicon carbide**, a new and high efficient power component, replaces ordinary silicon devices , Sinexcel has once again made major technology innovations in circuit design and algorithm,

Sinexcel P5 SVG Series



4*0.5% efficiency breakthrough
(compared to standard module)

Energy Saving Benefit

| Product | Efficiency | Product | Efficiency | Energy Saving/KWH |
|----------------|------------|----------------|------------|-------------------|
| SVG 100kVAr P2 | 97% | SVG 100kVAr P5 | 99% | 18,890KWH→2834USD |

Sinexcel P5 SVG Series compared with Standard SVG Series

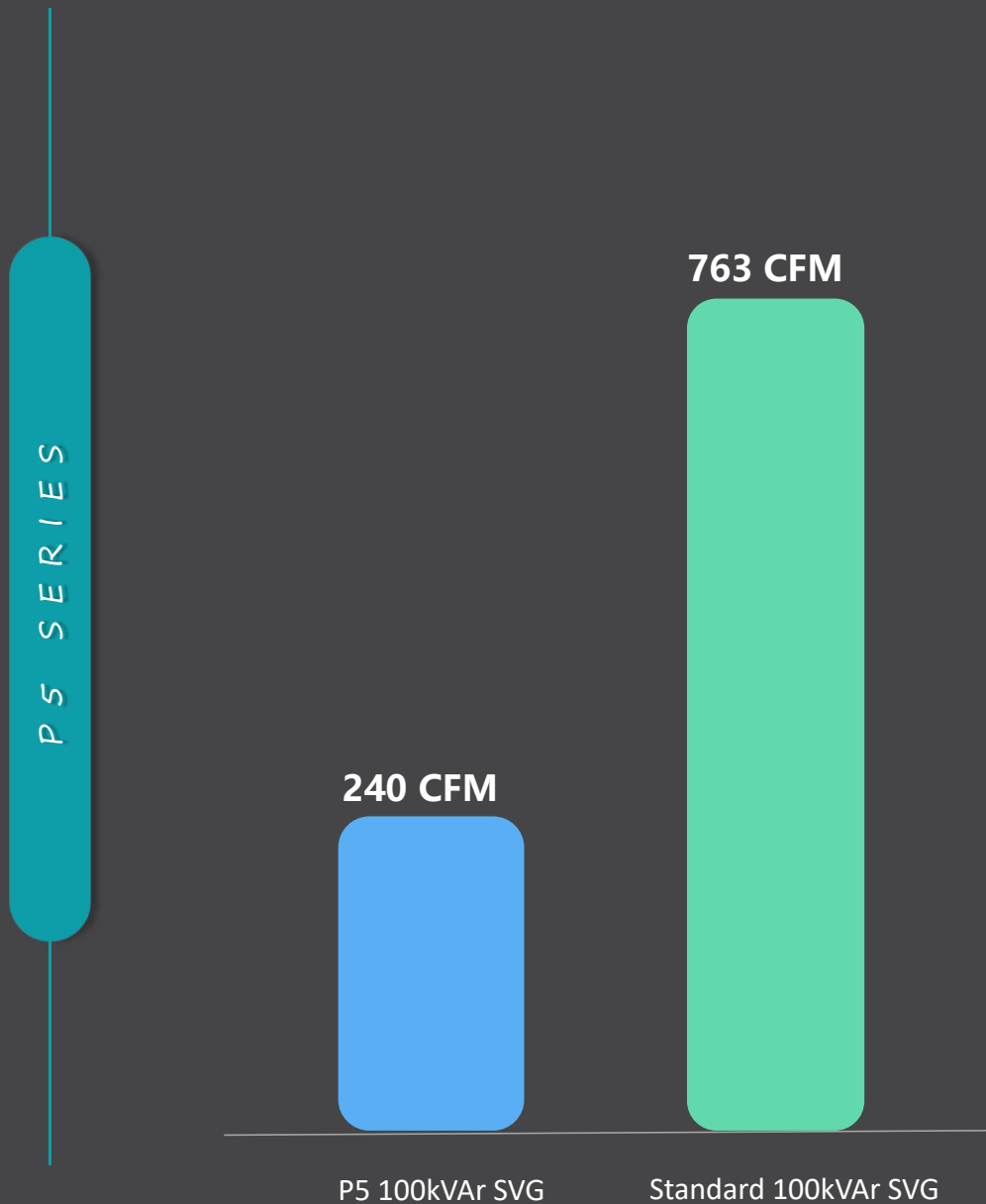
Singapore voltage 415V, $U \cdot I \cdot 1.732 \cdot 0.02 \cdot 24 \cdot 365$

