



# Leading Inverter Manufacturer

String Inverter | Hybrid Inverter | Microinverter



#### Note:

The technical data above mentioned may be updated or revised due to product development.

The data in this brochure is subject to change without notice.

The latest datasheet and catalogue can be acquired via [market@deye.com.cn](mailto:market@deye.com.cn)

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Deye Inverter



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# Company Profile

1

**Ningbo Deye Inverter Technology Co., Ltd**, founded in 2007 with registered capital 56 million USD, is one of the China's high-tech enterprises and a subsidiary of Deye Group. With a plant area over 600,000m<sup>2</sup> and complete production and testing equipment, Deye has become a major player in the global solar inverter market.

2

**Ningbo Deye Inverter Technology Co., Ltd** is dedicated to providing complete photovoltaic power system solutions, including residential and commercial power plants solutions. Also, Deye offers solar energy storage system solutions. Among them, PV grid-connected inverter power range from 1-136kW, Hybrid inverter 3kW-50kW, and microinverter 300W-2200W.

3

As a technology-oriented company, Deye has always been committing to research and develop new cutting-edge technologies to provide efficiency and reliable products. For example, Deye adopts T-type three-level topology and enhanced SVPWM algorithm to further improve the conversion efficiency by 0.7% compared with common SPWM. With frequency droop control technology, Deye string inverter is able to work with diesel generator, which greatly expands the scope of the product application.

4

**Deye New Energy Australia**, a subsidiary of Deye, is focused on serving our local Australian clients better. We are establishing local warehouses and on-site technical services to enhance operations and ensure prompt, efficient service tailored to our customers' needs.



# Milestones

## 2023

Cumulative shipments of hybrid inverters surpass **1 million** units.

## 2021

Deye Group was successfully listed on SSE of China in 2021, Stock Code **605117.SH**.

## 2017

Deye has launched first generation hybrid inverter and attracted a lot of attention with many unique features such as V/f droop control technology and battery DC / DC topology etc...

## 2024

Launch of the next-generation hybrid inverters and microinverters with a fresh design.

## 2022

Launched the latest generation of **50kW** hybrid inverter, equipped with independent two-way battery terminal port.

## 2019

By the end of 2019, with total shipments **30,000+**, Deye hybrid inverter has become Top 3 in SouthAfrica, Pakistan and **Top 1** Chinese brand in USA.

## 2007

Founded in 2007 with registered capital of **56 million USD**.

# Core Technology

Deye hybrid inverter 3-50kW with 208/230/240/400Vac

- ◆ Automatic switching time 4ms
- ◆ 6 time periods for battery charging/discharging
- ◆ V/f droop control, Max. 16pcs in parallel
- ◆ Supports using diesel generator to charge battery directly, ensuring system energy supply 7\* 24H
- ◆ Max. conversion efficiency of 97.6%; Max. battery charge efficiency of 96.5%
- ◆ Max. charging/discharging current of 290A

