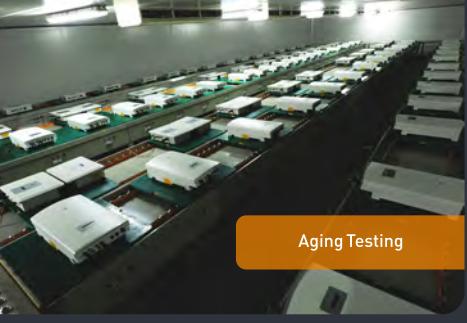
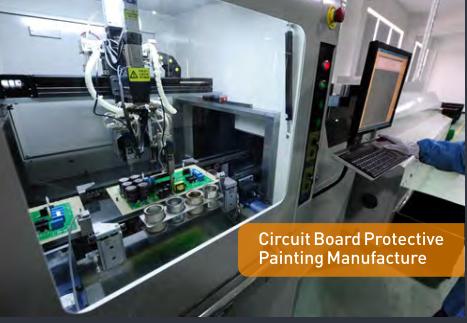


solis  
inverters

2017

V2-IN



Ginlong Manufacturing Base

Established in 2005 - Ginlong is one of the oldest and largest string inverter manufacturers in the world

3GW Annual Production Capacity

430,000sqft Manufacturing Centre

World class R&D - 52 engineers

Solis Inverter range from 700W – 70kW

Approved Vendor Listing - Leading banks and financial institutions

3<sup>rd</sup> Party Technical Audits - DNV GL, OST, SolarIF

# Company History

2003 R&D company CUK founded in Bristol, UK - 3 Engineers

2005 Ginlong company officially established in Ningbo, China. Ginlong inverter certified to CE

2006 Ginlong inverter was the second inverter certified to UK G83 certification

2009 First Asian inverter to achieve USA UL1741 certification.  
PV inverters delivered to AGL - Top 3 Australian utility company.