100kVAr SVG as example, energy consume saving \approx 18,890 KWH per year

Using 0.15USD/KWH as electricity pricing



Electricity Fee Saving: 2,834 USD Per Year



>70% Ventilation Requirement Reduced

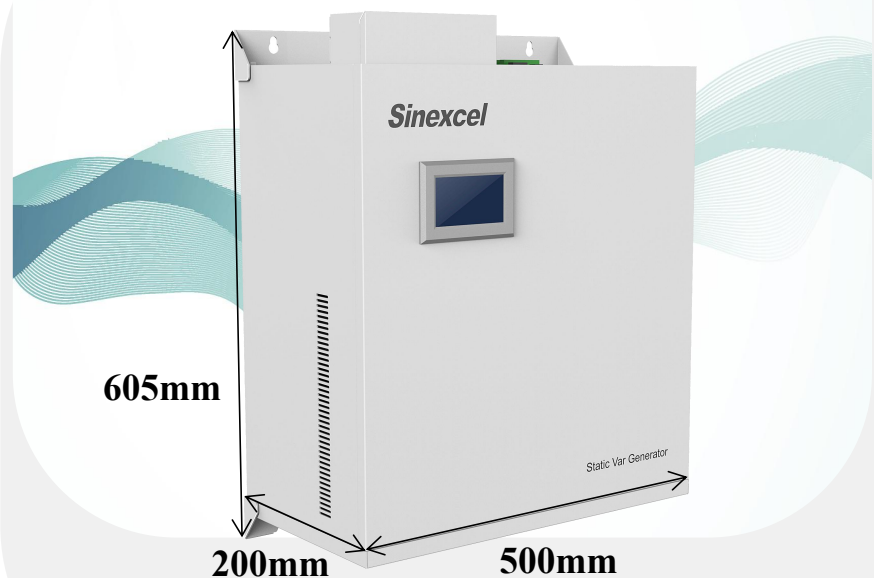
- ✓ Less air conduct, lower noise
- ✓ Less heat generation, longer lifespan
- ✓ Less ventilation, more flexible cabinet configuration



