

**SANUPS**

PV INVERTER

**P83D**



**SANYO DENKI**

# High Efficiency PV INVERTER

# SANUPS P83D

PV Inverter

Grid-connected Type **With transformer**

Input operating voltage range	Output voltage	Rated output	Output electrical system
DC 430 V to 900 V	AC 380/400/415 V	250 kW	3-phase 3-wire



**1** Maximum Efficiency of 97%

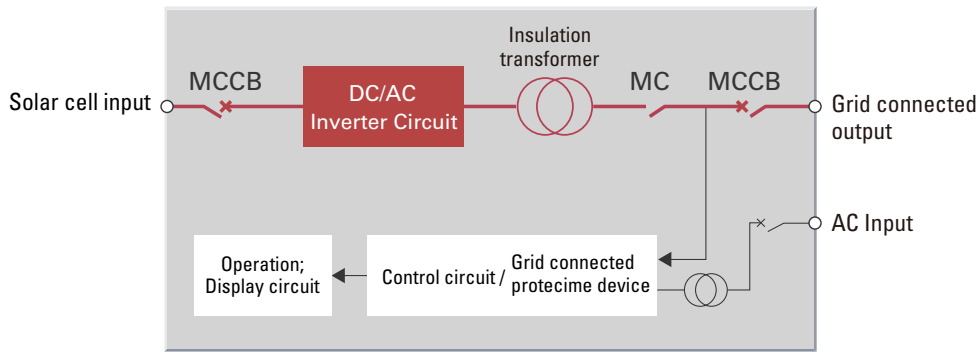
**2** 20 Years of Life Expectancy

■ It will last 20 years with maintenance.

