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# Solis-mini-(700-3600)-4G,Solis-mini-(1500-2500)-4G-WP

## Solis 4G Mini Series Inverters



### Features:

- Mini series - Extended to 3600W
- High frequency switching technology-Smaller, smarter
- 24-hour load consumption monitoring
- DRM integrated, fully comply with AS4777.2:2015
- Compact and lightweight
- 50V-500V input voltage range-ultra low startup
- Over 97.5% Max. efficiency
- Precise MPPT algorithm
- Intergrated Export Power Manager (EPM)
- RS485, WiFi/LAN/GPRS (optional) interface
- WiFi monitoring available-plus access to Android and Apple apps



### Model:

Solis-mini-700-4G	Solis-mini-1000-4G
Solis-mini-1500-4G	Solis-mini-2000-4G
Solis-mini-2500-4G	Solis-mini-3000-4G
Solis-mini-3600-4G	Solis-mini-1500-4G-WP
Solis-mini-2000-4G-WP	Solis-mini-2500-4G-WP

## Datasheet

Model Name	Solis-mini-700-4G	Solis-mini-1000-4G	Solis-mini-1500-4G	Solis-mini-2000-4G	Solis-mini-2500-4G	Solis-mini-3000-4G	Solis-mini-3600-4G	Solis-mini-1500-4G-WP	Solis-mini-2000-4G-WP	Solis-mini-2500-4G-WP
<b>Input DC</b>										
Max. DC input power(kW)	0.93	1.33	2.0	2.66	3.33	4.0	4.78	2	2.66	3.33
Max. DC input voltage(V)					600					
Nominal DC voltage(V)		200			330			200	330	
Start-up voltage(V)		60			90			60	90	
MPPT voltage range(V)		50-500			80-500			50-500	80-500	
Max. input current(A)			11A			19A			11A	
Max. Short Circuit current for each MPPT			17.2A			30A			17.2A	
MPPT number/ Max input strings number			1/1			1/1			1/1	
<b>Output AC</b>										
Rated output power(kW)	0.7	1	1.5	2	2.5	3	3.6	1.5	2	2.5
Max. apparent output power(kVA)	0.8	1.1	1.7	2.2	2.8	3.3	3.6	1.5	2	2.5
Rated grid voltage(V)					230					
Operation phase					Single Phase					
Rated grid output current(A)	3.0	4.3	6.5	8.7	10.9	13	16	6.5	8.7	10.9
Max. output current(A)	4.4	5.2	8.1	10.5	13.3	15.7	16	7.2	9.6	12.0
Power Factor (at rated output power)					0.8leading ... 0.8lagging					
THDi (at rated output power)					<3%					
<b>Efficiency</b>										
Max. efficiency		97.2%			97.5%	97.2		97.2%	97.5%	
EU efficiency		96.5%			96.8%	96.5		96.5%	96.8%	
MPPT efficiency			99.5%			99.5%			99.5%	
<b>Protection</b>										
DC reverse-polarity protection					Yes					
Insulation resistance monitoring					Yes					
Residual current detection					Yes					
Surge protection					Yes					
Islanding protection					Yes					
Integrated DC switch					Optional					
<b>General Data</b>										
Dimensions(mm)				310W*373H*160D						
Weight (kg)		7.4			7.7			8.5	8.8	
Topology				Transformerless						
Self consumption (night)			<1W (Night)					<10W (Night)		
Operating ambient temperature range				-25~60°C						
Relative humidity				0-100%						
Ingress protection				IP65						
Noise emission(typical)				<20dBA						
Cooling concept				Natural convection						
Max. operation altitude				4000m						
Grid connection standard		EN505049, AS4777.2:2015, VDE0126-1-1, IEC61727, VDE4105-2018, G99, IEC 62116				EN50549, AS4777.2:2015, VDE0126-1-1, IEC61727, VDE4105-2018, G99, IEC 62116				
Safety/EMC standard		IEC62109-1/-2, NBT32004-2018, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4				IEC62109-1/-2, NBT32004-2018, EN61000-6-1, EN61000-6-3				
<b>Features</b>										
DC connection				MC4						
AC connection				IP67 rated plug						
Display				LCD, 2x20 Z.						
Communication connections				4 Pin RS485 connector						
Monitoring				WiFi or GPRS						
Warranty				5 years (extend to 20 years)						
DRM function for AUS				Integrated DRM function for AUS						

# Solis-1P(2.5-5)K-4G,Solis-1P5K-4G-MX

Solis 4G Single Phase Inverters



## Features:

- Solis 1P 4G Single Phase Range
- High frequency switching technology - Smaller, smarter
- 24-hour load consumption monitoring
- Dual MPPT design with precise MPPT algorithm
- Integrated Export Power Manager(EPM)
- Over 98.1% Max. efficiency
- RS485, WiFi/LAN/GPRS (optional) interface
- WiFi monitoring available-plus access to Android and Apple apps

## Model:

Solis-1P2.5K-4G	Solis-1P3K-4G
Solis-1P3.6K-4G	Solis-1P4K-4G
Solis-1P4.6K-4G	Solis-1P5K-4G
Solis-1P5K-4G-MX	

