

# APOLLO

## Datasheets



**ON-GRID**

Commercial On-Grid  
Photovoltaic System Kits



# ON-GRID COMMERCIAL

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



## Product Description

Shinson's 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.



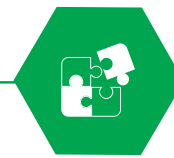
### Help the environment

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



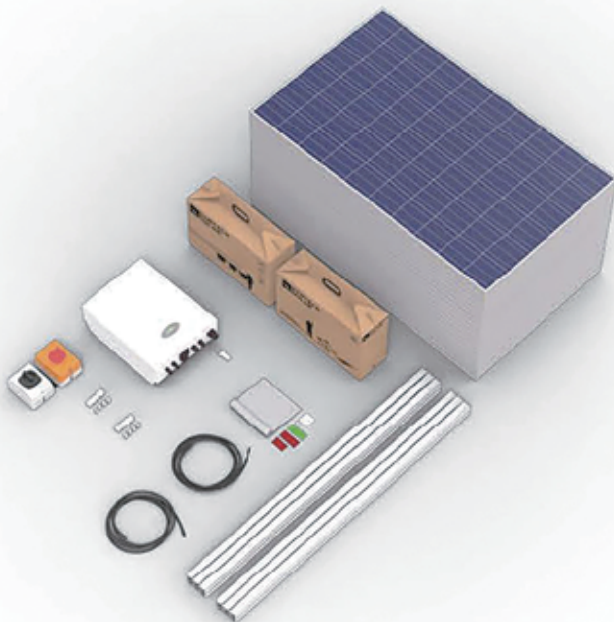
### Increase your value

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**

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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.

### **Common Applications**

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

### **Product Benefits**

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- 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

# Shinson | Product Line

## Commercial On-Grid PV Kits

SYSTEM SIZE	10KW	15KW	20KW	30KW	50KW	100KW
PRODUCT MODEL	AP-10KW	AP-15KW	AP-20KW	AP-30KW	AP-50KW	AP-100KW
PV System size Nominal(Wp)	10120	15640	22080	31740	50600	103500

### PV MODULE SPECIFICATION (MONO)

Panel Model	SS460M60P3					
Power(W)	460					
Vmp(V)	34.2					
Voc(V)	41.48					
Isc(A)	14.01					
Imp(A)	13.45					
Dimensions(L x W x H)(mm)	1903*1134*30					
PV module weight(kg)	24					
Certifications	VDE CE CEC ETL INMETRO					

### INVERTER SPECIFICATIONS (600VDC)

Inverter Size(kw)	10	15	20	30	50	100
Max DC Power(W)	16	24	32	48	80	150
Max DC Voltage(V)	1100					
MPPT Voltage range(V)	200-800				200-1000	
No.of MPPT'S	2			3	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 Freque ncy 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

#AC/DC Disconnect	1/2	1/4	1/8	2/12	2/20	10/100
*PV Wire Harmess.4mm(meters)	200	350	500	750	1000	5000
*Ground Wire.4mm(meters)	100	100	200	400		1000
Battery Cables	N/A					

\* Extra wire is available upon request

### SYSTEM LAYOUT

# of Modules	22	34	48	69	112	225
# 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)	528	972.4	1372.8	1973.4	3203.2	6435
PV Module Configuration 1000VDC	No. of PV Modules/String	11	17	24	28	25
	Total Strings	2	2	4	3	9
	String Voc	456.28	705.16	995.52	954.04	1161.44
	String Vmp	376.2	581.14	820.8	786.6	957.6
	String Imp	14.01				