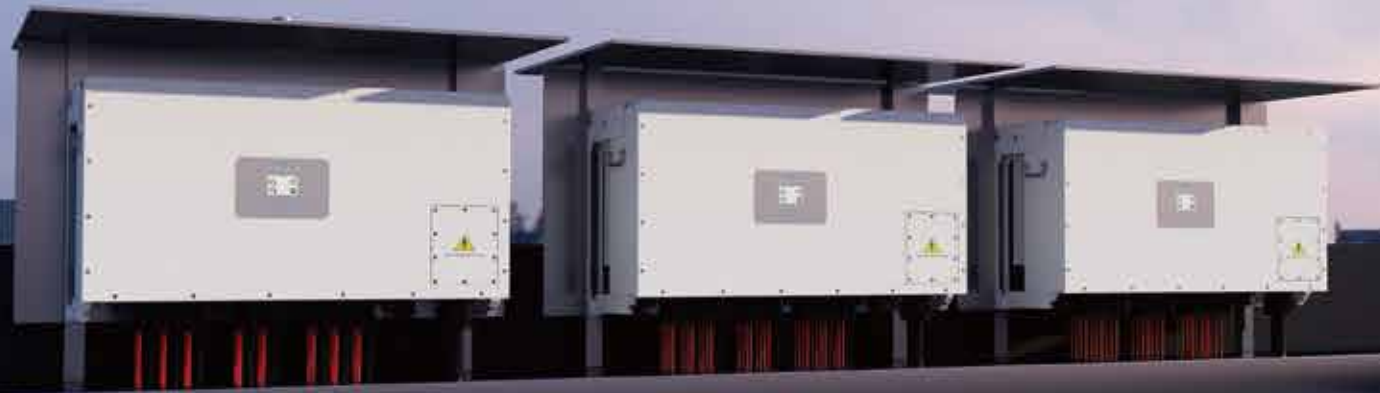




# Core Features

## Deye grid-connected inverter 1-136kW

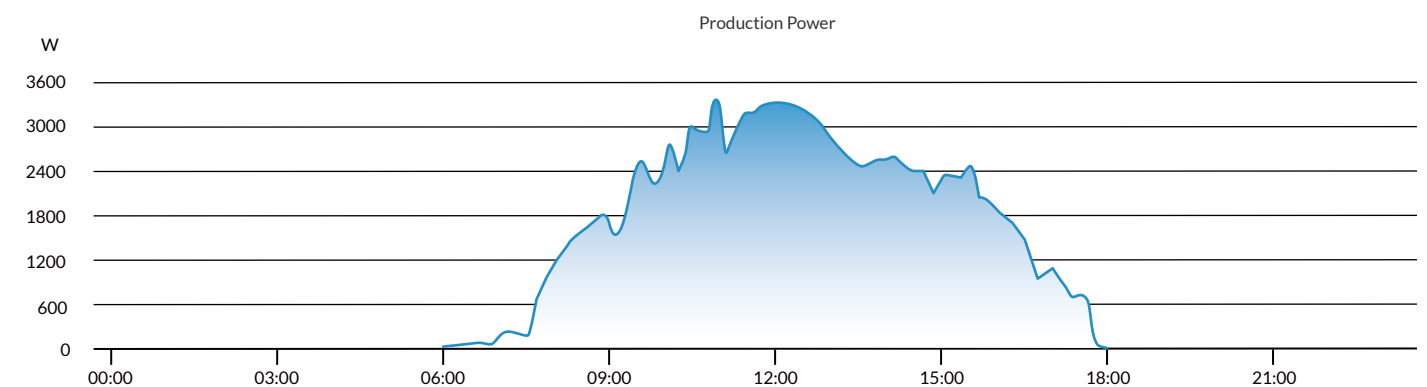
- ◆ Max. 8 MPP trackers, Max. efficiency up to 98.9%
- ◆ High DC/AC ratio 1.5 times for more yields
- ◆ Wide output voltage range 277-520Vac
- ◆ Zero export application, response speed within 0.5S
- ◆ T-type three-level topology and enhanced SVPWM
- ◆ Type II DC / AC SPD, frequency droop control technology
- ◆ Max. DC input current of 16A/string, adapt to 600W solar panel
- ◆ String intelligent monitoring (optional), Ani-PID function (Optional)



# Main Highlights

## Deye microinverter 300-2200W

- ◆ Support reactive power compensation, comply with UL code.
- ◆ Module level monitoring, Max. 4 MPPTs design
- ◆ Max. DC input current 18A, adapt to 700W PV module
- ◆ Rapid shutdown function, safe and reliable
- ◆ WIFI communication
- ◆ IP67 protection degree, 15 years warranty