2010 Ginlong inverter was the second Asian inverter certified to AS4777/AS 3100

2013 IEC61400-2 annual meeting was mainly held by Ginlong

2015 Ginlong inverter installed on Eiffel Tower in Paris

2015 No 1 inverter sales for distributed PV in UK

2015 Top 12 inverter sales in Europe

2015 Top 5 PV string inverter sales in USA

2015&2016 Top 3 PV string inverter brand value in China

2016 To be listed Asia PV innovation company

2016 Awarded as the Best Distributed Inverter Brand

2016&2017 Top 3 energy storage inverter supplier in China

2016&2017 Ginlong awarded TOP BRAND PV by EuPD Research

2017 Ginlong got the APVIA Technology Achievement Award

# 100% components from the world's leading brands

Capacitor, Inductor



**nichicon**

**NCC** 株式会社



**YAGEO**

Connector, Switching device



**wieland**

**ZETTLER**



**santon**

**OMRON**

**JST**

Materials, IC category

**TEXAS INSTRUMENTS**

**A.Schulman**

**RAMPF**  
discover the future



**Avago**  
TECHNOLOGIES

**3M** Science.  
Applied to Life.™

Power device, Sensor

**infineon**

**VAC**  
VACUUMSCHMELZE

**MAGTRON**

**CREE**

**SiTime**™

**ANALOG  
DEVICES**  
AHEAD OF WHAT'S POSSIBLE™

**ON Semiconductor**

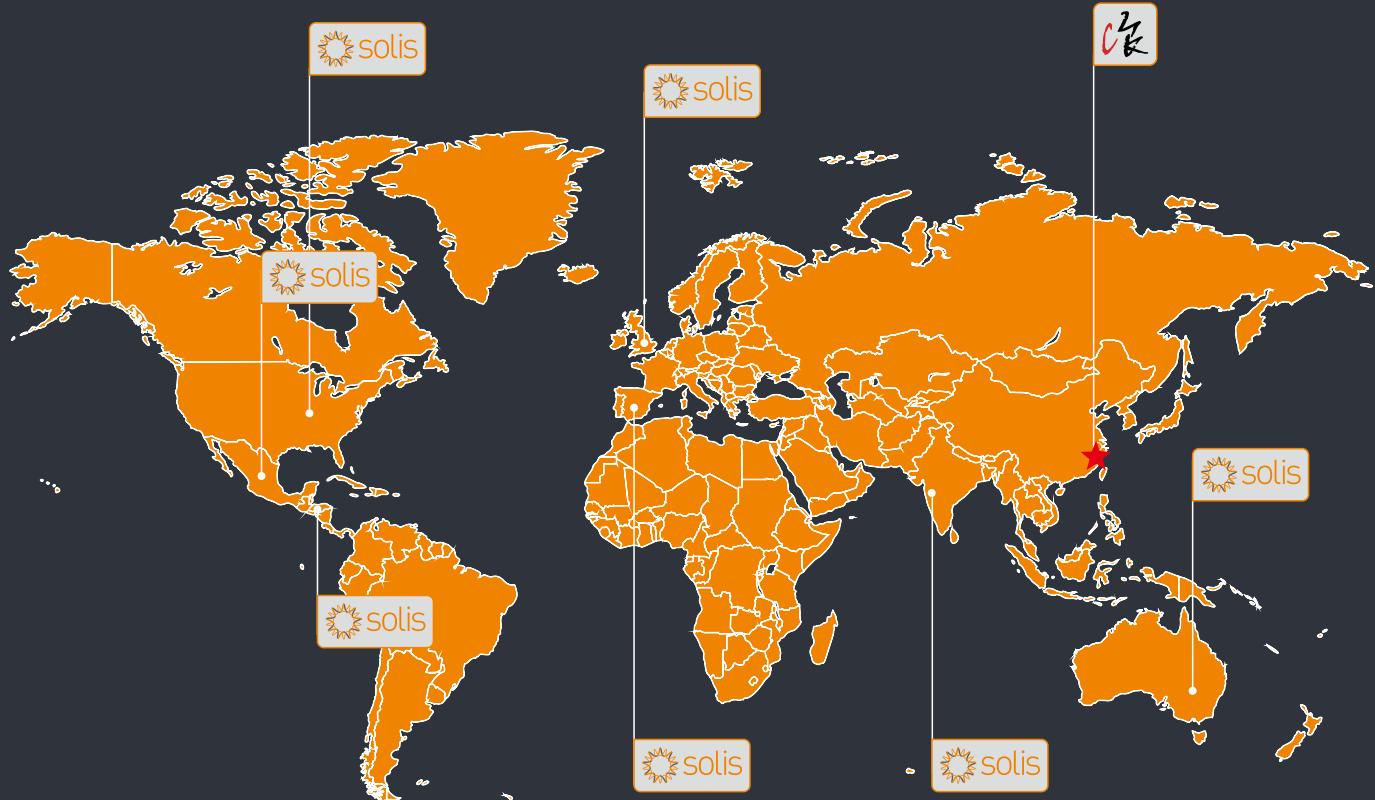
**ON**

**molex**®

**intersil**™  
A Renesas Company

**ebm papst**

# Service system



## Global service network

- ▶ America
- ▶ Australia
- ▶ Mexico
- ▶ Costa Rica
- ▶ UK
- ▶ China
- ▶ Spain
- ▶ India

## Service

- ▶ Unmatched experience across 60+ countries
- ▶ High reliability and low service frequencies
- ▶ Limited time to ensure fast service
- ▶ Local service points - China, USA(2010), Australia (2010), UK (2013) ,Central America (2013), Europe (2014)

# Installed On Eiffel Tower





# CONTENTS

■ Solis Mini Series Inverters		1
■ Solis Single Phase Inverters		3
■ Solis Three Phase Inverters		5
■ Solis Energy Storage Inverters		11
■ Accessories		13
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# Mini

700W  
to 2.5KW

## Solis Mini Series Inverter

- ▶ 50V-400V input voltage range- ultra low startup
- ▶ Over 96.7% Max.efficiency
- ▶ Precise MPPT algorithm
- ▶ IP65 rated for external installation
- ▶ RS485, WiFi/GPRS(optional) interface
- ▶ Numerous protection functions
- ▶ WiFi monitoring available---iphone and android app available
- ▶ 5 years standard warranty, 20 years optional upgrade



### Model:

Solis-mini-700

Solis-mini-1000

Solis-mini-1500

Solis-mini-2000

Solis-mini-2500

### Features:

5.6kg

Weight

50V

MPPT  
voltage

2X

CPU

Fanless

Cooling  
Concept

WiFi/GPRS

Real time  
monitoring

Available on the iPhone  
App Store

Available on the Android  
App Store

# Datasheet

Model	Solis-mini-700	Solis-mini-1000	Solis-mini-1500	Solis-mini-2000	Solis-mini-2500
Energy Source		PV			
Input Side(DC)					
Max. DC input power(kW)	0.9	1.2	1.8	2.4	3
Max. DC input voltage(V)		450		500	
Start-up voltage(V)			60		
MPPT voltage range(V)			50-400		
Max. input current(A)			10A		
MPPT number/Max input strings number			1/1		
Output Side (AC)					
Rated output power(kW)	0.7	1	1.5	2	2.5
Max. apparent output power(kVA)	0.8	1.1	1.65	2.2	2.5
Max. output power(kW)	0.8	1.1	1.65	2.2	2.5
Rated grid voltage(V)			230		
Grid voltage range(V)			180-270		
Rated grid frequency(Hz)			50/60		
Operation phase			Single		
Rated grid output current(A)	3	4.3	6.5	8.7	10.9
Max. output current(A)	4.4	6.1	9.2	12.2	13.9
Power Factor (at rated output power)			>0.99		
THDi (at rated output power)			<3%		
DC injection current(mA)			<20		
Grid frequency range(Hz)			47-52 or 57-62		
Efficiency					
Max.efficiency			96.7%		
EU efficiency			96.2%		
MPPTefficiency			>99%		
Protection					
DC reverse-polarity protection			Yes		
Short circuit protection			Yes		
Output over current protection			Yes		
Output over voltage protection			Yes		
Insulation resistance monitoring			Yes		
Residual current detection			Yes		
Surge protection			Yes		
Islanding protection			Yes		
temperature protection			Yes		
Integrated DC switch			Optional		
General Data					
Dimensins(mm)			270W*433H*105D (mm)		
Weight(kg)	5.2			5.6	
Topology			Transformerless		
Self consumption (night)			<1W(Night)		
Operating ambient temperature range			-25~60°C		
Ingress protection			IP65		
Noise emission{typical}			<30 dBA		
Cooling concept			Natural convection		
Max.operation altitude			4000m		
Designed lifetime			>20years		
Grid connection standard			EN50438, G83/2, AS4777, VDE0126-1-1, IEC61727		
Relative humidity			0~100%		
Safty/EMC standard			IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-3		
Features					
DC connection			MC-4mateable		
AC connection			Ip67rated plug		
Display			LCD,2×20 Z.		
Communication connections			RS485, WiFi/GPRS(Optional)		
Warranty			5 years standard (extend to 20 years)		