## Datasheet

Model Name	Solis-1P2.5K-4G	Solis-1P3K-4G	Solis-1P3.6K-4G	Solis-1P4K-4G	Solis-1P4.6K-4G	Solis-1P5K-4G	Solis-1P5K-4G-MX
<b>Input DC</b>							
Max. DC input power(kW)	3.3	4.0	4.8	5.3	6.1	6.7	6.7
Max. DC input voltage(V)				600			
Nominal DC voltage(V)				330			
Start-up voltage(V)				120			
MPPT voltage range(V)				90-520			
Max. input current(A/B)				11A+11A			
Max. Short Circuit current for each MPPT				17.2A+17.2A			
MPPT number/Max input strings number				2/2			
<b>Output AC</b>							
Rated output power(kW)	2.5	3	3.6	4	4.6	5	
Max. apparent output power(kVA)	2.8	3.3	4	4.4	5	5	
Rated grid voltage(V)				230			
Operation phase				Single Phase			
Rated grid output current(A)	10.9	13	15.7	17.4	20	21.7	
Max. output current(A)	13.3	15.7	16	21	23.8A(21.7 for AUS)	25A(21.7 for AUS)	
Power Factor (at rated output power)				0.8leading ... 0.8lagging			
THDi (at rated output power)				<3%			
DC injection current				<0.5%In			
<b>Efficiency</b>							
Max. efficiency		97.8%				98.1%	
EU efficiency		97.1%				97.3%	
MPPT efficiency				>99.5%			
<b>Protection</b>							
DC reverse-polarity protection				Yes			
Insulation resistance monitoring				Yes			
Residual current detection				Yes			
Surge protection				Yes			
Islanding protection				Yes			
Integrated DC switch				Optional			
<b>General Data</b>							
Dimensions(mm)				310W*543H*160D			
Weight (kg)				11.5			
Topology				Transformerless			
Self consumption (night)				<10W (Night)			
Operating ambient temperature range				-25~60°C			
Relative humidity				0~100%			
Ingress protection				IP65			
Noise emission(typical)				<20dBA			
Cooling concept				Natural convection			
Max. operation altitude				4000m			
Designed lifetime				>20 years			
Grid connection standard				EN505049, AS4777.2:2015, VDE0126-1-1, IEC61727, VDE N4105, G98, G99, IEC 62116			
Safety/EMC standard				IEC62109-1/-2, NB/T 32004, EN61000-6-2, EN61000-6-3			
<b>Features</b>							
DC connection				MC4			
AC connection				IP67 rated plug			
Display				LCD, 2x20 Z.			
Communication connections				4 pins RS485 connector			
Monitoring				WiFi or GPRS			
Warranty				5 years standard (extend to 20 years)			
DRM function for AUS				Integrated DRM function for AUS			

# Solis-3P(5-10)K-4G-AU,Solis-3P(12-20)K-4G Solis-3P5K-4G-AU-MX

## Solis 4G Three Phase Inverters



### Features:

- Solis 3P 4G Three Phase Range
- 160V-850V MPPT voltage range- ultra low startup
- Dual MPPT design with precise MPPT algorithm
- THDi<1.5%, low harmonic distortion against grid
- Over 98.7% Max. efficiency
- Multiple protections functions
- RS485, WiFi/LAN/GPRS (optional) interface
- WiFi monitoring available-plus access to Android and Apple apps

### Model:

Solis-3P5K-4G-AU	Solis-3P6K-4G-AU	Solis-3P8K-4G-AU
Solis-3P9K-4G-AU	Solis-3P10K-4G-AU	Solis-3P12K-4G
Solis-3P15K-4G	Solis-3P17K-4G	Solis-3P20K-4G
Solis-3P5K-4G-AU-MX		

## Datasheet

Model Name	Solis-3P5K-4G-AU	Solis-3P5K-4G-AU-MX	Solis-3P6K-4G-AU	Solis-3PBK-4G-AU	Solis-3P9K-4G-AU	Solis-3P10K-4G-AU	Solis-3P12K-4G	Solis-3P15K-4G	Solis-3P17K-4G	Solis-3P20K-4G
<b>Input DC</b>										
Max. DC input power(kW)	10	10	12	12	13.5	15	18	22.5	24	24
Max. DC input voltage(V)					1000					
Nominal DC voltage(V)					600					
Start-up voltage(V)					180					
MPPT voltage range(V)					160-850					
Max. input current(A/B)	22A+11A					22A+22A				
Max. Short Circuit current for each MPPT	34.3A+17.2A					34.3A+34.3A				
MPPT number/ Max input strings number	2/2					2/4				
<b>Output AC</b>										
Rated output power(kW)	5	4.999	6	8	9	10	12	15	17	20
Max. apparent output power(kVA)	5.5	4.999	6.6	8.8	9.9	11	13.2	16.5	18.7	22
Rated grid voltage(V)					400					
Rated grid frequency(Hz)					50/60					
Operation phase					Three Phase					
Rated grid output current(A)	7.2	7.2	8.7	11.5	13.0	14.4	17.3	21.7	24.6	28.9
Max. output current(A)	7.9	7.9	9.5	12.7	14.3	15.9	19.1	23.8	27	31.8
Power Factor (at rated output power)					0.8leading ... 0.8lagging					
THDi (at rated output power)					<1.5%					
<b>Efficiency</b>										
Max. efficiency		98.3%					98.7%			
EU efficiency		97.8%					98.1%			
MPPT efficiency					>99.5%					
<b>Protection</b>										
DC reverse-polarity protection					Yes					
Insulation resistance monitoring					Yes					
Residual current detection					Yes					
Surge protection					Yes					
Grid monitoring					Yes					
Islanding protection					Yes					
<b>General Data</b>										
Dimensions(mm)				563*310*219mm						
Weight (kg)			18.9					19.8		
Topology				Transformerless						
Self consumption (night)				<1W (Night)						
Operating ambient temperature range				-25~60°C						
Relative humidity				0~100%						
Ingress protection				IP65						
Noise emission(typical)				<60 dBA						
Cooling concept				Intelligent fan-cooling						
Max. operation altitude				4000m						
Grid connection standard				EN50549, AS4777, VDE0126-1-1, IEC61727, G98, G99						
Safety/EMC standard				IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4						
<b>Features</b>										
DRM				Yes						
DC connection				MC4						
AC connection				Terminal connectors						
Display				LCD, 2x20 Z.						
Communication connections				4 Pin RS485 connector						
Monitoring				WiFi or GPRS						
Warranty				5 years (extend to 20 years)						

# Solis-(20-33)K,Solis-30K-MX

Solis Three Phase Inverters



## Features:

- ▶ Solis Three Phase Range
- ▶ Over 98.7% Max. efficiency
- ▶ 200V-800V MPPT voltage range-ultra low startup
- ▶ 7.0" LCD color screen display
- ▶ Four MPPT design with precise MPPT algorithm
- ▶ Compact and light design, easy installation
- ▶ IP65 rated for outdoor installation
- ▶ Anti-resonance, single transformer can connect 6M+ in parallel
- ▶ RS485, WiFi/LAN/GPRS (optional) interface
- ▶ WiFi monitoring available-plus access to Android and Apple apps



