

**ENVOLTAGE**



**POWERCUBE™**

**Datasheets**



**ON-GRID**

Commercial On-Grid  
Photovoltaic System Kits



## ON-GRID COMMERCIAL

10kW / 15kW / 20kW / 30kW / 60kW / 100kW



### Product Description

---

These innovative commercial Solar PV Kits are ideally suited for any business that is looking to reduce rising energy costs and hedge against future energy inflation. Our pre-engineered kits are suitable for most installation sites including commercial roof tops and ground mounting locations.



#### Help the environment

Business owners reduce electricity costs whilst simultaneously promote their brand commitment to the environment and enhance their social corporate responsibility.



#### Increase your value

Depreciate financial contributions and sell any excess electricity generated by the system back to the grid. Increase the ROI and enjoy added marketing benefits from a highly visible landmark.



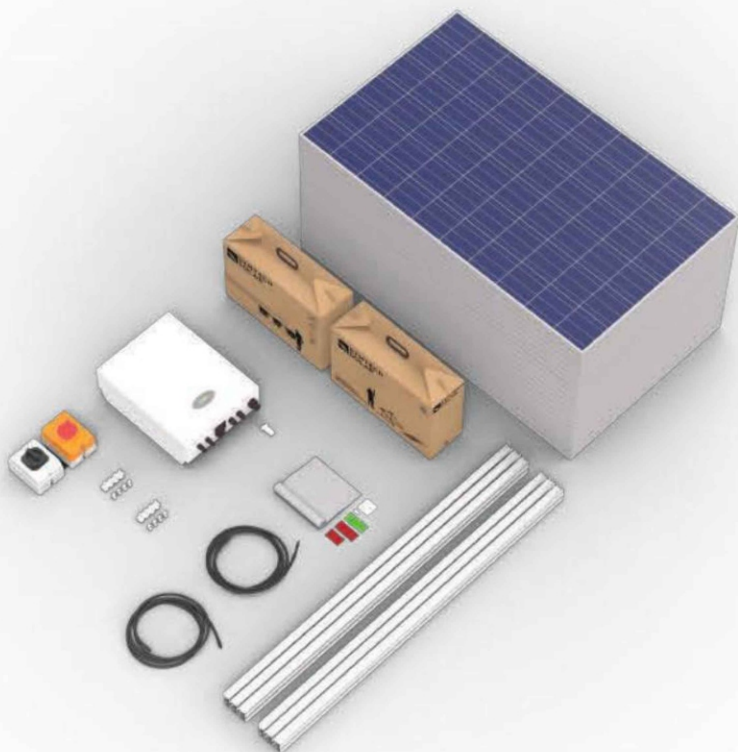
#### Great adaptability

Let our systems fit in your needs. We offer flexible design to serve space restricted areas. They come in a variety of inverter voltage ranges which can be adapted to site-specific electrical requirements.

### What's in the Box

---

- Solar modules
- Solar on-grid inverter (3 phase)
- 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



## Solar Power for your Business

---

Offered in both pre-configured and site specific designs, PV systems save time and money when planning and adopting solar into commercial settings.

Designed to match your business's requirements, commercial PV systems are delivered install ready and hold internationally compliant certifications. Directly shipped from our facilities in Shanghai, China, our Commercial line is ideally suited for business applications.

### Product Benefits

---

- Hedge yourself against future utility increases
- Sell excessive power back to the utility grid (net metering)
- Solar modules have up to a 25-year warranty and a typical lifetime of 40+ years
- Reduce your building operating costs
- Low maintenance/high reliability

### Common Applications

---

- Factories
- Distribution centers
- Shopping centers
- Office buildings
- Libraries
- Churches
- Schools

## Commercial On-Grid PV Kits

SYSTEM SIZE	10KW	15KW	20KW	30KW	60KW	100KW
PRODUCT MODEL	PCC-10KW	PCC-15KW	PCC-20KW	PCC-30KW	PCC-60KW	PCC-100KW
PV System size Nominal(Wp)	9900W	15300W	21600W	30600W	61200W	102600W

### PV MODULE SPECIFICATION (MONO)

Panel Model	OP450M72-P3					
Power(W)	450					
Vmp(V)	40.8					
Voc(V)	48.9					
Isc(A)	11.24					
Imp(A)	10.67					
Dimensions(L x W x H)(mm)	2110x1046x35mm					
PV module weight(kg)	28.6					
Certifications	VDE CE CEC ETL INMETRO					

### INVERTER SPECIFICATIONS (600VDC)

Inverter Size(kw)	10	15	20	30	60	100
Max DC Power(W)	11500	16500	23000	34000	78000	130000
Max DC Voltage(V)	1000					
MPPT Voltage range(V)	200-800			200-1000		
No. of MPPT'S	2			4		
Max AC Power(VA)	11000	15000	20000	30000	66000	55000
Max Output Current(A)	14.5	23.9	3*33.5	3*48	3*92	3*83
AC Nom. Voltage/Voltage Range(V)	220/230/240 180-280V					
AC Grid Frequency range(Hz)	50/60					
Number of phases	3					
Dimensions(L x W x H)(mm)	534*419*201	534*419*179	555*446*270		855*555*275	
Inverter weight(kg)	30	32	37	40	67	
Certifications	EN61000-6-2 EN61000-6-3 EN61000-3-2 VDE4105 EN50549 CEI0-21					

12/240VUL inverters also available upon request

### BOS

#DC Isolator 1200V	2	2	2	2	2	2
#AC Isolator	1	1	1	1	1	1
#AC Breaker	1	1	1	1	1	1
*PV Wire Harness.4mm(meters)	1	1	1	1	1	2
*Ground Wire.4mm(meters)	100	100	200	300	300	400
Battery Cables	N/A					