**2G**

**2.5KW  
to 5KW**

## Solis 2G Single Phase Inverter

- ▶ Ultra wide input voltage range
- ▶ Compact and light design, easy installation
- ▶ IP65 rated for external installation
- ▶ RS485, WiFi/GPRS (optional) interface
- ▶ Numerous protection functions
- ▶ WiFi and monitoring app available
- ▶ 5 years standard warranty, 20 years optional upgrade



### Model:

**Solis-2.5K-2G-ST**

**Solis-3.6K-2G-ST**

**Solis-4.6K-2G**

**Solis-3K-2G-ST**

**Solis-3.6K-2G**

**Solis-5K-2G**

**Solis-3K-2G**

**Solis-4K-2G**

### Features:

**Fanless  
Cooling  
Concept**

**Ultra wide  
Voltage  
Range**

**WiFi/GPRS  
Real time  
monitoring**

**Available on the iPhone  
App Store**  
**Available on the Android  
App Store**

**IP65**

**Weight  
12kg**

# Datasheet

Model	Solis-2.5K-2G	Solis-3K-2G-ST	Solis-3K-2G	Solis-3.6K-2G-ST	Solis-3.6K-2G	Solis-4K-2G	Solis-4.6K-2G	Solis-5K-2G			
Energy Source	PV										
Input Side(DC)											
Max. DC input power(kW)	3	3.5	3.5	4.2	4.2	4.6	5.3	5.8			
Max. DC input voltage(V)	600										
Start-up voltage(V)	120										
MPPT voltage range(V)	100~500										
Max. input current(A)	10A+10A	18A	10A+10A	18A	10A+10A	15A+15A	15A+15A	15A+15A			
MPPT number/Max input strings number	2/2	1/2	2/2	1/2	2/2	2/2	2/2	2/2			
Output Side (AC)											
Rated output power(kW)	2.5	3	3	3.6	3.6	4	4.6	5			
Max. apparent output power(kVA)	2.8	3.3	3.3	4	4	4.4	5	5			
Max. output power(kW)	2.8	3.3	3.3	4	4	4.4	5	5			
Rated grid voltage(V)	230										
Grid voltage range(V)	180~270										
Rated grid frequency(Hz)	50/60										
Operation phase	Single										
Rated grid output current(A)	10.9	13	13	15.7	15.7	17.4	20	21.7			
Max. output current(A)	13.3	15.7	15.7	16	16	21	23.8	23.8			
Power Factor (at rated output power)	>0.99										
THDi (at rated output power)	<3%										
DC injection current(mA)	<20										
Grid frequency range(Hz)	47~52 or 57~62										
Efficiency											
Max.efficiency	97.5%					97.8%					
EU efficiency	96.8%					97.0%					
MPPTefficiency	>99%										
Protection											
DC reverse-polarity protection	Yes										
Short circuit protection	Yes										
Output over current protection	Yes										
Output over voltage protection	Yes										
Insulation resistance monitoring	Yes										
Residual current detection	Yes										
Surge protection	Yes										
Islanding protection	Yes										
temperature protection	Yes										
Integrated DC switch	Optional										
General Data											
Dimensins(mm)	339W*565H*172.5D (mm)										
Weight(kg)	12	13.8	13.8	15.8	15.8						
Topology	Transformerless										
Self consumption (night)	<1W(Night)										
Operating ambient temperature range	-25~60°C										
Ingress protection	IP65										
Noise emission{typical}	<30 dBA										
Cooling concept	Natural convection										
Max.operation altitude	4000m										
Designed lifetime	>20years										
Grid connection standard	EN50438, G83/2 or G59/3, AS4777, VDE0126-1-1, IEC61727										
Relative humidity	0~100%										
Safty/EMC standard	IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-3										
Features											
DC connection	MC-4mateable										
AC connection	Ip67rated plug										
Display	LCD,2×20 Z.										
Communication connections	4 pins RS485 connector										
Warranty	5 years standard (extend to 20 years)										

**Three**

**6kW**

**-**  
**15kW**

## Solis Three PV Inverter

- ▶ Three phase output
- ▶ Precise MPPT algorithm
- ▶ Compact and light design, easy installation
- ▶ IP65 rated for outdoor installation
- ▶ RS485, WiFi/GPRS (optional) interface
- ▶ WiFi and monitoring app available
- ▶ Numerous protection functions
- ▶ 5 years standard warranty, 20 years optional upgrade