## Model:

Solis-25K      Solis-25K      Solis-30K  
Solis-33K      Solis-30K-MX

## Datasheet

Model Name	Solis-20K	Solis-25K	Solis-30K	Solis-33K	Solis-30K-MX
<b>Input DC</b>					
Max. DC input power(kW)	27	33	40	44	40
Max. DC input voltage(V)			1000		
Nominal DC voltage(V)			600		
Start-up voltage(V)			350		
MPPT voltage range(V)			200-800		
Max. input current(A/B/C/D)			18A+18A+18A+18A		
Max. Short Circuit current for each MPPT			23.4A+23.4A+23.4A+23.4A		
MPPT number/Max input strings number			4/8		
<b>Output AC</b>					
Rated output power(kW)	20	25	30	33	29.99
Max. apparent output power(kVA)	22	27.5	33	33	29.99
Rated grid voltage(V)			400		
Rated grid frequency(Hz)			50/60		
Operation phase			Three Phase		
Rated grid output current(A)	28.7	36.1	43.3	47.8	43.3
Max. output current(A)	33.3	41.7	50	50	50
Power Factor (at rated output power)			0.8leading ... 0.8lagging		
THDi (at rated output power)			<3%		
<b>Efficiency</b>					
Max. efficiency		98.6%		98.7%	98.6%
EU efficiency			98.3%		
MPPT efficiency			>99.9%		
<b>Protection</b>					
DC reverse-polarity protection			Yes		
Insulation resistance monitoring			Yes		
Residual current detection			Yes		
Surge protection			Yes		
Islanding protection			Yes		
Integrated DC switch			Optional		
<b>General Data</b>					
Dimensions(mm)			530W*700H*356.5D		
Weight (kg)	57.2			58.2	
Topology			Transformerless		
Self consumption (night)			<1W (Night)		
Operating ambient temperature range			-25~60°C		
Relative humidity			0~100%		
Ingress protection			IP65		
Noise emission(typical)			<30 dBA		
Cooling concept			Natural convection		
Max. operation altitude			4000m		
Grid connection standard			EN50438, AS4777, VDE0126-1-1, IEC61727, G99, IEC 62116		
Safety/EMC standard			IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4		
<b>Features</b>					
DC connection			MC4		
AC connection			Terminal connectors		
Display			7.0" LCD color screen display		
Communication connections			4 pins RS485 connector , 2 RJ45 connector		
Monitoring			WiFi or GPRS		
Warranty			5 years (extend to 20 years)		

# Solis-(40-60)K,Solis-(50-60)K-HV

Solis Three Phase Inverters



## Features:

- ▶ Solis Three Phase Range
- ▶ Over 98.8% Max. efficiency
- ▶ High precision, high speed MPPT algorithm
- ▶ Four MPPT inputs each rated at 28.5Adc, compatible with high power modules
- ▶ Compact and light weight design for 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 redundancy fan



## Model:

400V: Solis-40K Solis-50K

480V: Solis-50K-HV Solis-60K-HV

## Datasheet

Model Name	Solis-40K	Solis-50K	Solis-50K-HV	Solis-60K-HV
<b>Input DC</b>				
Max. DC input power(kW)	53	67	67	80
Max. DC input voltage(V)		1100		
Nominal DC voltage(V)	600		720	
Start-up voltage(V)		200		
MPPT voltage range(V)		200-1000		
Max. input current(A/B/C/D)	22A+22A+22A+22A	28.5A+28.5A+28.5A+28.5A	22A+22A+22A+22A	28.5A+28.5A+28.5A+28.5A
Max. Short Circuit current for each MPPT	34.3A+34.3A+34.3A+34.3A	44.5A+44.5A+44.5A+44.5A	34.3A+34.3A+34.3A+34.3A	44.5A+44.5A+44.5A+44.5A
MPPT number/Max input strings number	4/8	4/12	4/8	4/12
<b>Output AC</b>				
Rated output power(kW)	40	50	50	60
Max. apparent output power(kVA)	44	55	55	66
Rated grid voltage(V)		400		
Rated grid frequency(Hz)		50/60		
Operation phase	Three Phase			
Rated grid output current(A)	58	72.2	60.2	72.2
Max. output current(A)	66.9	83.3	66.2	80
Power Factor (at rated output power)	0.8leading ... 0.8lagging			
THDi (at rated output power)	<3%			
<b>Efficiency</b>				
Max. efficiency		98.8%		
EU efficiency		98.4%		
MPPT efficiency		99.9%		
<b>Protection</b>				
DC reverse-polarity protection		Yes		
Insulation resistance monitoring		Yes		
Residual current detection		Yes		
Surge protection		Yes		
Islanding protection		Yes		
Integrated DC switch		Optional		
<b>General Data</b>				
Dimensions(mm)	630W*700H*357D			
Weight (kg)	61	63	61	63
Topology	Transformerless			
Self consumption (night)	<1W (Night)			
Operating ambient temperature range	-25~60°C			
Relative humidity	0~100%			
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			
Grid connection standard	EN50438, G99, AS4777, VDE0126-1-1, IEC61727, IEC 62116			
Safety/EMC standard	IEC62109-1/-2, AS3100, EN61000-6-2, EN61000-6-4, NB/T 32004			
<b>Features</b>				
DC connection	MC4			
AC connection	OT Terminal connectors			
Display	LCD, 2x20 Z.			
Communication connections	4 pins RS485 connector, 2 RJ45 connector, 2 group of terminal block			
Monitoring	WiFi or GPRS			
Warranty	5 years (extend to 20 years)			

# Solis-3P(25-40)K-5G, Solis-3P(40-50)K-HV-5G

## Solis 5G Three Phase Inverters



### Features:

- ▶ 4 MPPT design with precise MPPT algorithm, effectively reducing string mismatch
- ▶ 8 strings intelligent monitoring, Smart I-V Curve Diagnosis supported
- ▶ Up to 30% DC input oversize, 12.5A input for each PV string
- ▶ Over 98.8% Max. efficiency
- ▶ 200V-1000V MPPT voltage range-ultra low startup
- ▶ Fuse free design
- ▶ Type II surge arrester for both DC and AC
- ▶ Natural convection, Fan-less design
- ▶ RS485/ WiFi/ GPRS interface integration, remote upgrade supported