### 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

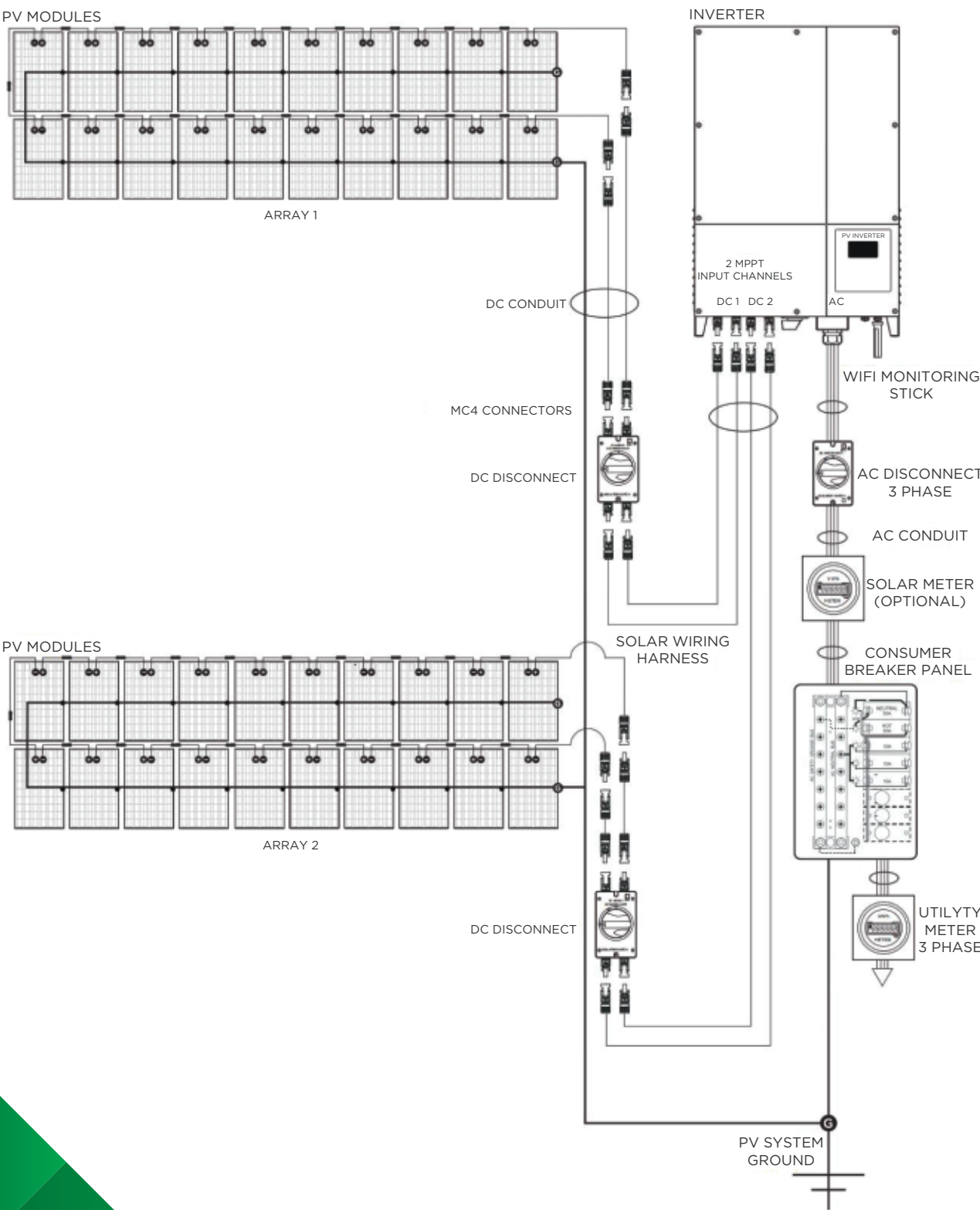
\* Based on 0.85% system derating (formula=DC Power x peak sunshine hour/year x derate factor)(GHI=Global Horizontal irradiance)

### 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	N/A					



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 solutions. Shinson'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.

Shinson'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.

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'





# APOLLO

## Datasheets



**ON-GRID**

Residential On-Grid  
Photovoltaic System Kits



## ON-GRID Residential

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



### Product Description

Shinson'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.