### Model:

**Solis-6K      Solis-10K      Solis-15K**

### Features:

**Fanless**  
—  
Cooling  
Concept

**Ultra wide**  
—  
Voltage  
Range

**WiFi/GPRS**  
—  
Real time  
monitoring

**Available on the iPhone App Store**  
 **Available on the iPhone App Store**

**IP65**

**Weight**  
—  
29kg

# Datasheet

Model	Solis-6K	Solis-10K	Solis-15K
Energy Source		PV	
<b>Input Side(DC)</b>			
Max. DC input power(kW)	6.9	11.5	16.5
Max. DC input voltage(V)		1000	
Start-up voltage(V)		250	
MPPT voltage range(V)		200-800	
Max. input current(A)	15A+15A	18A+18A	18A+18A
MPPT number/Max input strings number	2/2	2/4	2/4
<b>Output Side (AC)</b>			
Rated output power(kW)	6	10	15
Max. apparent output power(kVA)	6.6	11	15
Max. output power(kW)	6.6	11	15
Rated grid voltage(V)		400	
Grid voltage range(V)		313-470	
Rated grid frequency(Hz)		50/60	
Operation phase		Three	
Rated grid output current(A)	8.7	14.4	21.7
Max. output current(A)	10	16.7	25
Power Factor (at rated output power)		0.8...1...0.8	
THDi (at rated output power)		<3%	
DC injection current(mA)		<20	<50
Grid frequency range(Hz)		47–52 or 57–62	
<b>Efficiency</b>			
Max.efficiency	98.2%		98.3%
EU efficiency	97.3%		97.5%
MPPTefficiency		>99.5%	
<b>Protection</b>			
DC reverse-polarity protection		Yes	
Short circuit protection		Yes	
Output over current protection		Yes	
Output over voltage protection		Yes	
Insulation resistance monitoring		Yes	
Residual current detection		Yes	
Surge protection		Yes	
Islanding protection		Yes	
temperature protection		Yes	
Integrated DC switch		Optional	
<b>General Data</b>			
Dimensins(mm)		430W*613H*269D (mm)	
Weight(kg)	29		30
Topology		Transformerless	
Self consumption (night)		<1W(Night)	
Operating ambient temperature range		-25~60°C	
Ingress protection		IP65	
Noise emission{typical}		<30 dBA	
Cooling concept		Natural convection	
Max.operation altitude		4000m	
Designed lifetime		>20years	
Grid connection standard		EN50438, G59/3, AS4777, VDE0126-1-1, IEC61727	
Relative humidity		0~100%	
Safty/EMC standard		IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-3,	
<b>Features</b>			
DC connection		MC-4mateable	
AC connection		Ip67rated plug	
Display		LCD,2 x 20 Z.	
Communication connections		4 pins RS485 connector	
Warranty		5 years standard (extend to 20 years)	

# Three

20kW  
-  
40kW



## Solis Three PV Inverter

- ▶ Three phase output
- ▶ Over 98.8% Max. efficiency
- ▶ 200V-1000V input voltage range
- ▶ 7.0" LCD color screen display
- ▶ Four MPPT design with precise MPPT algorithm
- ▶ Compact and light design, easy installation
- ▶ IP65 rated for outdoor installation
- ▶ RS485, WiFi/GPRS (optional) interface
- ▶ Anti-resonance, single transformer can connect 6M+ in parallel
- ▶ Multiple protection fuctions
- ▶ WiFi and monitoring app available
- ▶ 5 years standard warranty, 20 years optional upgrade

### Model:

Solis-20K

Solis-25K

Solis-30K

Solis-33K

Solis-36K-HV

Solis-40K-HV

### Features:

Fanless  
Cooling  
Concept

Four  
MPPT

7"  
LCD

WiFi/GPRS  
Real time  
monitoring

Available on the iPhone  
App Store  
Available on the iPhone  
App Store

IP65

# Datasheet

Model	Solis-20K	Solis-25K	Solis-30K	Solis-33K	Solis-36K-HV	Solis-40K-HV				
Energy Source	PV									
<b>Input Side(DC)</b>										
Max. DC input power(kW)	23	28	34	36	41	48				
Max. DC input voltage(V)	1000				1100					
Start-up voltage(V)	350									
MPPT voltage range(V)	200-800				200-1000					
Max. input current(A)	18A+18A+18A+18A									
MPPT number/Max input strings number	4/8									
<b>Output Side (AC)</b>										
Rated output power(kW)	20	25	30	33	36	40				
Max. apparent output power(kVA)	22	27.5	33	33	40	44				
Max. output power(kW)	22	27.5	33	33	40	44				
Rated grid voltage(V)	400				480					
Grid voltage range(V)	304-460				384-576					
Rated grid frequency(Hz)	50/60									
Operation phase	Three									
Rated grid output current(A)	28.7	36.1	43.3	47.8	43.3	48.1				
Max. output current(A)	33.3	41.7	50	50	47.8	53				
Power Factor (at rated output power)	0.8...1...0.8									
THDi (at rated output power)	<3%									
DC injection current(mA)	<50									
Grid frequency range(Hz)	47-52 or 57-62									
<b>Efficiency</b>										
Max.efficiency	98.6%	98.6%	98.6%	98.7%	98.8%	98.8%				
EU efficiency	98.3%/98.3%	98.3%/98.3%	98.3%/98.3%	98.3%/98.3%	98.4%/98.4%	98.4%/98.4%				
MPPTefficiency	99.9%									
<b>Protection</b>										
DC reverse-polarity protection	Yes									
Short circuit protection	Yes									
Output over current protection	Yes									
Output over voltage protection	Yes									
Insulation resistance monitoring	Yes									
Residual current detection	Yes									
Surge protection	Yes									
Islanding protection	Yes									
temperature protection	Yes									
Integrated DC switch	Optional									
<b>General Data</b>										
Dimensins(mm)	530W*700H*356.5D (mm)									
Weight(kg)	57.2		58.2							
Topology	Transformerless									
Self consumption (night)	<1W(Night)									
Operating ambient temperature range	-25~60°C									
Ingress protection	IP65									
Noise emission{typical}	<30 dBA									
Cooling concept	Natural convection									
Max.operation altitude	4000m									
Designed lifetime	>20years									
Grid connection standard	EN50438, G59/3, AS4777, VDE0126-1-1, IEC61727									
Relative humidity	0~100%									
Safty/EMC standard	IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-3									
<b>Features</b>										
DC connection	MC-4mateable									
AC connection	Terminal connectors									
Display	7.0"LCD color screen display									
Communication connections	4 pins RS485 connector , 2 RJ45 connector									
Warranty	5 years standard (extend to 20 years)									