### Model:

400V:	Solis-3P25K-5G	Solis-3P30K-5G
	Solis-3P33K-5G	Solis-3P36K-5G
	Solis-3P40K-5G	
480V:	Solis-3P40K-HV-5G	Solis-3P50K-HV-5G

## Datasheet

Model	Solis-3P25K-5G	Solis-3P30K-5G	Solis-3P33K-5G	Solis-3P36K-5G	Solis-3P40K-5G	Solis-3P40K-HV-5G	Solis-3P50K-HV-5G
<b>Input DC</b>							
Max. DC input power(kW)	33	39	43	47	52	52	65
Max. DC input voltage(V)				1100			
				600			
Start-up voltage(V)				180			
Operating MPPT voltage range(V)				200-1000			
Max. input current(A)		26+26+26			26+26+26+26		
Max. Short Circuit current for each MPPT(A/B/C/D)		40+40+40			40+40+40+40		
MPPT number/Max input strings number		3/A:2; B:2; C:2			4/A:2; B:2; C:2; D:2		
<b>Output AC</b>							
Rated output power(kW)	25	30	33	36	40	40	50
Max. apparent output power(kVA)	27.5	33	36.3	39.6	44	44	55
Rated grid voltage(V)			400			480	
Rated grid frequency(Hz)				50/60			
Operation phase				Three Phase			
Rated grid output current (A)	36	43.3	47.6	51.9	57.7	48.1	60.1
Max. output current(A)	41.8	50.2	55.1	60.2	66.9	53	66.2
Power Factor (at rated output power)				0.8leading ... 0.8lagging			
THDi (at rated output power)				<3%			
<b>Efficiency</b>							
Max.efficiency				98.8%			
CEC efficiency				98.3%			
MPPT efficiency				>99.5%			
<b>Protection</b>							
DC reverse-polarity protection				Yes			
Insulation resistance monitoring				Yes			
Residual current detection				Yes			
Surge protection				DC Type II/ AC Type II			
Islanding protection				Yes			
Integrated DC switch				Optional			
Strings monitoring				Yes			
Anti-PID				Optional			
<b>General Data</b>							
Dimensions(mm)				647W*629H*252D			
Weight(kg)				45			
Topology				Transformerless			
Self consumption (night)				<1W (Night)			
Operating ambient temperature range				-25~60° C			
Relative humidity				0~100%			
Ingress protection				IP65			
Noise emission{typical}				<30 dBA			
Cooling concept				Natural convection			
Max.operation altitude				4000m			
Grid connection standard				EN5049, G99, AS4777, VDE0126-1-1, IEC61727, VDE4105-2018			
Safety/EMC standard				IEC62109-1-2, AS3100, EN61000-6-2, EN61000-6-3			
<b>Features</b>							
DC connection				MC-4			
AC connection				Terminal board			
Display				LCD, 2×20 Z.			
Communication connections				4pin RS485 *1、RJ45*2、Meter*1、DRM*1 (Optional)			
Monitoring				WiFi or GPRS			
Warranty				5 years (extend to 20 years)			

# Solis-80K-5G, Solis-100K-HV-5G

Solis 5G Three Phase Inverters



## Features:

- ▶ Max. 13A per string, support 1.5 DC overloading capability
- ▶ 9 individual MPPT, lower mismatch loss
- ▶ Efficient logic algorithm, over 99% max. Efficiency
- ▶ String monitoring, shorter O&M time
- ▶ Remote & local intelligent IV scan function
- ▶ Leakage current repression technology
- ▶ Volt-watt work mode integrated
- ▶ DC input reverse alarm
- ▶ Optional anti-PID function integrated
- ▶ Reactive power compensation function



## Model:

400V: Solis-80K-5G

480V: Solis-100K-HV-5G

## Datasheet

Model Name	Solis-80K-5G	Solis-100K-HV-5G
<b>Input DC</b>		
Recommended Max. DC input power (kW)	112	126
Max. DC input voltage (V)		1100
Nominal DC voltage (V)	600	720
Start-up voltage (V)		200
MPPT voltage range (V)		180-1000
Full load MPPT voltage range (V)		505-850
Max. input current (A)		26A
Max. Short Circuit current for each MPPT		40A
MPPT number/Max input strings number	8/A:2; B:2; C:2; D:2; E:2; F:2; G:2; H:2	9/A:2; B:2; C:2; D:2; E:2; F:2; G:2; H:2; I:2
<b>Output AC</b>		
Rated output power	80kW	100kW
Max. apparent output power	88kVA	110kVA
Max. output power	88kW	110kW
Rated grid voltage	3/N/PE, 230/400V	3/PE, 480V
Rated grid frequency		50Hz/60Hz
AC Output frequency range		45 ~ 55Hz/55 ~ 60Hz
Operation phase		Three Phase
Rated grid current	115.5A	120.3A
Max. output current	133.7A	132.3A
Power Factor (at rated output power)		0.8leading ... 0.8lagging
THDi (at rated output power)		< 3%
DC injection current		0.5%In
<b>Efficiency</b>		
Max. efficiency	99.00%	99.00%
EU efficiency	98.40%	98.40%
MPPT efficiency	99.5%	99.5%
<b>Protection</b>		
Anti-islanding protection		Yes
DC reverse-polarity protection		Yes
Insulation resistance monitoring		Yes
Residual current detection		Yes
DC Surge protection		Type II /Type I + II
AC Surge protection		Type II
Grid monitoring		Yes
Strings Monitoring		Yes
I/V Curve scanning		Yes
Anti-PID function		Yes
DC arc-fault circuit protection		Yes
Intergated DC switch		Yes
Intergated AC switch		Optional
<b>General Data</b>		
Dimensions(W*H*D)		1050W*567H*286.5D
Weight		< 85kg
Topology		Transformerless
Self consumption (night)		< 2W
Operating ambient temperature range		- 25~+60°C
Relative humidity		0~100%
Ingress protection		IP66
Noise emission(typical)		≤ 55dB(A)
Cooling concept		Intelligent redundant fan-cooling
Max.operation altitude		4000m
<b>Standards</b>		
Grid connection standard	EN50549, G99, AS4777.2-2015, VDE0126-1-1, IEC62727, VDE4105-2018, IEE1547, UL1741SA	
Safty/EMC standard	IEC62109-1/-2, NB/T32004-2018, EN61000-6-1, EN61000-6-3, UL1741, FCC	
<b>Features</b>		
DC connection		MC4
AC connection		OT Terminal connectors
Display		LCD, 2x20 Z.
Communication		RS485 /PLC (optional)
Warranty		5 Years /10 Years /15 Years /20 Years