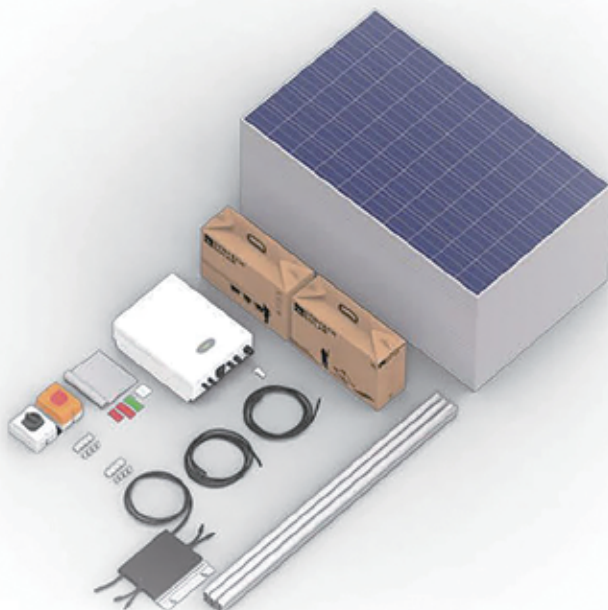
#### Sell back your power

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

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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

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

#### Common Applications

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- Homes
- Villas
- Out buildings
- Garages
- Apartments





# Shinson | Product Line

## Residential On-Grid PV Kits

SYSTEM SIZE	3KW	4KW	5KW	6KW	7KW	8KW
PRODUCT MODEL	AP-3KW	AP-4KW	AP-5KW	AP-6KW	AP-7KW	AP-8KW
PV System size Nominal(Wp)	3320	4150	4980	6640	7470	8300

### PV MODULE SPECIFICATION (MONO)

Panel Model	SS415M54P3					
Power(W)	415					
Vmp(V)	30.79					
Voc(V)	37.31					
Isc(A)	14					
Imp(A)	13.48					
Dimen sions(L x W x H)(mm)	1722*1134*30					
PV module weight(kg)	20.7					
Certifications	VDE CE CEC ETL INMETRO					

### INVERTER SPECIFICATIONS (600VDC)

Inverter Size(kw)	3	4	5	6	7	8
Max DC Input Power(kw)	4.5	6.3	7.5	9	10.5	12
Max DC Voltage(V)	600					
MPPT Voltage range(V)	70-580					
No. of MPPT'S	2					
Max AC Power(KVA)	3.3	4.6	5.5	6.6	7.7	8.8
Max Output Current(A)	15	23	25	30	35	40
AC Nom.Voltage/Voltage Range(V)	220/230/240 180~280V					
AC Grid Freque ncy range(Hz)	50/60					
Number of Phases	1					
Dimensions(L × W × H)(mm)	323*402*119	341.5*430*143		534*419*201		
Inverter weight(kg)	10.5	13		30		
Certifications	EN61000-6-2 EN61000-6-3 EN61000-3-2 VDE4105 EN50549 CEI0-21					

12/240VUL invertersalsoavailable 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 Harmess.4mm(meters)	2	2	2	2	2	2
*Ground Wire.4mm(meters)	30	40	50	60	70	80
Battery Cables	N/A					

\* Extra wire is avaiable upon request

### SYSTEMLAYOUT

# of Modules	8	10	12	16	18	20
# of inverters	1					
PV Layout options	Landscape or Portrait					
PV Array Surface Area(m²)	14.66	21.6	25.2	28.8	36	39.6
PV Array Weight(kg)	160	240	280	320	400	440
PV Module Configuration 1000VDC	No.of PV Modules/String	4	5	6	8	10
	Total Strings	2	2	2	2	2
	String Voc	149.24	186.55	223.86	298.48	335.79
	String Vmp	123.16	151.95	184.74	246.32	277.11
	String Imp	13.38				