# Three

40kW  
-  
70kW

## Solis Three PV Inverter

- ▶ Three phase output
- ▶ Max. efficiency 99%, EU efficiency 98.5%
- ▶ High precise, high speed MPPT algorithm
- ▶ Four MPPT input, each rated current is 28.5A, compatible with high power module
- ▶ Compact and light design for two-person easy installation
- ▶ IP65, visually pleasing for domestic environment
- ▶ THDi < 3%, low harmonic distortion against grid
- ▶ Anti-resonance, single transformer can connect 6M+ in parallel
- ▶ Perfect commercial site monitoring solution
- ▶ Intelligent redundant fan-cooling



### Model:

Solis-40K

Solis-50K

Solis-50K -HV

Solis-60K-HV

Solis-70K-HV

### Features:

Four  
—  
MPPT

Smart  
—  
Redundant  
fan-cooling

WiFi/GPRS  
—  
Real time  
monitoring

THDi  
—  
<3%

Available on the iPhone  
App Store  
Available on the iPhone  
App Store

IP65

# Datasheet

Model	Solis-40K	Solis-50K	Solis-50K-HV	Solis-60K-HV	Solis-70K-HV
Energy Source	PV				
<b>Input Side(DC)</b>					
Max. DC input power(kW)	48	55	60	72	77
Max. DC input voltage(V)	1100				
Start-up voltage(V)	200				
MPPT voltage range(V)	200-1000				
Max. input current(A)	22A+22A+22A+22A	28.5A+28.5A+28.5A+28.5A	22A+22A+22A+22A	28.5A+28.5A+28.5A+28.5A	
MPPT number/Max input strings number	4/8	4/12	4/8	4/12	
<b>Output Side (AC)</b>					
Rated output power(kW)	40	50	50	60	70
Max. apparent output power(kVA)	44	55	55	66	77
Max. output power(kW)	44	55	55	66	77
Rated grid voltage(V)	380/400	380/400	500	500	540
Grid voltage range(V)	304-460	304-460	384-576	384-576	400-648
Rated grid frequency(Hz)	50/60				
Operation phase	Three				
Rated grid output current(A)	58	72.2	57.7	69.3	74.8
Max. output current(A)	66.9	83.3	66.2	80	82.3
Power Factor (at rated output power)	0.8...1...0.8				
THDi (at rated output power)	<3%				
DC injection current(mA)	<50				
Grid frequency range(Hz)	47~52 or 57~62				
<b>Efficiency</b>					
Max.efficiency	98.8%	98.8%	99.0%	99.0%	99.0%
EU efficiency	98.4%/98.4%	98.4%/98.4%	98.5%/98.5%	98.5%/98.5%	98.5%/98.5%
MPPTefficiency	99.9%				
<b>Protection</b>					
DC reverse-polarity protection	Yes				
Short circuit protection	Yes				
Output over current protection	Yes				
Output over voltage protection	Yes				
Insulation resistance monitoring	Yes				
Residual current detection	Yes				
Surge protection	Yes				
Islanding protection	Yes				
temperature protection	Yes				
Integrated DC switch	Optional				
<b>General Data</b>					
Dimensins(mm)	630W*700H*357D (mm)				
Weight(kg)	61	63	61	63	63
Topology	Transformerless				
Self consumption (night)	<1W(Night)				
Operating ambient temperature range	-25~60°C				
Ingress protection	IP65				
Noise emission{typical}	<30 dBA	<60 dBA	<30 dBA	<60 dBA	
Cooling concept	Natural convection	Intelligent redundant fan-cooling	Natural convection	Intelligent redundant fan-cooling	
Max.operation altitude	4000m				
Designed lifetime	>20years				
Grid connection standard	EN50438, G59/3, AS4777, VDE0126-1-1, IEC61727				
Relative humidity	0~100%				
Safty/EMC standard	IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-3				
<b>Features</b>					
DC connection	MC-4mateable				
AC connection	OT Terminal connectors				
Display	LCD,2×20 Z.				
Communication connections	4 pins RS485 connector, 2 RJ45 connector, 2 group of terminal block				
Warranty	5 years standard (extend to 20 years)				