# Solis-125K-EHV-5G

Solis 5G Three Phase Inverters



## Features:

- ▶ Maximum 20 strings input, support 1.5 DC/AC inverter load ratio
- ▶ Integrated AC & DC disconnect switches
- ▶ Touch safe DC Fuse holders adds convenience and safety
- ▶ High precision intelligent strings monitoring, reduce fault location time
- ▶ Built-in AC and DC lightning protection module, all-around lightning protection
- ▶ Support Anti-PID function, improve system efficiency
- ▶ Over 99.1% Max. efficiency
- ▶ Ethernet /RS485 multiple communication modes, flexible monitoring
- ▶ WiFi monitoring available-plus access to Android and Apple apps



## Model:

Solis-125K-EHV-5G

## Datasheet

Model	Solis-125K-EHV-5G
<b>Input DC</b>	
Max. DC input power(kW)	187.5
Max. DC input voltage(V)	1500
Nominal DC voltage(V)	950
Start-up voltage(V)	900
Operating MPPT voltage range(V)	860-1450
Max. input current(A)	150
Max. Short Circuit current for each MPPT(A)	300
MPPT number/Max input strings number	1/20
<b>Output AC</b>	
Rated output power(kW)	125
Max. apparent output power(kVA)	125
Max. output power(kW)	125
Rated grid voltage(V)	600
Rated grid frequency(Hz)	60
Operation phase	Three Phase
Rated grid output current (A)	120
Max. output current(A)	120
Power Factor (at rated output power)	0.8leading ... 0.8lagging
THDi	<3%
<b>Efficiency</b>	
Max.efficiency	99.10%
CEC efficiency	98.60%
MPPT efficiency	>99.9%
<b>Protection</b>	
DC reverse-polarity protection	Yes
Residual current detection	Yes
Overvoltage protection	DC II/ AC II
Islanding protection	Yes
DC switch/AC switch	Yes/Yes
DC Fuse	Yes
I/V Curve scanning	Yes
String monitoring	Yes
Anti-PID function	Optional
<b>General Data</b>	
Dimensions (mm)	1178W*713.5H*315D
Weight (kg)	84
Topology	Transformerless
Self consumption (night)	<3W (without anti-PID)
Operating ambient temperature range	- 25~+60°C
Relative humidity	0~100%
Ingress protection	NEMA4X/IP65
Noise emission	≤55dB(A)
Cooling concept	Fan cooling
Max.operation altitude	4000m
Compliance	UL 1741, UL 1741SA, Rule 21, UL 1998, UL 1699B, IEEE 1547, FCC Part 15 (Class A & B), CAN/CSA C22.2 107.1-1, Rule 21 Phaes II&III
<b>Features</b>	
DC connection	MC4
AC connection	OT Terminal connectors( Max. 185mm <sup>2</sup> )
Display	LCD, 2x20 Z.
Communication connections	RS485, Ethernet
OTA update	Yes
Warranty	5 Years /10 Years /15 Years /20 Years

# RHI-(3-5)K-48ES

Solis Energy Storage Inverters



## Features:

- ▶ Solis Intelligent Hybrid PV Inverter
- ▶ Dual MPPT - 3K, 3.6K, 4.6K, 5K
- ▶ Off-grid backup function
- ▶ Export Control
- ▶ UPS function
- ▶ Intelligent EMS function
- ▶ Multiple protection functions
- ▶ CAN, RS485, WiFi/LAN/GRPS (Optional)



## Model:

RHI-3K-48ES	RHI-3.6K-48ES
RHI-4.6K-48ES	RHI-5K-48ES

## Datasheet

Model Name	RHI-3K-48ES	RHI-3.6K-48ES	RHI-4.6K-48ES	RHI-5K-48ES
<b>Input DC(PV side)</b>				
Max. DC input power(kW)	4	5	6	6.5
The max DC input voltage(V)		600		
Nominal DC voltage(V)		330		
Start-up DC voltage(V)		120		
MPPT operating voltage range(V)		90-520		
The rating max dc input current(A/B)		11A+11A		
Max. Short Circuit current for each MPPT		17.2A+17.2A		
MPPT number/Max input strings number		2/A:1; B:1		
<b>Battery</b>				
Battery Type		Li-ion		
Battery Voltage range(V)		42 -58		
Battery Capacity (Ah)		50-2000		
Maximum Charging Power(kW)		3		
Maximum Charge/discharge current(A)		62.5/62.5		
<b>Output AC(Back-up)</b>				
Rating output power(kW)		3		
Transient max. apparent output power		4kVA, 10sec		
Back-up switch time		<10ms		
Operation phase		Single Phase		
Rated grid voltage(V)		220/230/240		
Rated frequency(Hz)		50/60		
Rated output current(A)		13		
THDi		2%(linear load)		
<b>Output AC(Grid side)</b>				
Rated output power(kW)	3	3.6	4.6	5
Max. apparent output power(kVA)	3.3	4	4.6	5.5
Rated grid voltage		220/230/240Vac		
Rated grid frequency(Hz)		50/60Hz		
Rated grid output current(A)	13	15.7	20.9	21.7
Max. output current(A)	15.7	17.3	23 (21.7 for AUS)	23.9 (21.7 for AUS)
Output power factor		1 (default) and 0.8leading ... 0.8lagging adjustable		
Output THDi		<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</b>				
Ground fault monitoring		Integrated		
Residual current monitoring unit		Integrated		
DC AFCI		Optional		
DC reverse polarity protection		Yes		
Protection class/Over voltage category		I/III		
<b>General data</b>				
Dimensions (mm)		333W*505H*249D		
Weight(kg)		17		
Operation temperature range		-25~60°C		
Protection degree/ Pollution degree		IP65/ PD3		
Inverter Topology		High frequency isolation (for battery)		
Noise emission (typical)		<20dBA		
Cooling concept		Natural convection		
Max.operation altitude		2000m		
Design lifetime		>20 years		
Grid connection standard		EN50438, G98, G99,AS4777.2:2015, VDE0126-1-1, IEC61727, VDE N4105		
Safety / EMC standard		IEC62040-1, IEC62109-1/-2, AS3100, NB/T 32004, EN61000-6-2, EN61000-6-3		
AC and DC Connections		Quick Connector		
Display		7.0"LCD color screen display		
Interface		CAN/RS485/WiFi/GPRS optional		
Warranty		5 Years /10 Years /15 Years /20 Years		

