

# Grid Connected Photovoltaic Inverter

**High-efficiency**

Single large capacity  
High-efficiency Photovoltaic Central Inverter  
For photovoltaic generating system

•Indoor installed type

**100kW**

**250kW**

**500kW**

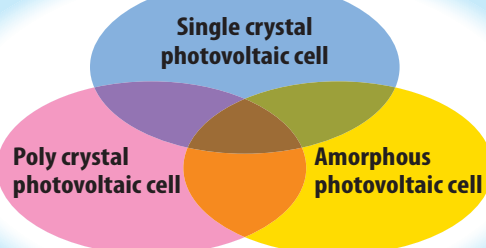
## Characteristics

- 1. The highest efficiency available among insulating transformer type products.**
- 2. Large input voltage range. Units capable to accept voltage ranges within DC330~900V.**
- 3. The smallest size in its class.**  
Minimized the installation area required for the 100kW~500kW type models. Minimized the heat sink by optimizing the design.
- 4. Streamlined the maintenance process.**  
Using a unified spare parts list lends to similar maintenance process.
- 5. TÜV - CoC**
  - prEN62109-1: 2007
  - IEC62109-1: 2007 ( 82/505/CDV )
  - IEC62109-2: 2007 ( Committee Draft )



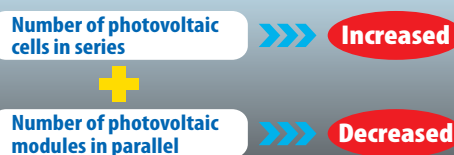
## High-efficiency type

**Input voltage DC330~900V**



Any photovoltaic crystal structures can be applied to our products.

**DC500V, 600V rating unit was developed**



**Low-loss realized**

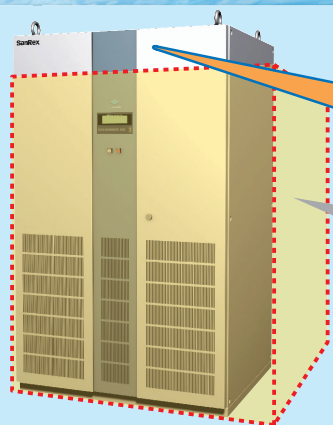
## New Design

**Downsizing of footprint**

**Slim body and innovative design**

**LCD panel displays maintenance functions**

- Display of operation status
- Warning display of abnormal operation



High-efficiency type (100kW)  
900×2150×900mm

Ordinary product  
1000×1850×1000mm

**81%, compared with our ordinary product**



Specifications for TÜV certified model

Indoor installed type 100kW 250kW 500kW

Production Lineup	MV TYPE (750Vseries)			HMV TYPE (900Vseries)		
	100kW	250kW	500kW	100kW	250kW	500kW
System type	Grid connected type					
Output nominal power (W)	100,000	250,000	500,000	100,000	250,000	500,000
Grid voltage (Within Isolation Transformer) (V)	380/ 400/ 420	380/ 400/ 420	380/ 400/ 420	380/ 400/ 420	380/ 400/ 420	380/ 400/ 420
	3Phase 3wire system					
Output nominal current (A)	151.9/ 144.3/ 137.5	379.8/ 360.9/ 343.7	759.7/ 721.7/ 687.3	151.9/ 144.3/ 137.5	379.8/ 360.9/ 343.7	759.7/ 721.7/ 687.3
Output maximum current (A)	168.8	422.0	844.1	168.8	422.0	844.1
Isolation Transformer	Within Isolation Transformer for industrial use					
AC output power factor	≥0.99	≥0.99	≥0.99	≥0.99	≥0.99	≥0.99
AC current total distortion factor (%)	≤3.0	≤3.0	≤3.0	≤3.0	≤3.0	≤3.0
Maximum D.C input voltage (max Voc) (V)	750.0	750.0	750.0	900.0	900.0	900.0
Maximum D.C input current (max Isc) (A)	300.0	750.0	1,500.0	300.0	750.0	1,500.0
Input voltage operating range (V)	330~750	330~750	330~750	330~880	330~880	330~880
Rated voltage PV field (V)	500.0	500.0	500.0	500.0	500.0	500.0
Rated input current (A)	211.0	527.0	1,050.0	211.0	527.0	1,050.0
D.C ripple factor (%)	≤1.0	≤1.0	≤1.0	≤1.0	≤1.0	≤1.0
Input voltage MPPT operating range (V)	340~650	340~650	340~650	340~780	340~780	340~780
Rated load efficiency (Within Tr) (%)	95.2	95.4	95.5	95.2	95.4	95.5
Efficiency tolerance	IEC/TC82 (CO) 19 (or JIS-C8961)					
Standby power (Including nighttime) (W)	≤50	≤50	≤50	≤50	≤50	≤50
Operation temperature range (°C)	-20~45	-20~45	-20~45	-20~45	-20~45	-20~45
Humidity range, non-condensing (%)	25~95	25~95	25~95	25~95	25~95	25~95
AC-Case	AC2,500V 1min	AC2,500V 1min	AC2,500V 1min	AC2,500V 1min	AC2,500V 1min	AC2,500V 1min
Dimensions W×H×D (mm)	900×2,150×900	1,300×2,150×1,000	1,600×2,350×1,300	900×2,150×900	1,300×2,150×1,000	1,600×2,350×1,300
Weight (kg)	1,300	2,000	3,500	1,300	2,000	3,500