**Energy  
Storage**

**3kW**

**5kW**

# **HYBRID**

## **All NEW Solis Series**

### **Hybrid Energy Storage Inverter**

- ▶ All NEW Intelligent Hybrid PV Inverter
- ▶ Dual MPPT – 3K, 3.6K, 5K
- ▶ Off-grid backup function
- ▶ Export Control
- ▶ UPS function
- ▶ Intelligent EMS function
- ▶ Integrated BMS
- ▶ Smart battery SOC detection - Compatible with various 48V batteries
- ▶ Numerous protection functions
- ▶ CAN, RS485, WiFi/LAN/GPRS (Optional)
- ▶ 5 years standard warranty, 20 years optional upgrade



### **Model:**

**RHI-3K-48ES      RHI-3.6K-48ES      RHI-5K-48ES**

### **Features:**

**Off-Grid  
Backup**

**Flexible  
adaptation**  
Lithium  
battery

**Smart  
Energy  
management**

**7"**  
**LCD**

**WiFi/GPRS**  
**Real time  
monitoring**

Available on the iPhone  
 Available on the iPhone

# Datasheet

Model	RHI-3K-48ES	RHI-3.6K-48ES	RHI-5K-48ES
Energy Control	Intelligent Hybrid with Grid Backup		
<b>Input DC(PV side)</b>			
The max DC input voltage(V)	600		
Start-up DC voltage(V)	120		
MPPT operating voltage range(V)	90-520		
MPPT Number	2		
The rating max dc input current(A/B)	11A/11A		
<b>Battery</b>			
Battery Type	Li-ion		
Battery Voltage range(V)	42-58		
Battery Capacity(Ah)	50-2000		
Maximum Charging Power(W)	3000		
Maximum Charging/discharge current(A)	62.5		
<b>Output AC(Back-up)</b>			
Rating output power(kW)	3		
Transient max. apparent output power	4000kVA, 10sec		
Back-up switch time	<10ms		
Operation phase	L-N-PE		
Rating grid voltage(V)	220/230/240		
Rating grid frequency(Hz)	50/60		
Rating grid output current(A)	13		
THDi	2%(linear load)		
<b>Output AC(Grid side)</b>			
Rating output power(kW)	3	3.6	(4.6 for 4105) <sup>5</sup>
Max. apparent power from grid(kVA)	5.5		
Operation phase	L-N-PE		
Rating grid voltage(V)	220/230/240		
The grid voltage range(V)	180-270		
Rating grid frequency(Hz)	50/60		
AC grid frequency range(Hz)	47-52 or 57-62		
Rating grid output current(A)	13	15.7	21.7
Output power factor	1 (default) and 0.8leading ... 0.8lagging adjustable		
THD	<2%		
<b>Efficiency</b>			
Max efficiency of Solar Inverting	>97.5%		
European efficiency of Solar Inverting	>96.8%		
Max efficiency of Battery Inverting	>95%		
Max efficiency of Battery charging	>95%		
<b>Protection device</b>			
Ground fault monitoring	Integrated		
Residual current monitoring unit	Integrated		
DC AFCI	Optional		
DC reverse polarity protection	Yes		
Protection class/Over voltage category	I/IV		
<b>General Data</b>			
Dimensions(W/H/D)	333*505*249(mm)		
Weight(kg)	17		
Operation temperature range	-25°C ~ 60°C		
Protection degree	IP65		
Inverter Topology	High frequency insulation (for battery)		
Noise emission (typical)	<20dBA		
Cooling concept	Natural convection		
Design lifetime	>20 years		
Safety/EMC standard	IEC62040-1, IEC62109-1/-2, AS3100, , NB/T 32004, EN61000-6-1, EN61000-6-3		
AC and DC Connections	Quick Connection		
Interface	CAN/RS485/WiFi/GPRS (optional)		
Warranty	5 years standard (extend to 20 years)		

# Monitoring System

DLS-W  
DLS-G  
DLS-L

## Ginlong Monitoring System



Data Logging Stick  
LAN

Data Logging Stick  
WiFi/GPRS

### Data Logging Stick LAN

- Quick installation and easy operation
- Not need to set, plug and play function
- LAN communication is stable and reliable, remote monitoring

### Data Logging Stick WiFi

- Quick installation and easy operation
- Enabling local and remote monitoring
- WiFi communication supporting remote monitoring
- Easy visualization of data and other information via Internet

### Data Logging Stick GPRS

- Quick installation and easy operation
- Connecting inverters with 'plug and play' function
- Easy visualization of data and other information via mobile device
- GPRS communication enabling mobile monitoring anytime anywhere



