

Multifit Solar Smart Grid System

The MultifitSmart Grid System includes high efficiency micro inverters, a communication gateway, and secure web access. System information is analyzed in real time for instant response to changing weather conditions and hardware needs. A backup safety feature initiates system-wide power down if hardware-threatening conditions are identified. Customers can conveniently monitor and control the system via computer or mobile device.

1、Multifit Microinverter: Powerlife series

The micro inverter is the key component to a distributed solar system. Combined with its web-based analytics, a continual fine-tuning of settings produces 15-25% more energy than string converters.

2、Multifit Link:

The link collects critical data on the panel’s health and performance, relaying it to the online management system for analysis. This data provides the basis for the system’s self-regulation, optimizing for maximal performance and safety.

3、Multifit Management Platform:

Users can view the self-regulating smart grid online, via computer or mobile device. Self-diagnosed maintenance/repair need are sent by email. Settings and auto-responses are all customizable, and can be adjusted to fit the user’s desired level of control.

Product features

Advanced technology: <ul style="list-style-type: none">● Peak efficiency 96.2%● CEC efficiency 95.5%● 15 built-in protection measures● Enhanced safety insulations	Easy monitoring <ul style="list-style-type: none">● Communication via PLC● Web based real-time monitoring system● Remote real time control
Quality assurance: <ul style="list-style-type: none">● Carefully selected components● Strict supplier selection● Most vigorous production quality control● Up to 25-year warranty	
NREL (National Renewable Energy Laboratory) <ul style="list-style-type: none">● Microinverters can improve performance under shaded conditions more than 12%● Under partially shaded conditions, the use of distributed power electronics can recover between 10%-30% of annual performance	
PV System with String Invert <ul style="list-style-type: none">● Monitoring the whole system● More susceptible to the effect of the shading● Hard to expand the system after installing to replace● Need 4-5 inverters during 25years● High DC voltage wiring wall	PV System with Multifit Microinverter: <ul style="list-style-type: none">● Panel level monitoring● Harvest 15-25% more energy● Flexibility to adjust the size of the system● Up to 25-year warranty and no additional replacement cost● No DC high voltage

Microinverter PowerLife series Specification

Inputdate (dc)	Powerlife250 72-cell PV modules	Powerlife230 60-cell PV modules
Recommended input power(STC)	230-280	218-260
Maximum Voc(d.cV)	60	60
Peak power tracking voltage (d.c.V)	27-45	24-45
Maximum DC short circuit current(d.c.A)	15	15
Maximum input current(d.c.A)	9.7	10.0
Output Data(Ac)		
Maximum continuous output power(W)	250	230
Nominal output current (a.c.A)	1.1	1.0
Nominal voltage(a.c.A)	230	230
Nominal operating voltage range (a.c.V)	210-253	210-253
Nominal operating frequency(Hz)	50	50
Nominal operating frequency range(Hz)	49-51	49-51
Power factor	>0.99	>0.99
Total harmonic distortion	<4%	<4%
Maximum units per 18A branch	15	15
Efficiency		
Peak inverter efficiency	96.2%	96.2%
CEC weighted efficiency	95.5%	95.5%
Static MPPT efficiency(reference EN50530)	>99.0%	>99.0%
Dynamic MPPT efficiency(reference EN50530)	>99.0%	>99.0%
Mechanical Data		
Operating ambient temp range	-40C°to65C°	-40C°to65C°
Dimension(W*H*D)	16.2cm*16.2cm*3.1cm	16.2cm*16.2cm*3.1cm
Weight KG	1.8	1.8
Cooling	Natural convection	Natural convection
Enclosure environmental rating	Ip65	Ip65
Other Features		
Night time power consumption	<30mW	<30mW
Compliance	IEC61727 ,IEC62116,IEC/EN62109-1,62109-2,AS4777.2 AS4777.3 AS/NZS3100	IEC61727 ,IEC62116,IEC/EN62109-1,62109-2AS4777.2 AS4777.3 AS/NZS3100
Communication	Power Line carrier	Power Line carrier