# RAI-3K-48ES-5G

Solis 5G Energy Storage Inverters



## Features:

- ▶ Compatible with any existing grid-tied PV system, option to upgrade the current grid-tied system to a new battery storage system
- ▶ Various work mode for different application scenario
- ▶ Convenient real-time monitoring realized via wireless communication and intelligent debugging APP which support one-click inverter configuration
- ▶ Available to integrate all renewable energy system including solar, wind, fuel cell etc
- ▶ Optional stand alone mode ensures constant power supply for critical load
- ▶ Advanced BMS to enhance the battery usage and guarantee the longer battery lifespan
- ▶ Natural cooling without external fan
- ▶ IP65 degree, applicable for different installation environments



## Model:

RAI-3K-48ES-5G

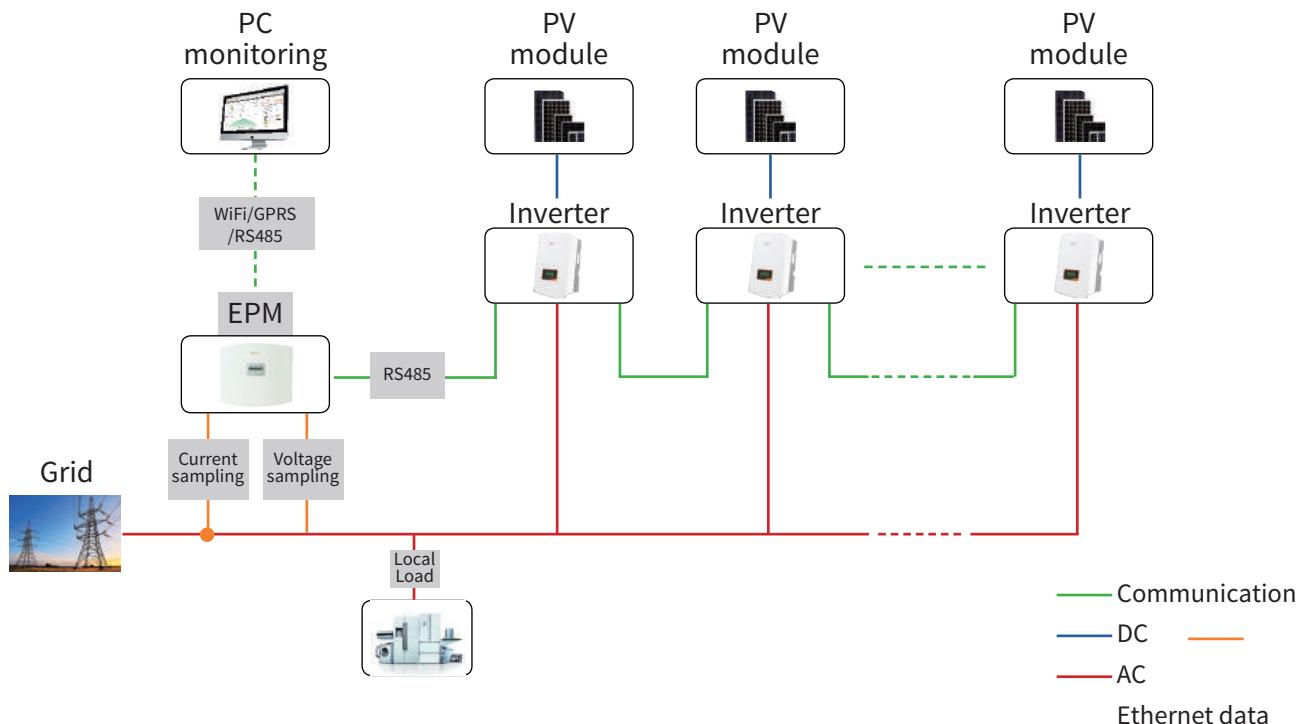
## Datasheet

Model Name	RAI-3K-48ES-5G
<b>AC Output(On Grid)</b>	
Rated AC power(VA)	3000
Max. apparent AC power(VA)	1.5*Prated,10s;1.2*Prated,30s
Rated grid voltage(V)	230
Rated grid Frequency(Hz)	50/60
Rated AC current(A)	13
Displacement power factor	0.8 leading to 0.8 lagging
THDi, rated power	<3%
Operation phase	Single Phase
<b>Battery</b>	
Rated battery voltage(V)	48
Battery voltage range(V)	40-60
Max.charge/discharge power(W)	3300
Max.charge/discharge current(A)	60
Communication interfaces	CAN
Battery Type	Lithium-ion
<b>Efficiency</b>	
Max. Battery charge efficiency	94.0%
Max. Battery discharge efficiency	94.5%
<b>AC Output(Back-up)</b>	
Rated power(VA)	3000
Rated voltage(V),Frequency(Hz)	230,50/60
Rated current(A)	13
Peak output power(W), Duration(s)	1.5*Prated,10s
Switch time(s)	<3
Total harmonic distortion(THDv, linear Load) (%)	<3%
<b>Protection</b>	
Battery reverse protection	YES
Battery over and under voltage protection	YES
Short circuit protection	YES
Output over current protection	YES
Output over voltage protection	YES
temperature protection	YES
<b>Environment Limit</b>	
Ingress protection	IP65
Operating temperature range(°C)	-25°C~60°C
Humidity(%)	0..100%,No Condensing
Altitude(m)	2000
Noise emission(typical)(dB)	<35
<b>System Parameters</b>	
Dimensions (mm)	403W*525H*170D
Weight (kg)	15
Standby Losses	<8W
Cooling concept	Natural
Topology	High frequency isolation
Communication	WiFi, RS485*2, CAN, DRM (logic interface)
Display	LCD & APP
Dry port	2
Standard warranty (year)	5 Years /10 Years
Cetification	IEC62477-1, IEC61000-6-1/-2/-3/-4, VDE4105:2018, VDE0126, IEC62109, IEC62040.1, AS4777.2, G98, G99

# Accessories

## Solis Export Power Manager

### Solis Export Power Manager



#### The control center for smart energy management

The Solis export power manager is the ideal solution for smart energy management for both residential and commercial systems. The unit allows you to adjust export values to satisfy local network regulatory requirements.

