

# **POWERCUBE**<sup>™</sup>

Datasheets



Residential On-Grid Photovoltaic System Kits





## **Product Description**

These innovative residential Solar PV Kits are the most cost effective and easy PV solution available for home use. They are ideally suited for any household that is looking to reduce energy costs using an efficient and clean energy system.





## What's in the Box

- Solar modules
- Solar on-grid inverter
- Custom roof mounting system
- PV wiring harnesses
- DC and AC disconnects
- Wire management kit
- Safety label kit
- Single and three-line electrical and mechanical schematics
- Microinverter (available for Mini 500W)

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### **Residential PV Systems Ready to Install**

Configured in a'plug n play'solution,our On-Grid residential PV systems allow installers to safely connect them to the AC main service panel of any household anywhere in the world. Owners are given the option to either auto consume the power generated from their PV system or sell excess energy back to their local utility provider. These systems are offered with mounting systems for multiple roof types and configurations which offers stability and aesthetics to any rooftop.

#### **Product Benefits**

- Generate yourown electricityfrom home and reduce your electric bill
- Increase the value of your home
- Hedge yourself against future utility increases
- Reduce your carbon footprint

#### **Common Applications**

- Homes
- Villas
- Out buildings
- Garages
- Apartments

## **Residential On-Grid PV Kits**

SYSTEM SIZE		ЗКЖ	4KW	5KW	6KW	7KW	8KW
PRODUCT MODEL		PCR-3KW	PCR-4KW	PCR-5KW	PCR-6KW	PCR-8KW	PCR-10KW
PV System size Nominal(Wp)		3000W	4500W	5250W	6000W	7500W	8250W
PV MODULE SP	PECIFICATION (MC	ONO)					
Panel Model		OP375M60-P2					
Power(W)		375					
Vmp(V)		34.4					
Voc(V)		41.6					
lsc(A)		11.45					
Imp(A)		10.89					
Dimen sions(L x W x H)(mm)		1763x1046x30mm					
PV module weight(kg)		20					
Certifications		VDE CE CEC ETL INMETRO					
INVERTER SPE	CIFICATIONS (600	VDC)					
Inverter Size(kw)		3	4	5	6	8	10
Max DC Power(W)		4500	6300	6800	7500	8500	9600
Max DC Voltage(V)		600					
MPPT Voltage range(V)		70-580 100-530					
No.of MPPT'S		1			2		
Max AC Power(VA)		3300	4620	5000	6000	7000	8000
Max Output Current(A)		13	18.3	21.7	28.7	33.5	38.3
AC Nom.Voltage/Voltage Range(V)		220/230/240(180-280)					
AC Grid Freque ncy range(Hz)		50/60					
Number of phase	S				1		
Dimensions(L x W x H)(mm)		341.5*430*143 534*419*201					
Inverter weight(kg)		14.5			30		
Certifications			EN61000-6-2 EN	61000-6-3 EN610	00-3-2 VDE4105 B	EN50549 CEI0-21	
	alsovailable upon reque	est					
BOS							
#DC Isolator 1200V		1	2	2	2	2	2
#AC Isolator		1	1	1	1	1	1
#AC Breaker		1	1	1	1	1	1
*PV Wire Harmess.4mm(meters)		1	1	2	2	2	2
*Ground Wire.4mm(meters)		30	40	50	60	70	80
Battery Cables		N/A					
* Extra wire is avaib	le upon request						
SYSTEMLAYO	JT						
# of Modules		8/	12	14	16	20	22
# of inverters		1					
PV Layout options		Landscape or Portrait					
PV Arrary Surface Area(m2)		14.66	21.6	25.2	28.8	36	39.6
PV Arrary Weight(kg)		160	240	280	320	400	440
	No.of PV Modules/String	8	12	7	8	10	11
PV Module	Total Strings	1	1	2	2	2	2
Configuration	String Voc	332.8	499.2	291.2	332.8	416	457.6
1000VDC	String Vmp	275.2	412.8	240.8	275.2	344	378.4
	String Imp			10	.89		
PRODUCTION I	ESTIMATES(KWh)						
*Projectedyearly outputat 1100GHI/year		2805	4207	4908	5610	7012	7713
*Projectedyearly outputat 1460GHI/year		3723	5584	6515	7446	9307	10238
*Projectedyearly outputat 1825GHI/year		4653	6980	8144	9307	11634	12797
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 SYSTEM OPTIONS