≈69% Reduce Mechanical Size Weight Drop From 48kg to 25kg

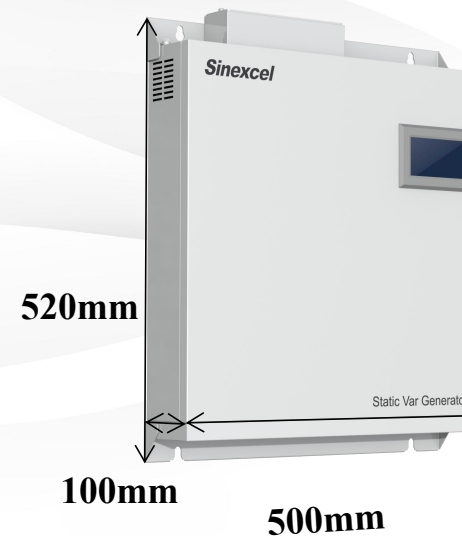
P5 SERIES

Standard SVG 100kVAr_48KG



48KG

P5 SVG 100kVAr_25KG

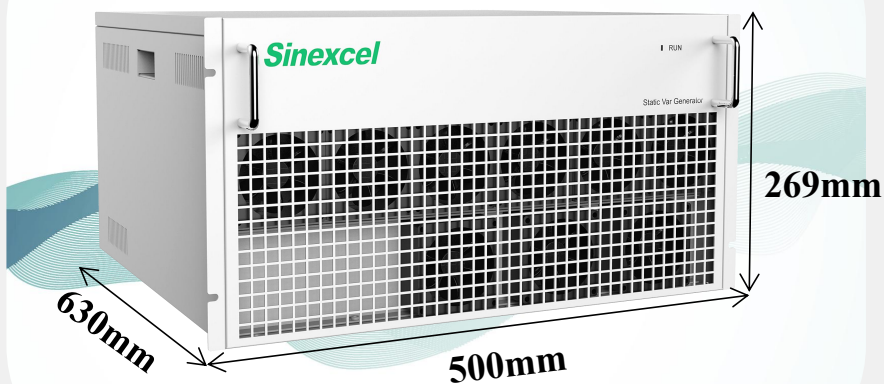


25KG

≈69% Reduce Mechanical Size Weight Drop From 48kg to 25kg

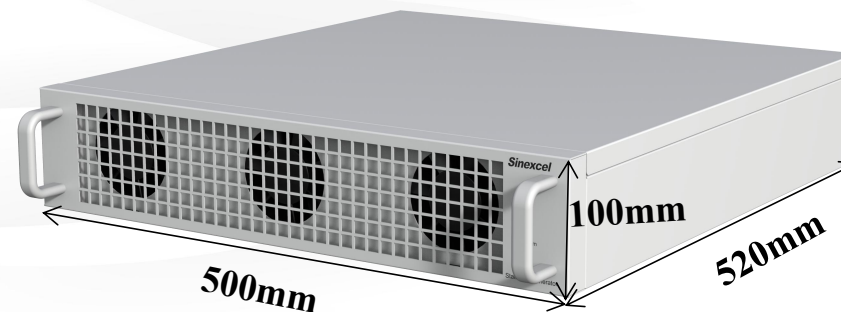
P5 SERIES

Standard SVG 100kVAr_48KG



48KG

P5 SVG 100kVAr_25KG



25KG

Higher Integrated!

P5 SERIES

Saving more space and higher power rating when integrated into the panel.

Less ventilation volume required as less space taken up.



Standard Flex. Cabinet

- ✓ For Standard cabinet only support 5 standard modules maximum,
- ✓ For P5 module that support 9 modules inside.



Maximum capacity up high to
900kVAr SVG

Cabinet More **Functional**

P 5 S E R I E S



7-Inch HMI



Support single 7-inch HMI to control **16 modules maximum**



Support **SVG+AHF hybrid** installation only use one 7-inch HMI to control



Convenient Installation



Two modules installation, total height are 200mm



Smaller size that more suitable for small area application, more optional and flexible for customer



More convenient installation and connection, only power cables and CTs to be connected

