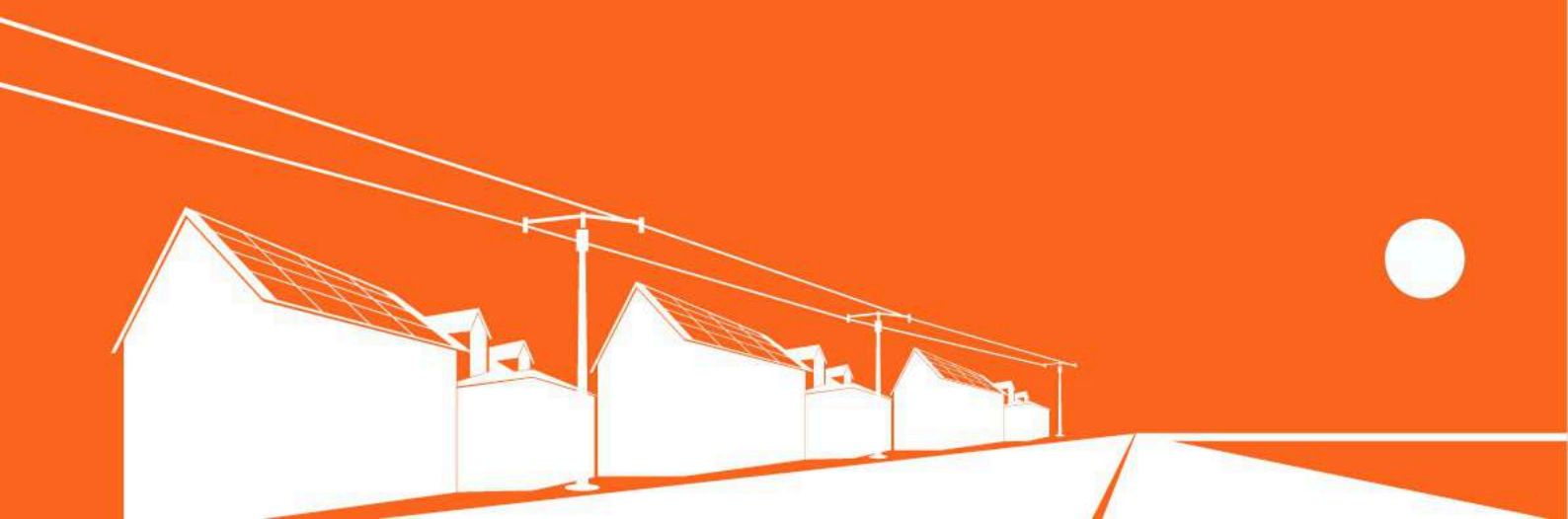
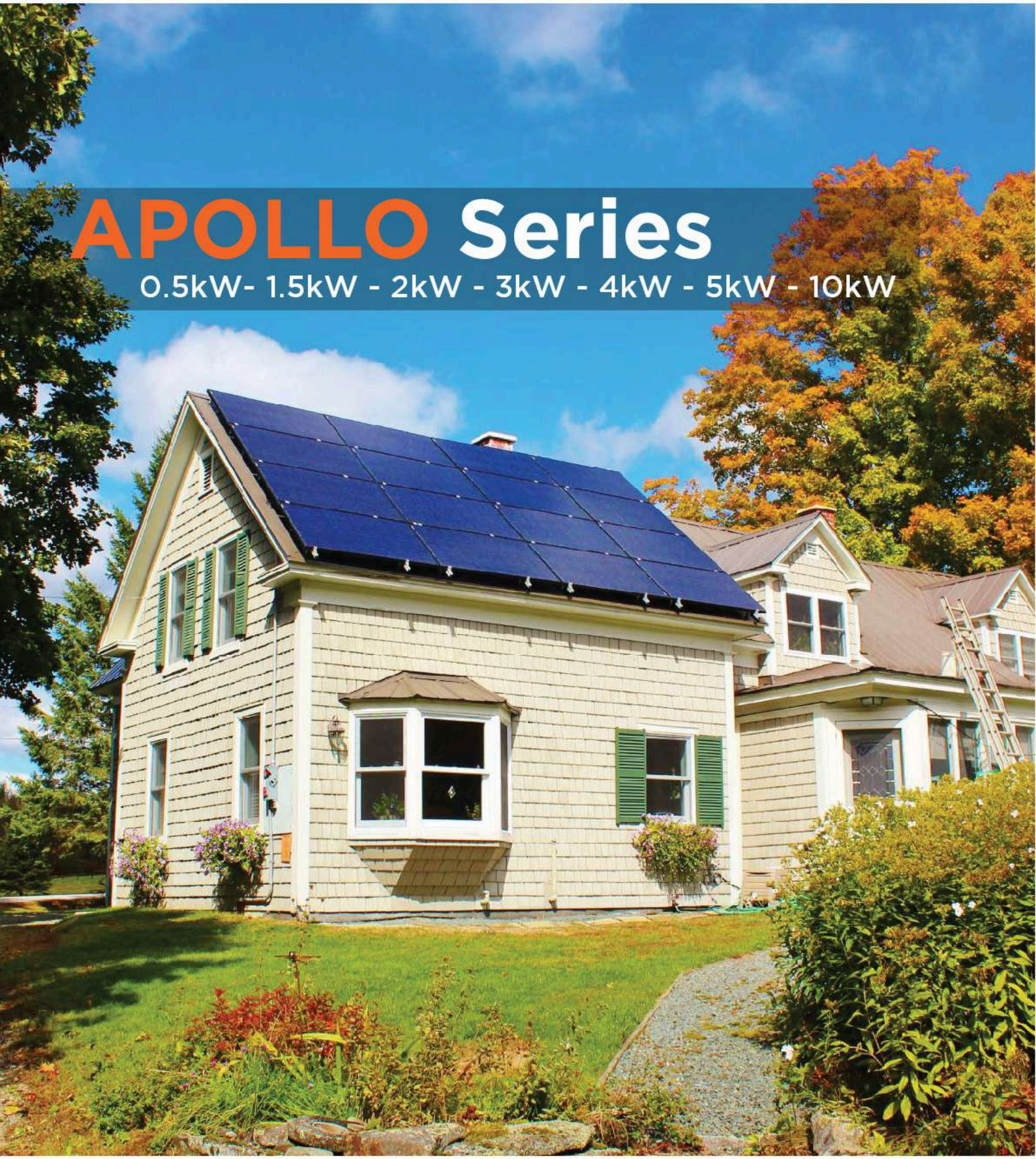
SYMTECH SOLAR

