POWERCUBE™

Datasheets

ON-GRID

Residential On-Grid Photovoltaic System Kits

ON-GRID RESIDENTIAL

3kW / 4kW / 5kW / 6kW / 7kW / 8kW

Product Description

Omnis Power Solar's 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.

Switch on and off

Our grid-tied systems allow homeowners to get power from either their solar electric system or the utility grid, switching seamlessly between the grid-tied PV system and the grid.

Sell back your power

When your grid-tied system is producing more power than your home is consuming, the excess power can often be sold back to the utility in a practice known as net metering.

Use the grid at night

When your system is not producing sufficient power or during non-daylight hours your home can draw power from the utility grid.

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)

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	3KW	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 SPECIFICATION (MONO)

Panel Model	OP375M60-P2
Power(W)	375
Vmp(V)	34.4
Voc(V)	41.6
Isc(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 SPECIFICATIONS (600VDC)

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 phases	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 EN61000-6-3 EN61000-3-2 VDE4105 EN50549 CEI0-21					

12/240VUL invertersalsovailable upon request

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 avaible upon request

SYSTEMLAYOUT

# 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
PV Module Configuration 1000VDC — No.of PV Modules/String	8	12	7	8	10	11
PV Module Configuration 1000VDC — Total Strings	1	1	2	2	2	2
PV Module Configuration 1000VDC — String Voc	332.8	499.2	291.2	332.8	416	457.6
PV Module Configuration 1000VDC — String Vmp	275.2	412.8	240.8	275.2	344	378.4
PV Module Configuration 1000VDC — String Imp	10.89					

PRODUCTION ESTIMATES(KWh)

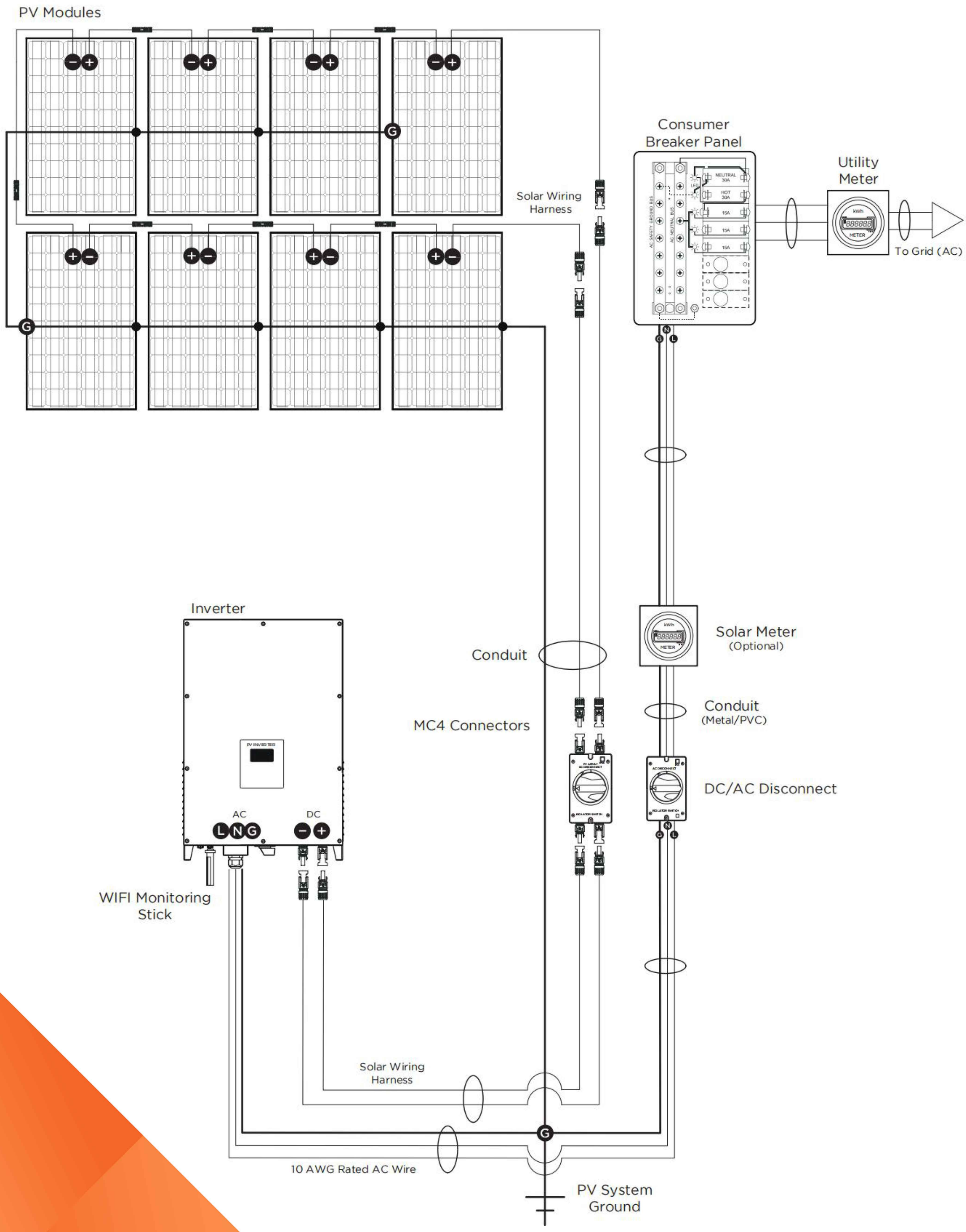
*Projectedyearly outputat 1100GHI/year	2805	4207	4908	5610	7012	7713
*Projectedyearly outputat 1460GHI/year	3723	5584	6515	7446	9307	10238
*Projectedyearly outputat 1825GHI/year	4653	6980	8144	9307	11634	12797