Physical Layout

0W	200 W	180 W	150 W
170 W	170 W	280 W	250 W
270 W	280 W	260 W	240 W





# Microinverter


## SUN-M60/80/100G5-AU-Q1



 IP67 protection degree, 10 years warranty

 WIFI communication

 30 Max. DC input current of 30A, adapt to 700W PV module

 1 MPP tracker, module level monitoring

 Rapid shutdown function

### Technical Data

Model	SUN-M60G5-AU-Q1		SUN-M80G5-AU-Q1	SUN-M100G5-AU-Q1
PV String Input Data				
Max. PV Input Power (W)	210-420(2 Pieces)	210-560(2 Pieces)	210-700(2 Pieces)	
Max. PV Input Voltage (V)	60			
Start-up Voltage (V)	15			
MPPT Voltage Range (V)	25-55			
Rated PV Input Voltage (V)	42.5			
Max. Operating PV Input Current (A)	30			
Max. Input Short Circuit Current (A)	45			
No. of MPP Trackers/ No. of Strings per MPP Tracker	1/2			
AC Output Side				
Rated AC Output Active Power (W)	600	800	1000	
Max. AC Output Apparent Power (VA)	600	800	1000	
Rated AC Output Current (A)	2.7	3.5	4.4	
Max. AC Output Current (A)	2.7	3.5	4.4	
Rated Output Voltage/Range (V)	230V/240V 0.85Un-1.1Un			
Grid Connection Form	L+N+PE			
Rated Output Grid Frequency/Range(Hz)	50/45-55			
Max. Unit per Branch	6	6	5	
Power Factor Adjustment Range	0.8 leading-0.8 lagging			
Total Current Harmonic Distortion THDi	<5%			
DC Injection Current	<0.5%In			
Efficiency				
Max. Efficiency	96.5%			
Euro Efficiency	96.0%			
MPPT Efficiency	>99%			
Equipment Protection				
DC Polarity Reverse Connection Protection	Yes			
AC Output Overcurrent Protection	Yes			
AC Output Overvoltage Protection	Yes			
AC Output Short Circuit Protection	Yes			
Thermal Protection	Yes			
DC Terminal Insulation Impedance Monitoring	Yes			
Power Network Monitoring	Yes			
Island Protection Monitoring	Yes			
Earth Fault Detection	Yes			
Overvoltage Load Drop Protection	Yes			
General Data				
Operating Temperature Range (°C)	-40 to +65°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude (m)	2000m			
Noise (dB)	≤25			
Ingress Protection(IP) Rating	IP 67			
Inverter Topology	HF Transformer			
Over Voltage Category	OVC II(DC), OVC IV(AC)			
Communication	WiFi			
Cabinet Size (WxHxD mm)	217.3×175.5×32.4 (Excluding Connectors and Brackets)			
Weight (kg)	2.7			
Warranty	Standard 10/15 years, extended warranty			
Type of Cooling	Natural Cooling			
Grid Regulation	AS/NZS 4777.2			
Safety EMC/Standard	IEC 62920,IEC 61000-6-1/2/3/4, IEC 62109-1, IEC 62109-2			