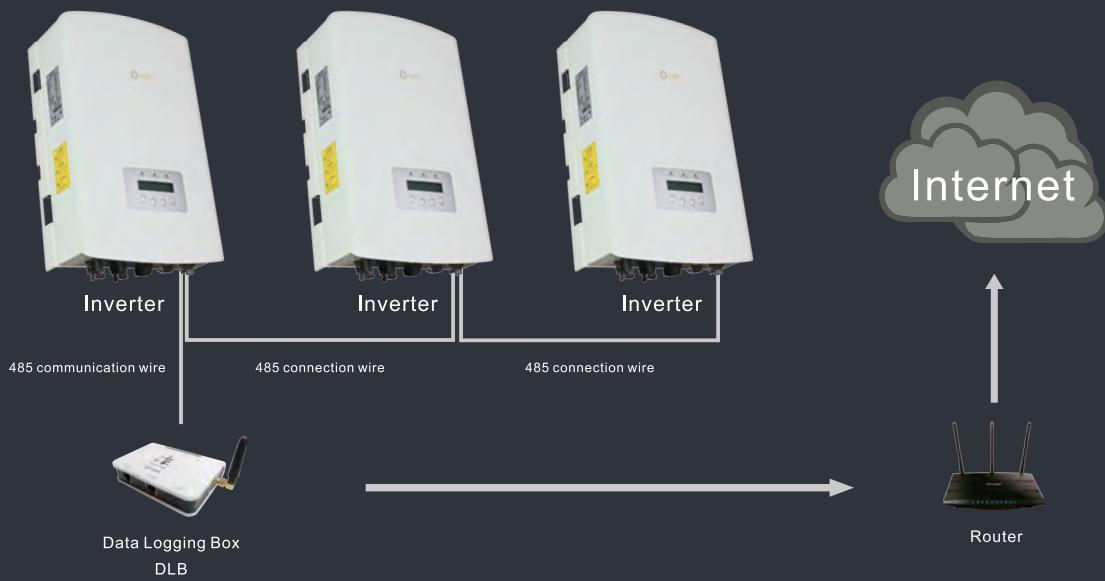
# Datasheet

Model	DLS-W	DLS-G	DLS-L
Max.number of inverters		1	
Inverter communication		4Pin	
Remote communication	WiFi (802.11 b/g/n)	GPRS Class 12	Ethernet 10/100Mbps
Communication rate	9600bps		1200-9600bps
Frequency	2.412GHz-2.484GHz	850/900/1800/1900 MHz	---
GPRS multi-slot	---	12/10/8	---
WiFi communication range	100m in outdoor open area without obstruction	---	---
LAN communication range	---	---	50m(CAT-5e Shielded Twisted Pair)
WiFi transmitting power	802.11b: +20dBm (Max) 802.11g: +18dBm (Max) 802.11n: +15dBm (Max) Configurable by users	---	---
WiFi receiving sensitivity	802.11b: -89dBm 802.11g: -81dBm 802.11n: -71dBm	---	---
GPRS Mobile Station	---	Class B	---
Compatible with the GSM Phase 2/2 +	---	Class 4 (2W @ 850/900 MHZ) Class 1 (1W @ 1800/1900 MHz)	---
External antenna	I-PEX antenna	I-PEX connecter	I-PEX antenna
Data collection intervals		5 minutes	
Data interface	UART: 9600bps	GPRS Class 12 Max 85.6kbps	UART: 9600bps
Preferences setting		Web Server	
Firmware updates	Wireless	Wireless	Ethernet
Data access	WiFi point-to-point/Remote server	Remote server	Remote server
Data storage	---	---	2MBYTE FLASH
Electrical			
Input voltage	DC 5V	DC 5V (+/-5%)	DC 5V (+/-5%)
Working current	130mA@5V	500mA	110mA~200mA
Static power consumption	---	<2W	---
Max. instantaneous power consumption	---	<8W	---
Environmental			
Operating temperature	-10°C~+85°C	-10°C~+85°C	-40°C~+85°C
Operating humidity		10%-90% Relative humidity, no condensa	
Storage temperature	-40°C~+125°C	-40°C~+125°C	-45°C~+90°C
Storage humidity		<40%	
Protection class		IP65	
Physical			
Dimension(L*W*H)	118mm*43mm*43mm	118mm*43mm*43mm	105mm*43mm*43mm
Weight(g)		56g	
Other			
Warranty		2 years	
Certificates		FCC,CE	

# Monitoring System

DLB-W  
DLB-G

## Ginlong Monitoring System

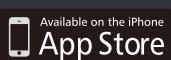


### Data Logging Box WiFi

- ▶ Quick installation and easy operation
- ▶ Monitoring your system and data anytime via WiFi
- ▶ Easy visualization of data and other information via Internet
- ▶ Comprehensive analyzing system in case of any possible faults

### Data Logging Box GPRS

- ▶ Quick installation and easy operation
- ▶ GPRS communication supporting remote monitoring
- ▶ Multi-functional protections keeping your system from faults
- ▶ Keeping users informed of status and data via mobile device