* Based on 0.85% system deraling(formula=DC Power x peak sunshine hour/year x derate factor)(GHI=Global Horizotall radiance)

SYSTEM OPTIONS

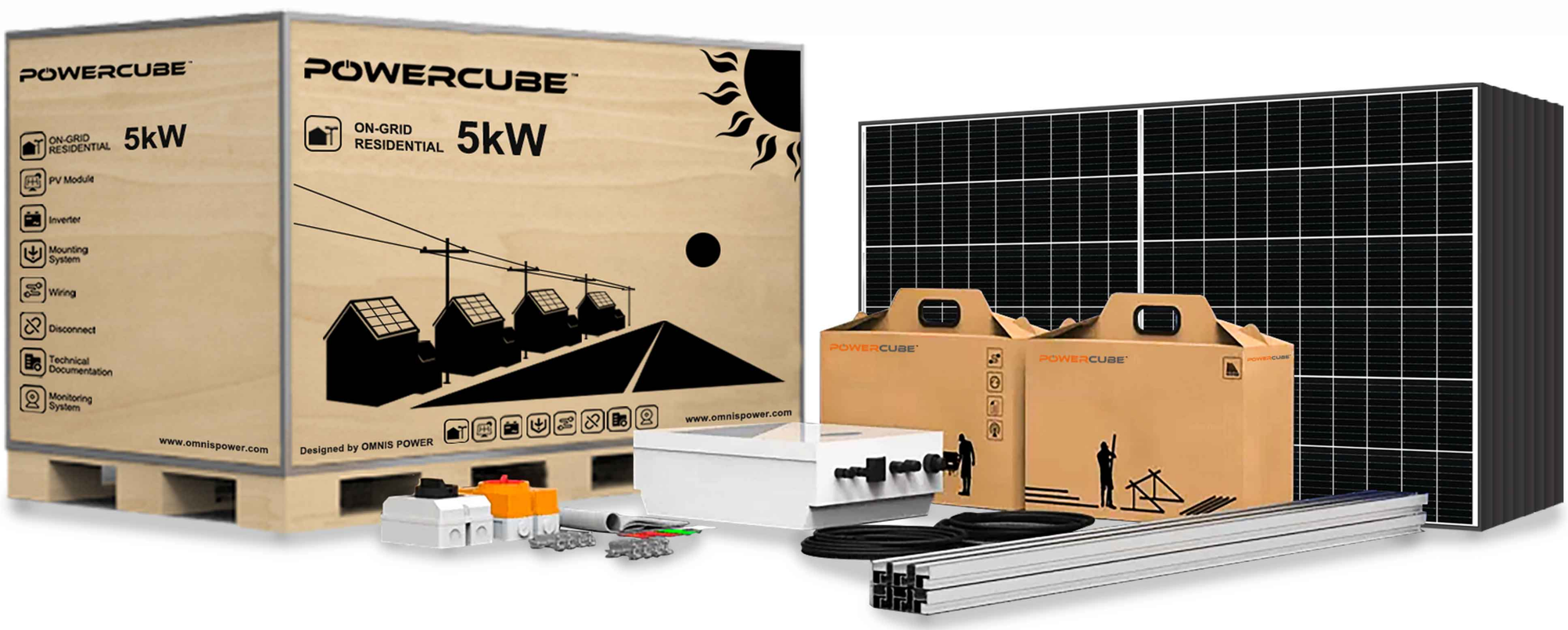
Wifi Monitor	Wifi or GPRS
PV System Color	Siliver or Full Black
Mounting System Types	Metal Roof Aspht Shingle,Tile roof,Flat Concrete
Battery Bank	TBD

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 solutions. Omnis Power Solar's 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. Omnis Power Solar's BOS toolboxes are included in all our solar kits and designed with the installer in mind. With years of installation experience, we understand the benefits of having a safe and well organized jobsite.



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 — 38 kits per 20’
1 kit per pallet — 76 kits per 40’

3kW
1.8 x 0.55 x 1 — 26 kits per 20’
1 kit per pallet — 52 kits per 40’

5kW
1.8 x 0.70 x 1 — 22 kits per 20’
1 kit per pallet — 44 kits per 40’

6kW
1.8 x 0.95 x 1 — 12 kits per 20’
1 kit per pallet — 24 kits per 40’

7kW
1.8 x 1.1 x 1 — 12 kits per 20’
1 kit per pallet — 24 kits per 40’

8kW
1.8 x 1.1 x 1 — 6 kits per 20’
2 pallets per kit — 12 kits per 40’