P5 Series SVG Capacity Optional

P 5 S E R I E S



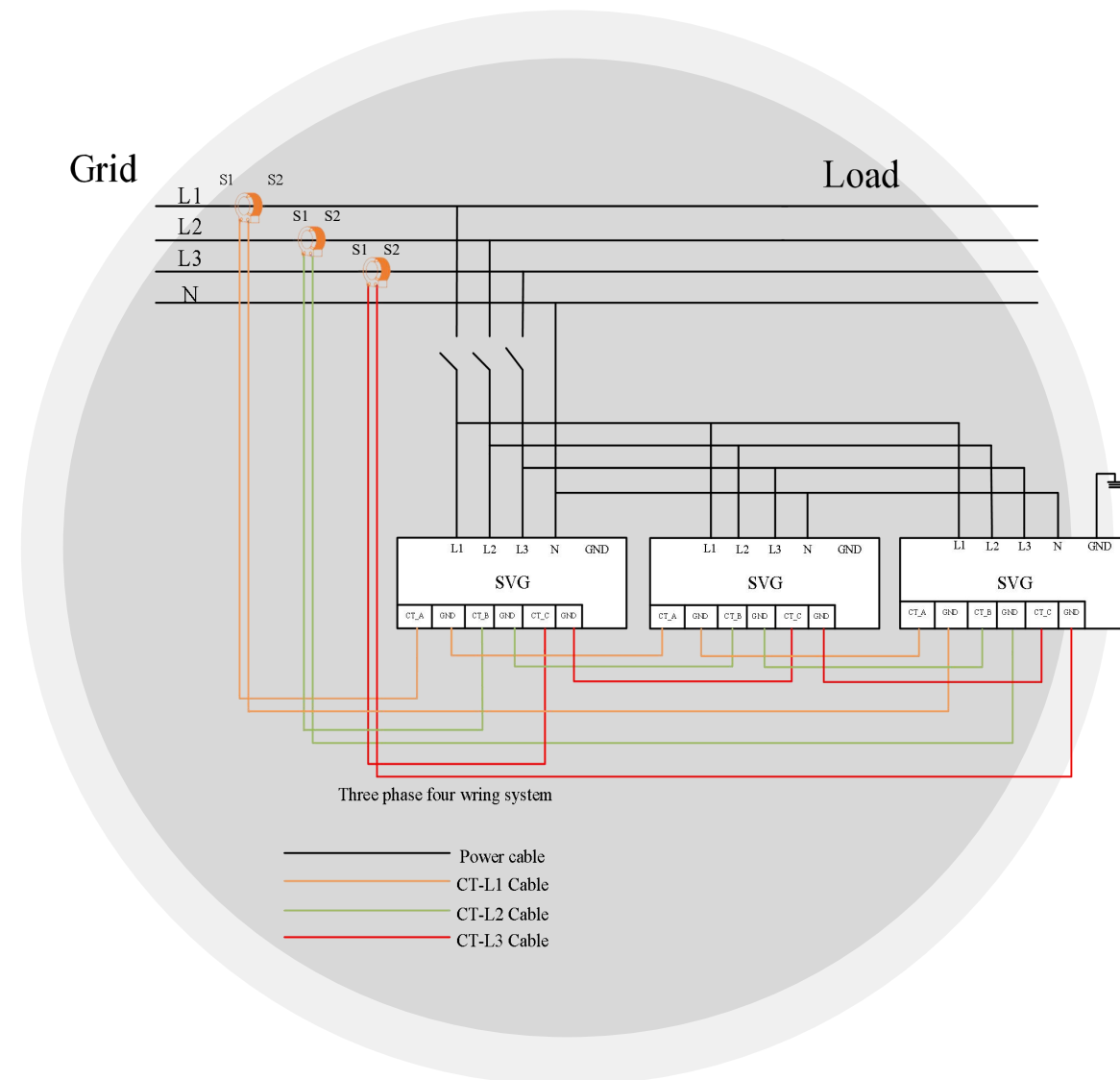
10kVAr Balde SVG (Had released in 2017 year)
15/30/50kVAr SVG (Will be released in October 2023 year)
100kVAr SVG (Will be mass production in March 2023 year)

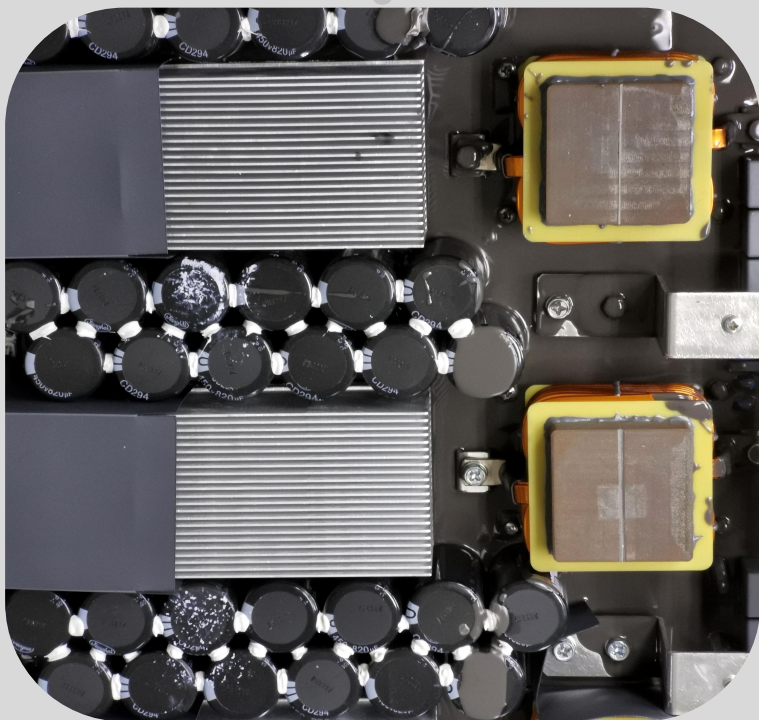
400V supports 3P3W&3P4W SVG (CE certification)
Compatible 380~480V supports 3P3W (ETL certification)

CT “Close Loop” Design

P5 series supports grid side connection, which means only one set of CT is needed on the grid side (load side) even with multiple modules paralleled.