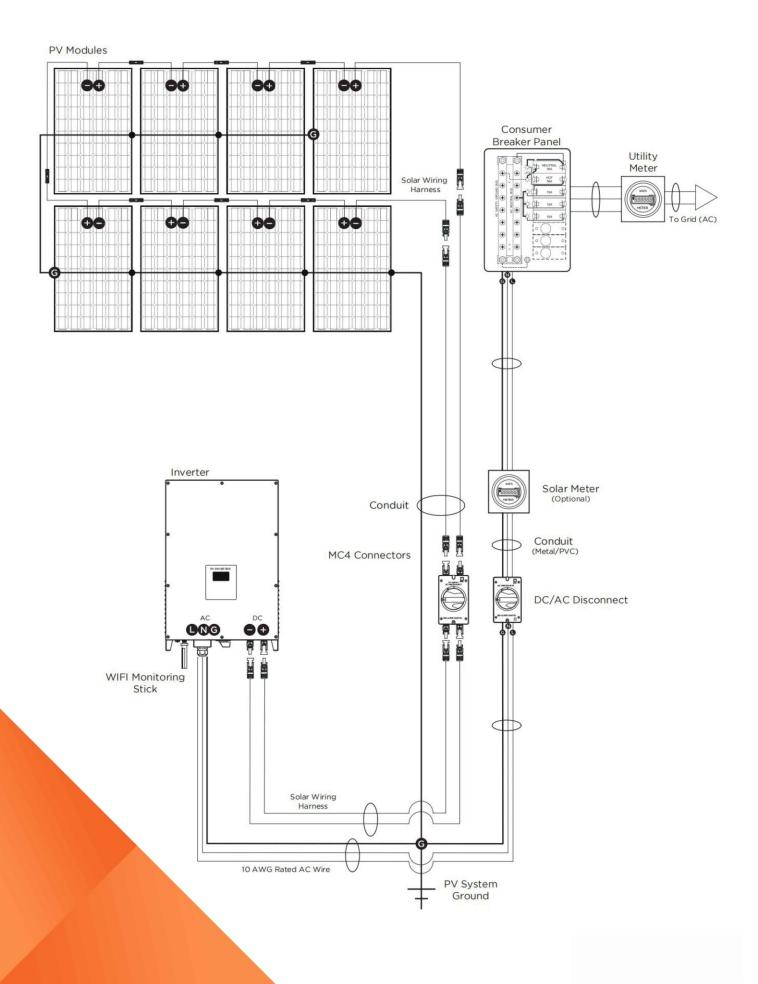
 Wifi Monitor
 Wifi or GPRS

 PV System Color
 Siliver or Full Black

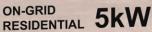
 Mounting System Types
 Metal Roof Aspht Shingle, Tile roof, Flat Concrete

 Battery Bank
 TBD

## **Residential On-Grid Example Layout (3kW)**







## The all-in-one Box Solution

The difference is clear, get better results with our all in a box packaging solution. Our innovative heavy duty ISPM15 compliant care design not only protects the contents during international shipping but also ensures that the solar kits arrive to their destination site undamaged and ready for installation. Our BOS toolboxes are included in all our solar kits and designed with the installer in mind.

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#### **Packaging Specs**

Designed to be warehouse friendly for distribution centers and local logistics companies, our kits are easily stacked, inventoried, and consolidated.

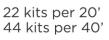
3kW 1.8 x 0.45 x 1 1 kit per pallet

38 kits per 20' 76 kits per 40'



#### **5kW** 1.8 × 0.70 × 1

1 kit per pallet





#### **7kW** 1.8 x 1.1 x 1 1 kit per pallet

12 kits per 20' 24 kits per 40'



**4kW** 1.8 x 0.55 x 1 1 kit per pallet

26 kits per 20' 52 kits per 40'



**6kW** 1.8 x 0.95 x 1 1 kit per pallet

12 kits per 20' 24 kits per 40'



8kW 1.8 x 1.1 x 1 2 pallets per kit

6 kits per 20' 12 kits per 40'