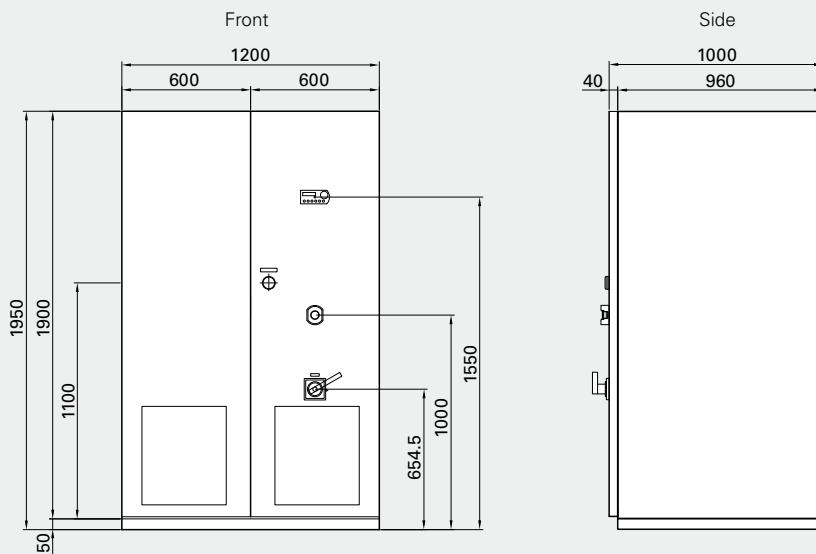
## Specifications

Item	Model	P83D254	Remarks
Rated output		250 kW	
System	Main circuit type	Self commutation voltage type	
	Switching method	High frequency PWM	
	Electrical insulation method	Commercial frequency insulation transformer method	
DC input	Maximum allowable input voltage	DC 950 V	
	Input operating voltage range	DC 430 to 900 V	
	Range of rated output voltage	DC 450 to 850 V	
	Maximum power point tracking range	DC 450 to 850 V	
AC output	Output electrical system	3-phase 3-wire system	TN-C grounding
	Rated output voltage (Line)	AC 380 / 400 / 415 V	Specified when ordering
	Voltage range	Rated output voltage $\pm$ 10%	
	Rated frequency	50 / 60Hz	Specified when ordering
	Rated output current	AC 379.8 / 360.8 / 347.8 A	
	AC output current distortion factor	3% Max.	Rated output current ratio
Conversion efficiency	Output power factor	0.99 Min.	At rated output
	MAX Efficiency	97%	
	EU Efficiency	96.2%	
Grid connected protective function		Utility grid over voltage (OV), Utility grid under voltage (UV), Utility grid over frequency (OF), Utility grid under frequency (UF),	
Islanding operation detecting functions	Passive-type device	Voltage phase jump detection	
	Active-type device	Reactive power variation method	
External communications		RS-485	
Environment	Installation place	Reactive power variation method	
	Ambient temperature	- 5 to + 40°C	Option: - 20 to 40°C
	Relative humidity	15 to 85%	Non-condensing
	Altitude	1,000m Max.	
Protection code		IP20	
Standards	Safety	EN 50178, IEC 62103	
	EMC	EN 61000-6-2, EN 61000-6-4	
	CE marking	Yes	

## Circuit block diagram



## Dimensions (Unit: mm)



Mass : 2100 kg

## Option

### ■ Data collection and measuring system

#### • SANUPS PV Monitor

SANUPS PV Monitor allows you to easily monitor power generation status in remote area via network. Max. 27 connected devices can be measured / monitored.

### ■ Outdoor enclosure

It is necessary when setting the PV inverter in outdoor.

### ■ Junction devices

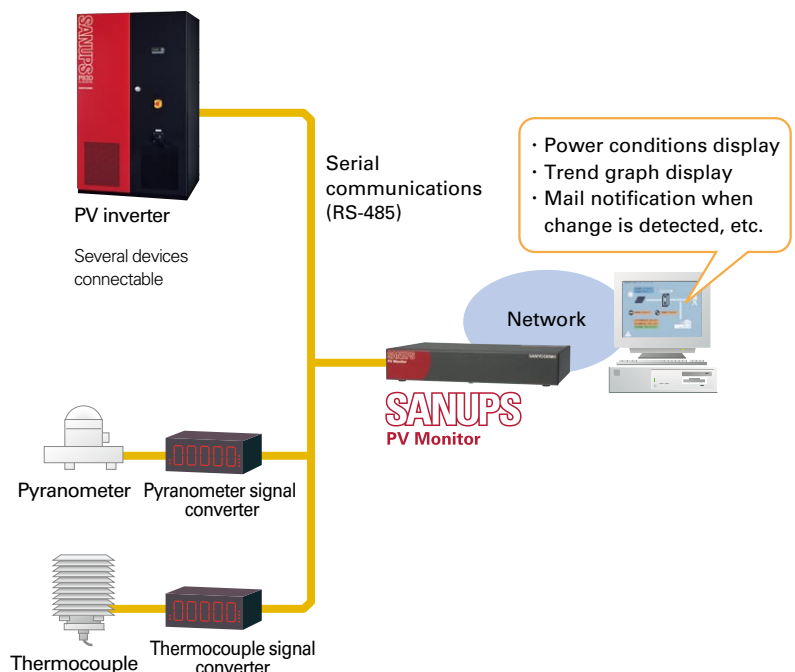
This device plays a role to collect DC outputs from solar cells and outputs to PV inverter.

### ■ Thermocouple

### ■ Pyranometer

### ■ Thermocouple signal converter

### ■ Pyranometer signal converter



## Notes when investigating use of this product in your applications

- Before starting installation, assembling and use, read the "Operation Manual" carefully and use the product correctly in your applications.
  - The product or system on this catalog is for general and industrial use. This product or system is not supposed to be applied to where exceptionally high quality and reliability is required, and its failure or improper operation may possibly result in fatal or serious injury. In this case, please call us for further assistance.
  - For the applications that undergo vibration, please consult with our company.
  - Never modify this product or give additional processing to this product.
  - For the installation and maintenance work, please consult with our company or with specialized company.
- ※ For any inquiry or consultation, please contact our sales representative.

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