Energy management with the Solis export power manager allows for higher self-consumption and efficient use of the locally generated PV power.



#### Easy to Use

- ▶ Active power limitation and control at the grid-connection point
- ▶ Automatic, intelligent control of loads with up to 6 Ginlong inverters
- ▶ Easy commissioning with the PV System Setup Assistant
- ▶ Ginlong monitoring system

#### Flexible

- ▶ Several standardised meter interfaces
- ▶ Individual specifications for controllable appliances

## Datasheet

Model	Solis-EPM1-5G	Solis-EPM3-5G
Technical data	Export Device	
<b>Communication</b>		
Inverter communication	RS485	
Monitoring	WiFi/GPRS/Ethernet	
<b>Connections</b>		
Inverter connection	Single phase inverters	Three phase inverters
Max. inverter number	80	
Monitoring connection	Wifi stick or GPRS stick for single inverter connection Smartlog for 2-80 inverter connection	
Grid connection	L/N+PE	3L/N+PE
<b>CT specification</b>		
CT connection	Terminal board for CT	
CT Input current range	0-5000A	
Recommended CT Input current range	300A	3000A
CT Ratio	3000:5	
<b>Voltage supply</b>		
Voltage supply	Grid	
Input voltage	L to N: 60~ 280 Vac, 50 / 60 Hz L to L: 100~ 480 Vac, 50/60 Hz	
Power consumption	<10 W	
<b>Ambient conditions during operation</b>		
Ambient temperature	-25°C~+60°C	
Degree of protection	IP65	
Maximum permissible value for relative humidity (non-condensing)	5 % to 95 %	
<b>General data</b>		
Dimensions (mm)	378W*425H*124D	
Weight (Kg)	4.9	
Mounting location	Indoor and outdoor	
Deployment options	Wall mounting	
<b>Features</b>		
Operation	Via LCD	
Warranty	5 years	
Control time	5 s	
Fail safe function and control time	Yes, 5 s	
Accuracy	0.03	
Remote upgrade	Support	

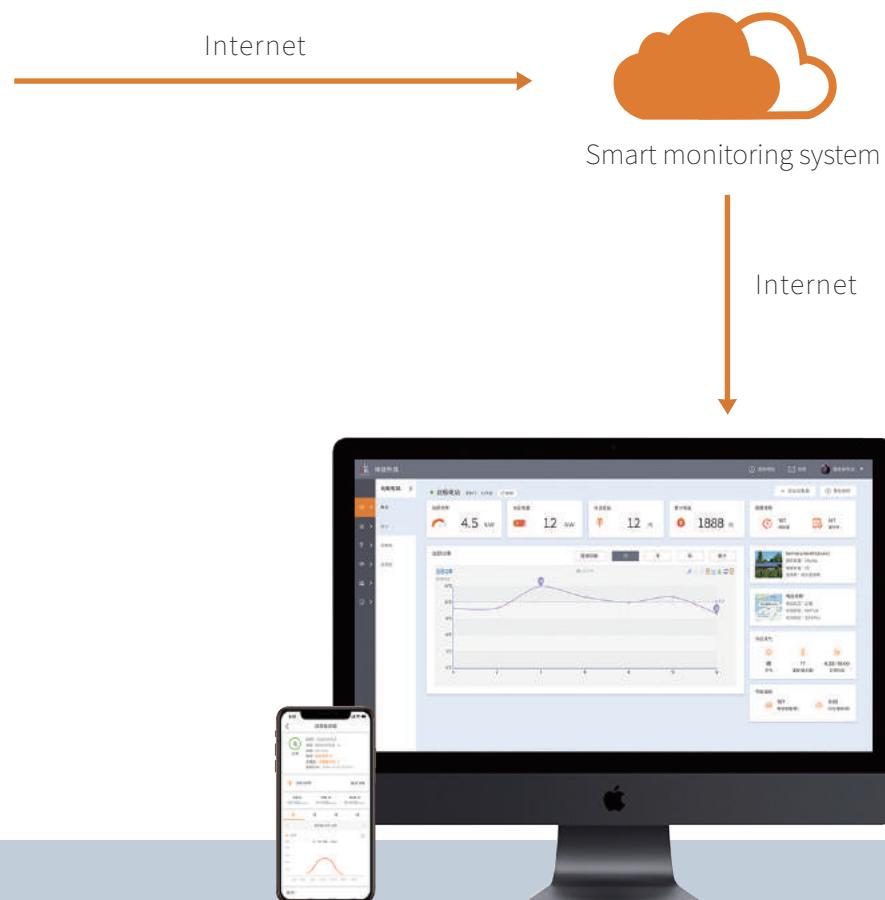
# Accessories

## Solis Data Logging Stick

### Ginlong Monitoring System



Data Logging Stick



#### Data Logging Stick: WiFi

Quick installation and easy operation  
Enables local and remote monitoring  
Easy visualisation of data and other information via Internet

#### Data Logging Stick: LAN

Quick installation and easy operation  
No need to set, plug and play function  
LAN communication is stable and reliable remote monitoring