# Datasheet

Model	DLB-W	DLB-G
Max. number of inverters	10	
Inverter communication	RS485	
Remote communication	WiFi (802.11 b/g/n)/Ethernet	GPRS
Max. communication range	<1km	
Communication rate	9600bps(adjustable)	
WiFi frequency	2.4GHz	800/900/1800/1900MHz
WiFi communication range	300m in outdoor open area without obstruction	---
WiFi transmitting power	802.11b/g/n:+20dBm/+18dBm/15dBm (Max)	Class 4 (2W)/Class 1 (1W)
Data collect intervals	5 minutes	
Preferences setting	Web server/ Serial AT instruction	Serial AT instruction
Firmware updates	Serial/Wireless	
Data access	Serial/WiFi point-to-point/Remote server	Serial/Remote server
Status display	4LEDs	
Electrical		
Input voltage	DC 5V	
Static power consumption	<1.6W	<2W
Max.instantaneous power consumption	<2.5W	<8W
Environmental		
Operating temperature	-10~+65°C	
Operating humidity	10%-90% Relative humidity, no condensa	
Storage temperature	-40~+85°C	
Storage humidity	<40%	
Protection class	IP21	
Physical		
Dimension(L*W*H)	110mm*86mm*26mm	
Weight(g)	108g	102g
Other		
Warranty	2 years	
Certificates	FCC, CE, RoHS	
Installation method	Wall mounted or horizontal	

# Case study



Zhejiang Shepantu Fisheries-photovoltaic hybrid PV plant | 40MW



Zhejiang Longyou Agricultural-photovoltaic hybrid PV plant | 40MW



Quzhou Qinghu Agricultural-photovoltaic hybrid PV plant | 20MW



Hubei Guanyin Agricultural-photovoltaic hybrid PV plant | 20MW



Mexico City | 20MW



Anhui Jinzhai Agricultural-photovoltaic hybrid PV plant | 6MW



Inner Mongolia Khobqi Desert | 20MW



Zhejiang Hangbu Agricultural-photovoltaic hybrid PV plant | 30MW

## Case study



Liaoning Yingkou Jiuzhai PV plant | 20MW



Zhejiang Dajie Agricultural-photovoltaic hybrid PV plant | 3MW



Huaneng Yimin surface mine PV plant | 20MW



Shanxi Guangling PV plant | 1.47MW



Inner Mongolia Khobqi Desert



Hunan Chenzhou Xingyi logistics city | 6MW



Shandong Qufu Confucius international commodity trade mall | 5.8MW



Hubei Luotian | 5.5MW

# Case study



Shanghai Volkswagen Photovoltaic solar carport | 55MW



Ningbo NBMIP | 4.1MW



Beilun TXC | 300kW



Ningbo NHC | 530kW



Xiangshan Chang he Industrial Park | 2.2MW



Cixi Sunter | 520kW



Ningbo Plastic machinery manufacturing | 600kW



Ningbo Aerte | 500kW

## Case study



Jiangxi Shicheng poverty alleviation PV Plant | 20MW



Shanxi Xiyangpoverty alleviation PV Plant | 9.7MW



Xinjiang Alaer poverty alleviation PV Plant | 2MW



Jiangxi Ganzhou Hengjiang poverty alleviation PV Plant | 8.45MW



Shanxi Dazhang poverty alleviation PV Plant | 100kW



Shandong Leling poverty alleviation PV Plant | 50kW



Anhui Shijing poverty alleviation PV Plant | 80kW



Suzhou Dazhuang Healthcare Center | 575kW

## Case study



Zhejiang largest photovoltaic building integrated village | 300kW



USA-Solarcity | 2MW

## Case study



Shanghai General Motor | 5MW



Beilun HaiLun Pianos | 650kW



Cixi CW BEARING | 1.3MW



Yuyao NGGC | 1.7MW



Cixi FUDA | 1.9MW



Ningbo Yinzhou Jieyu | 1.6MW



Shanghai Bayer | 50kW



Baoding Hebei construction | 960kW

## Case study



Sun-Earth | 3MW



Zhejiang Jiangshan Xintang Reservoir | 836kW



Zhejiang Ningbo Guantong | 1.5MW



Zhejiang Wugu | 1.64MW



Zhejiang Anboke | 1MW

## Case study



Cixi CXSH | 450kW



Hangzhou ABON | 410kW



Henan Hayne pharmaceutical | 820kW



Lishui Greening | 750kW



Beilun Innolux | 6.5MW



Shandong Tianqu Logistics Trade City | 5.5MW



Yuyao JF | 1.8MW



Xiangshan HLGY | 300kW

# Case study



Shanghai World Expo | 10kW



Hangzhou Bay EGL | 600kW



Ningbo Housing International Home | 800kW



Yinzhou Loctek | 800kW



Xiangshan Ginlong Technologies | 309kW



Jiangbei Huashu | 705kW



Xiangshan QXPV | 1.0MW



Jiaxing Nanhu service area | 250kW

## Case study



JiaxinChanger | 5MW



Hangzhou Bay Geely | 5.6MW



Zhejiang HANVOS | 2.1MW



Hunan Yantouzhai Primary school | 15kW



Gansu Bola Primary school | 15kW

# Case study



India RSWM | 3.6MW



India TTD | 10MW



Guadalajara DEPSA | 3.4MW



Barbados | 25kW



PanamaUGE Cochez | 3.4MW



Minas Gerais Araguari | 54kW



Georgia-Boviet Woodland | 1.6MW



Mexico-Tamaulipas Carport | 5MW

# Case study



UK ABP Ipswich | 1MW



Kansas | 25kW



Sweden Vallentuna | 100kW



UK Stockley Park | 110kW



United States Postal Service (USPS) LA P&DC Facility | 12MW



Mexico | 200kW



Philippines Calamba Doctors Hospital | 120kW



Dominicana Santo Domingo | 34kW



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