- Less CTs, less material cost
- Simplified wiring, less operating charges





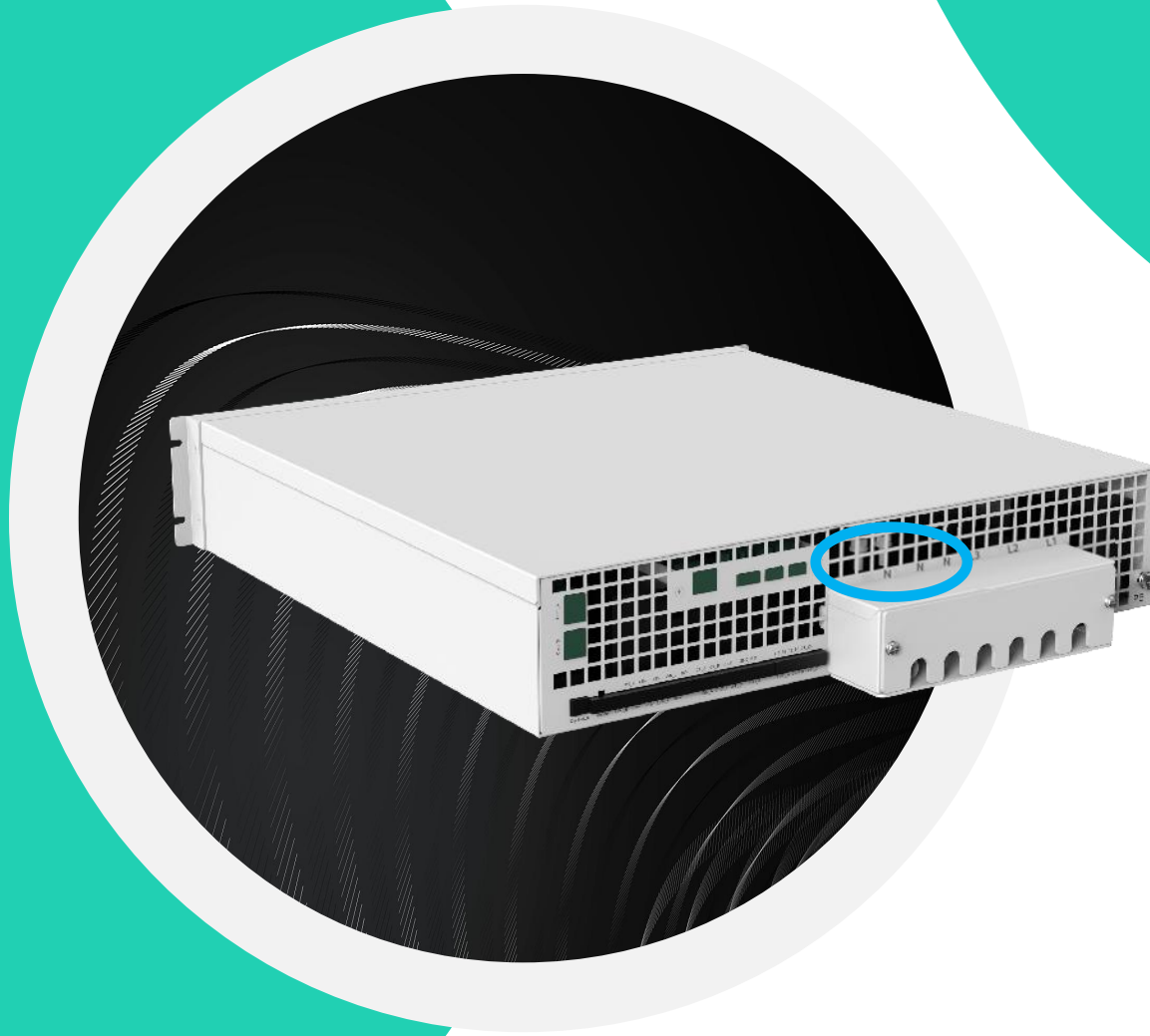
Hardware Updated

Friendly design, better user experience

Highly protection **IV** level

All veneers inside the module are fully glued that is more suitable for harsh environment, **like conductive dust, seawater corrosivity industry.**

Three N cables connection



N N N L3 L2 L1

Enhanced triple zero-sequence harmonic compensation capability



THANK YOU

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 ***Sinexcel***