#### Data Logging Stick: GPRS

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

Data Logging Stick WiFi

Data Logging Stick LAN

Data Logging Stick GPRS

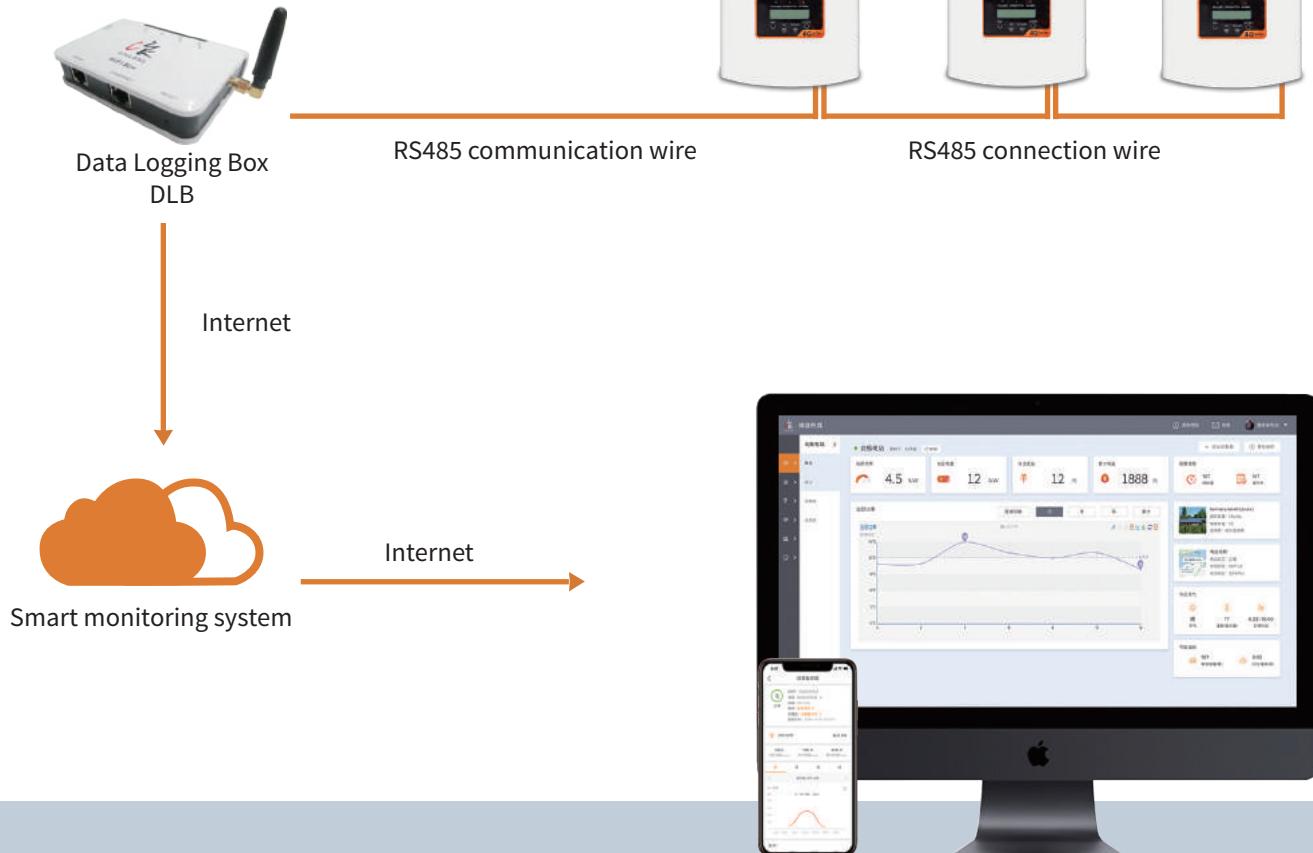
## Datasheet

Model	DLS-W(WiFi)	DLS-L(LAN)	DLS-G(GPRS)
Max.number of inverters		1	
Inverter communication		4pin	
Remote communication	WiFi(802.11 b/g/n)	Ethernet 10/100Mbps	GPRS Class 12
Communication rate	9600 bps(adjustable:1200-57600 bps)		
Frequency	2.412GHz-2.484GHz	/	850/900/1800/1900 MHz
GPRS multi-slot	/	/	/
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	/	/	ClassC
Compatible with the GSM Phase 2/2 +	/	/	Class 4 (2W@850/900MHz) Class 1 (1W@1800/1900MHz)
External antenna	I-PEX antenna	/	I-PEX antenna
Data collection intervals		5 minutes (adjustable:1-20 minutes)	
Data interface		RS485	
Preferences setting		Web Server	
Firmware updates	Wireless	Ethernet	Wireless
Data access	WiFi point-to-point/Remote server	Remote server	Remote server
Data storage	8MBYTE FLASH	8MBYTE FLASH	8MBYTE FLASH
Electrical			
Input voltage	DC 5V	DC 5V (+/-5%)	DC 5V (+/-5%)
Working current	200mA~300mA	110mA~200mA	160mA~500mA
Static power comsumption	/	/	<2W
Max. instantaneous power consumption	/	/	<8W
Environmental			
Operating temperature	-10 ~ +85°C	-10 ~ +85°C	-10 ~ +85°C
Operating humidity	Operating humidity 0%-100% Relative humidity, no condensation		
Storage temperature	-40 ~ +125°C	-40 ~ +125°C	-40 ~ +125°C
Storage humidity		<40%	
Protection class		IP65	
Physical			
Dimensions(mm)	118L*43W*43H	105L*43W*43H	118L*43W*43H
Weight(g)		56	
Other			
Warranty		2 years	
Certificates		FCC, CE	

# Accessories

## Solis Data Logging Box

### Ginlong Monitoring System



Data Logging Box  
DLB

#### Data Logging Box: WiFi

Quick installation and easy operation  
Monitoring your system and data anytime via WiFi  
Easy visualisation 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 fault free  
Keeping users informed of status and data via mobile device

## Datasheet

Model	DLB-W(WiFi)	DLB-G(GPRS)
Max. number of inverters	10	
Inverter communication	RS485	
Remote communication	WiFi(802.11 b/g/n)	GPRS
Max. communication range	<1km	
Communication rate	9600bps (adjustable:1200-57600 bps)	
WiFi frequency	2.4GHz	850/900/1800/1900 MHz
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 (adjustable:1-20 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	4 LEDs	
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 condensation	
Storage temperature	-40 ~ +65°C	
Storage humidity	<40%	
Protection class	IP21	
Physical		
Dimensions(mm)	110L*86W*26H	
Weight(g)	108	102
Other		
Warranty	2 years	
Certificates	FCC, CE, RoHS	