\* Extra wire is available upon request

### SYSTEM LAYOUT

# of Modules	22	34	48	68	136	228
# of inverters	1					
PV Layout options	Landscape or Portrait					
PV Array Surface Area(m2)	48.56	75.04	105.93	150.08	300.16	503.2
PV Array Weight(kg)	629.2	972.4	1372.8	1944.8	3889.6	6520.8
PV Module Configuration	No. of PV Modules/String	22	34	48	68	228
	Total Strings	2	2	4	4	12
	String Voc	1075.8	1662.6	2347.2	3325.2	6650.4
	String Vmp	897.6	1387.2	1958.4	2774.4	5548.8
	String Imp	10.67				

### PRODUCTION ESTIMATES(KWh)

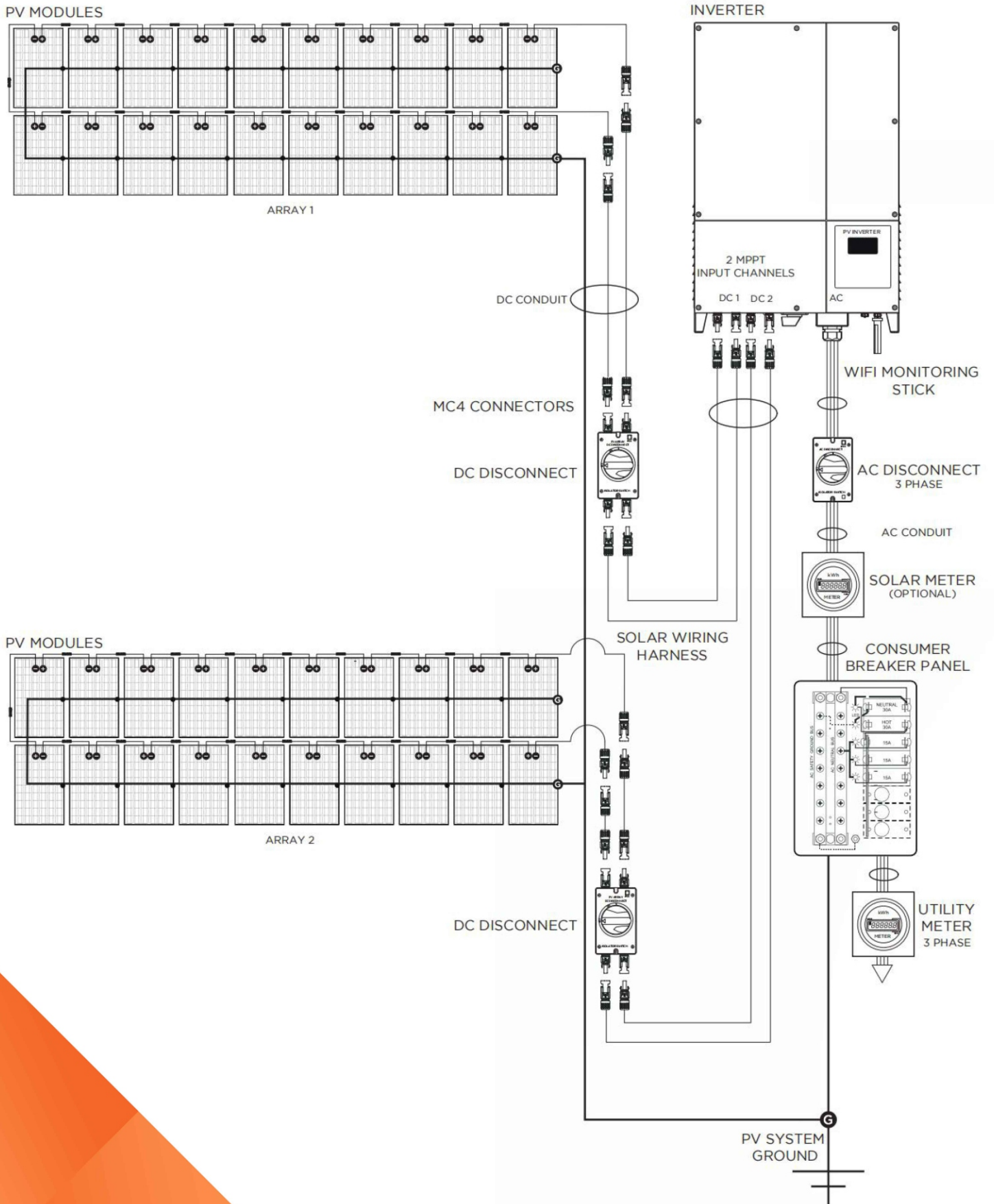
*Projected yearly output at 1100GHI/year	9256.5	14305.5	20196	28611	57222	95931
*Projected yearly output at 1460GHI/year	12285.9	18987.3	26805.6	37974.6	75949.2	127326.6
*Projected yearly output at 1825GHI/year	15357.4	23734.1	33507.0	47468.3	94936.5	159158.3

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

### SYSTEM OPTIONS

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

## Commercial On-Grid Example Layout(20kW)





## 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.



## Packaging Specs

---

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

### 10kW

1.8 x 1 x 1  
2 pallets per kit

6 kits per 20'  
12 kits per 40'



### 15kW

1.8 x 1 x 1  
4 pallets per kit

3 kits per 20'  
6 kits per 40'



### 20kW

1.8 x 1 x 1  
8 pallets per kit

1 kits per 20'  
3 kits per 40'



### 30kW

1.8 x 1 x 1  
12 pallets per kit

1 kits per 20'  
2 kits per 40'



### 60kW

1.8 x 1 x 1  
20 pallets per kit

1 kit per 40'



### 100kW

1.8 x 1 x 1  
20 pallets per kit

1 kit per 40'