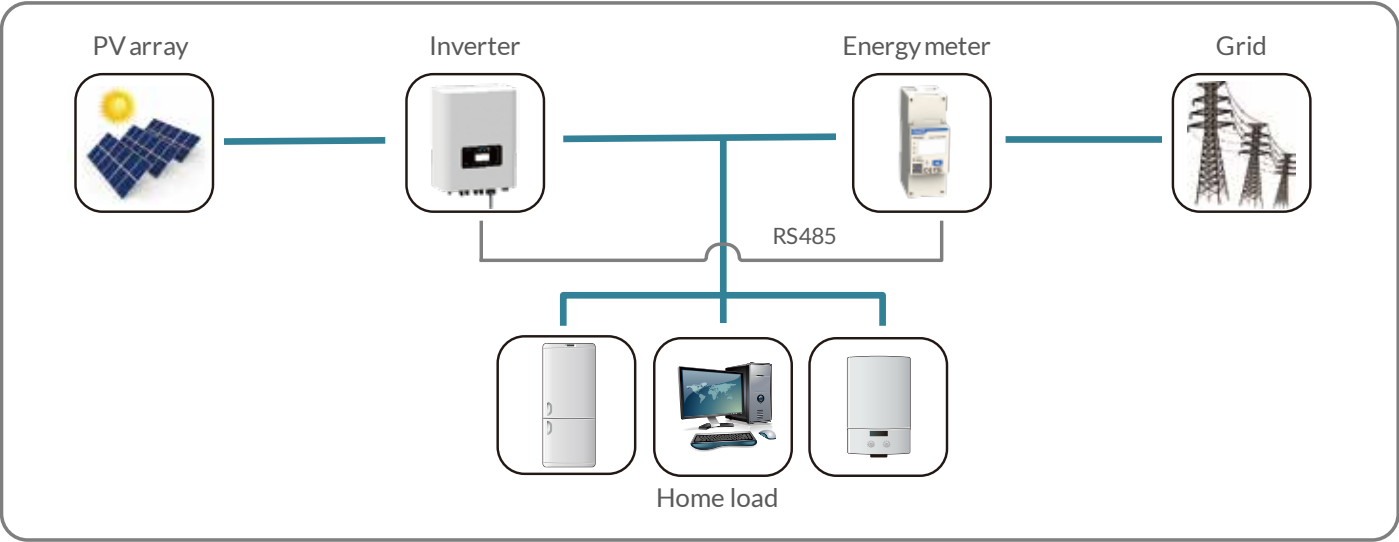
# Energy Meter



## Technical Data

Model	CHNT DDSU666	CHNT DTSU666	EASTRON SDM 230 Modbus	EASTRON SDM 630-Modbus V2	EASTRON SDM 630 MCT
Battery Data					
Max. direct current measurement (A)	60	80	100	100	1-9999A (with CT)
Direct Voltage measurement between phases	/	176-458V	/	147-480V	50-950V
					50-550V
Direct measurement between phase and neutral	176-264V	100-265V	176-276V	85-480V	20-550V
Accuracy Class					
Active power	Class1				
Reactive power	Class2				
Power Supply					
Power consumption	≤1W / 8VA	≤1.5W / 6VA	≤2W / 10VA	≤2W / 10VA	≤2W / 10VA
AC power supply input voltage	176-264V	100-265V	176-276V	85-480V	85-275V / 120-380V
AC power supply input frequency	50/60Hz		50Hz	50/60Hz ±2%	50/60Hz ±2%
Generation Specifications					
Dimenstions (L/H/W) in mm	36×85×66	100×72×66	36×99×63	72×100×66	72×94.5×65
Weight (kg)	0.21	0.44	0.21	0.42	0.29
Mounting options	DIN Rail				
Degree of protection	IP51				
Display	LCD				
Communication interface	RS485				
Max. number of devices to connect	32				
Regulated working temperature range	-25-55℃	-10-45℃	-25-55℃		
Limited working temperature range	-40-70℃	25-75℃	/		
Humidity	≤75%		0~95%, non-Condensing		
Warranty	1.5 years				

## Typical Application Diagram





# Stick Logger

## GPRS / WIFI / 4G / Ethernet

Monitor your system anywhere in the world.



- ◆ External light indicator, logging status at a glance;
- ◆ Plug & play, pick power within inverter, no external power needed, easy to install;
- ◆ Independent from inverter to protect parts inside inverter, eliminate potential problems;
- ◆ IP65 water-proof design, resistant to bad weather, enhance stability;
- ◆ External design, easier to replace faulty equipment;
- ◆ End-user can monitor yields at any time with SOLARMAN APP.

### Technical Data

Product Model	LSG-3	LSG-4	LSW-3	LS4G-3	LSE-3
Remote Communication Interface	GPRS	GPRS	WiFi	4G	LAN
Working Frequency	GSM850 / EGSM900 / DCS1800 / PCS 1900MHz	GSM850 / EGSM900 / DCS1800 / PCS 1900MHz	2.142GHz-2.484GHz	704MHZ-960MHZ 1710MHZ-2690MHZ	Adaptive Network; 10M / 100M
Satellite Positioning	/	GPS / Beidou < 15m	/	/	/
Antenna	External GPRS Stick Antenna	External GPRS Stick Antenna	External WiFi Stick Antenna	External 4G Stick Antenna	/
Data Interface	RS485 / RS232 / TTL				
Working Voltage	DC4.7V~DC15V				
Working Power	3W	3W	1.5W	5W	1W
SIM Card	Chip Card / MicroSIM	Chip Card / MicroSIM	/	MicroSIM	/
Memory	2M Flash (2M-16M Optional)				
Working Temperature	-40°C-85°C				
Working Humidity	< 90% (No Condensing)				
No.of Connections	One				
Serial Communication Rate	bps (1200-115200bps Configurable)				
Data Acquisition Interval	Default 5min (1-15min Configurable)				
User Configuration	AT+InstructionSet				
	Remote Server				
	Bluetooth		APP / Web	Local Serial Port	Web
Firmware Upgrade	Remote Upgrade				
Others	Real-time Control, Data resuming				

Stick logger supports GPRS, WIFI, 4G, Ethernet and other communication modes. Its bluetooth function enables local debugging configuration to collect operation and power generation data from inverters.

It pairs with solarman professional platform to enable remote PV system monitoring and to realize distributed power station management with lower cost and higher efficiency.

# Deye Cloud



Support the establishment, data collection, monitoring, operation, maintenance, and after-sales services for new energy power stations like photovoltaic, energy storage, and micro-inverters.

The Deye Smart Cloud Big Data platform enables transparent management of all power station types, enhancing their value. It offers a variety of power station and equipment types, comprehensive monitoring, efficient troubleshooting, intelligent data analysis, energy flow visualization, and diverse management modes.

Additionally, our new data center feature allows collaboration with merchants for shared operation and maintenance, ensuring power station security and stability.



All in one

- Supports multiple devices such as photovoltaic, batteries, wind turbines, power grids, micro-inverters, diesel generators, loads, UPS, and Smartload in all aspects;
- Supports both business users and owners in one APP.



Security

- Separate data centers in Europe and America;
- Comply with ETSI/EN 303645, GDPR.