Production Lineup	HV TYPE (900Vseries)		
	100kW	250kW	500kW
System type	Grid connected type		
Output nominal power (W)	100,000	250,000	500,000
Grid voltage (Within Isolation Transformer) (V)	380/ 400/ 420	380/ 400/ 420	380/ 400/ 420
	3Phase 3wire system		
Output nominal current (A)	151.9/ 144.3/ 137.5	379.8/ 360.9/ 343.7	759.7/ 721.7/ 687.3
Output maximum current (A)	168.8	422.0	844.1
Isolation Transformer	Within Isolation Transformer for industrial use		
AC output power factor	≥0.99	≥0.99	≥0.99
AC current total distortion factor (%)	≤3.0	≤3.0	≤3.0
Maximum D.C input voltage (max Voc) (V)	900.0	900.0	900.0
Maximum D.C input current (max Isc) (A)	240.0	600.0	1,200.0
Input voltage operating range (V)	440~880	440~880	440~880
Rated voltage PV field (V)	600.0	600.0	600.0
Rated input current (A)	175.4	438.6	877.2
D.C ripple factor (%)	≤1.0	≤1.0	≤1.0
Input voltage MPPT operating range (V)	450~800	450~800	450~800
Rated load efficiency (Within Tr) (%)	95.7	95.9	96.0
Efficiency tolerance	IEC/TC82 (CO) 19 (or JIS-C8961)		
Maximum efficiency (WithinTr) (%)	96.5	96.7	96.9
EU efficiency (WithinTr) (%)	95.1	95.3	95.5
Standby power (Including nighttime) (W)	≤50	≤50	≤50
Operation temperature range (°C)	-20~45	-20~45	-20~45
Humidity range, non-condensing (%)	25~95	25~95	25~95
AC-Case	AC2,500V 1min	AC2,500V 1min	AC2,500V 1min
Dimensions W×H×D (mm)	900×2,150×900	1,300×2,150×1,000	1,600×2,350×1,300
Weight (kg)	1,300	2,000	3,500

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High-efficiency Single large capacity High-efficiency Photovoltaic Central Inverter For photovoltaic generating system



Caution ご注意

Read and understand the entire Operating Manual and your employer's safety practices before installing, or using the equipment. Do not install the equipment in an area where water, high humid, steam, dust or oil are located. It may cause damage to the equipment or result in a fire or electrical shock.

- Please note that the parts such as fan or fuse needed to be replaced are chargeable when replacing. Also, keep accessory parts in a safe place.
- Please contact us if the equipment is used for any other applications not specified in this brochure.
- Specifications are subject to change without any notice.
- 有寿命部品 (ファン、ヒューズ) などは、交換時費用が必要となりますので、ご承知ください。付属品などは大切に保管してください。
- 本カタログに記載以外の用途でのご使用の場合は、別途ご相談ください。
- 本仕様は性能向上の為に予告なく変更する場合があります。

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