### PRODUCTION ESTIMATES(KWh)

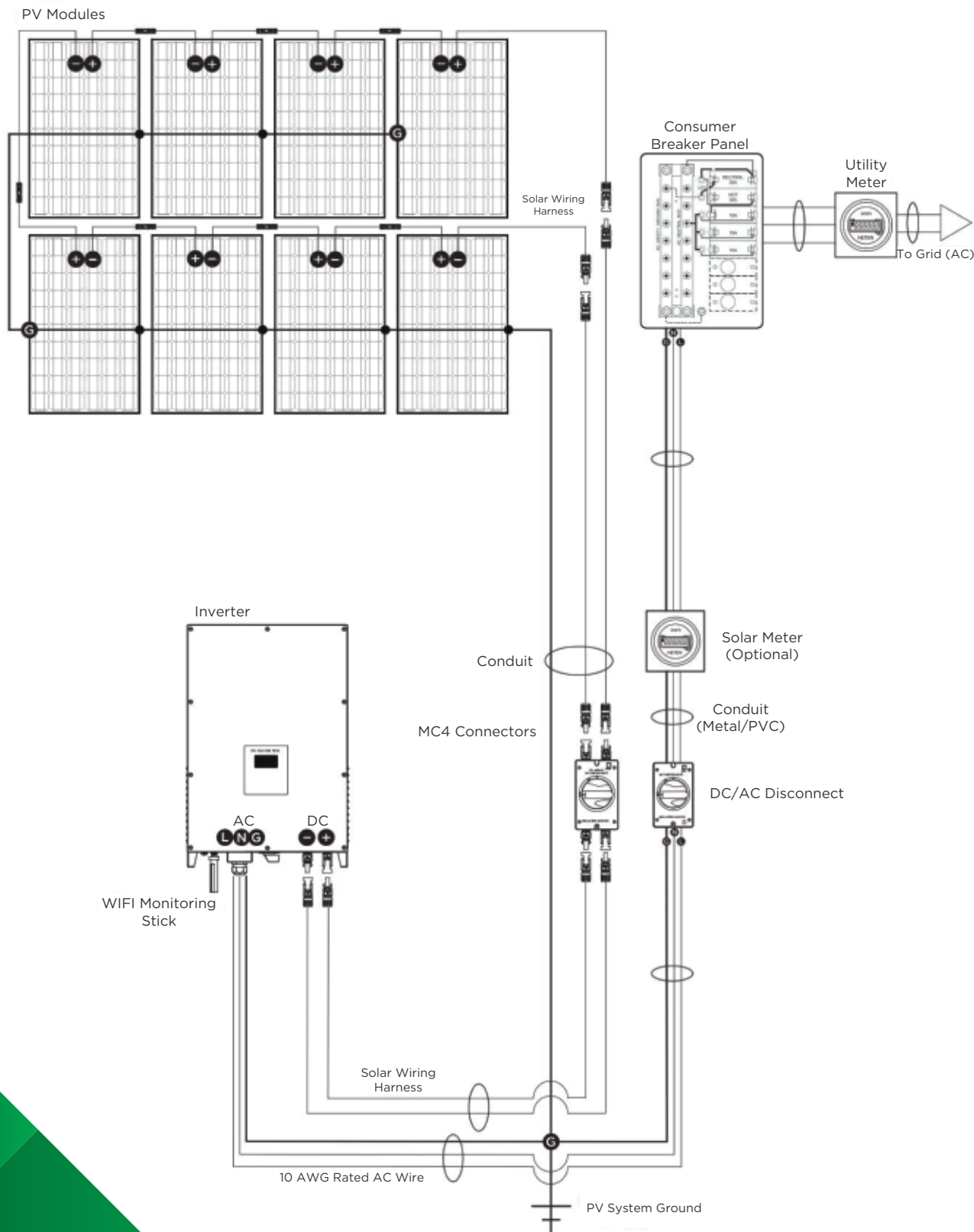
*Projectedyearly outputat 1100GHI/year	2805	4207	4908	5610	7012	7713
*Projectedyearly outputat 1460GHI/year	3723	5584	6515	7446	9307	10238
*Projectedyearly outputat 1825GHI/year	4653	6980	8144	9307	11634	12797

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

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. Shinson'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.

Shinson'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  
1 kit per pallet

38 kits per 20'  
76 kits per 40'



### 3kW

1.8 x 0.55 x 1  
1 kit per pallet

26 kits per 20'  
52 kits per 40'



### 5kW

1.8 x 0.70 x 1  
1 kit per pallet

22 kits per 20'  
44 kits per 40'



### 5kW

1.8 x 0.95 x 1  
1 kit per pallet

12 kits per 20'  
24 kits per 40'



### 7kW

1.8 x 1.1 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'