DATASHEETS

RESIDENTIAL ON-GRID PHOTOVOLTAIC SYSTEM KITS

APOLLO
ON-GRID





APOLLO Series

0.5kW- 1.5kW - 2kW - 3kW - 4kW - 5kW - 10kW

Product Description

Symtech 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.

Symtech Solar's grid-tied solar power systems are directly connected to the home's electric panel and electric utility grid. 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. 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. When your system is not producing sufficient power or during non-daylight hours your home can draw power from the utility grid.

Product Benefits

- 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

- Homes
- Villas
- Out buildings
- Garages
- Apartments

RESIDENTIAL ON-GRID

PV Kits

include

- 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

SYMTECH SOLAR

APOLLO - RESIDENTIAL ON-GRID

PRODUCT NAME	Apollo - 0.5kW	Apollo - 1.5kW	Apollo - 2kW	Apollo - 3kW	Apollo - 4kW	Apollo - 5kW	Apollo - 10kW
Product Series	Apollo						
PV System Size Nominal (kWp)	530	1590	2120	3180	4240	5300	10600
Part #	APO-0.5	APO-1.5	APO-2	APO-3	APO-4	APO-5	APO-10

PV MODULE SPECIFICATIONS (*Poly)	
Power (W)	265
Vmp (V)	31.1
Voc (V)	38.2
Isc (A)	9.1
Imp (A)	8.55
Dimensions (L x W x H) (mm)	1638 x 982 x 35
PV module weight (kg)	19.5
Certifications	TUV (IE61215 & IEC61730) / VDE (IEC61215 & IEC61730) / UL / CE — TUV (IEC61215 & IEC61730) / CE

**Monocrystalline PV modules also available upon request*

INVERTER SPECIFICATIONS (600VDC)							
Inverter Size (kW)	0.5	1.5	2	3	4	5	10
Max DC Power (W)	700	1800	2400	3500	4600	5800	11500
Max DC Voltage (V)	60	550			600		
MPPT Voltage range (V)	64 to 96	50 to 450			100 to 500		
No. of MPPT'S	2	1		2			3
Max AC Power (W)	500	1700	2200	3300	4400	5500	10000
Max Output Current (A)	2.17	8.1	10.5	15.7	21	25	45.9
AC Nom. Voltage/ Voltage Range (V)	208 / 230 / 240			230V / 160 to 285			
AC Grid Frequency range (Hz)	50-60						
Number of Phases	1						
Dimensions (W x H x D) (mm)	250 x 180 x 28			310 x 543 x 160			333 x 573 x 249
Inverter Weight (kg)	3.08	11			11.5		18
Certifications	CAN / CSAC22.2 N107.1, UL 1741, UL 1998, UL 1699B, FCC part 15, Class B — AS4777, AS / NZS 3100, CE, VDE 0126-1-1, DK5940, G83 / 1-1, G59 / 2, RD 1663, EN50438, VDE-AR-N4105, CEI-021, IEC-62109, ENEL-Guide						

**120/240V UL inverters also available upon request*

BOS							
AC/DC Disconnect	0		1/ 1			1/ 2	1/ 4
*PV Wire Harness - 4mm (meters)	0		1			2	4
*Ground Wire - 4mm (meters)	10	20	20	30	40	50	100

**Extra wire is available upon request*

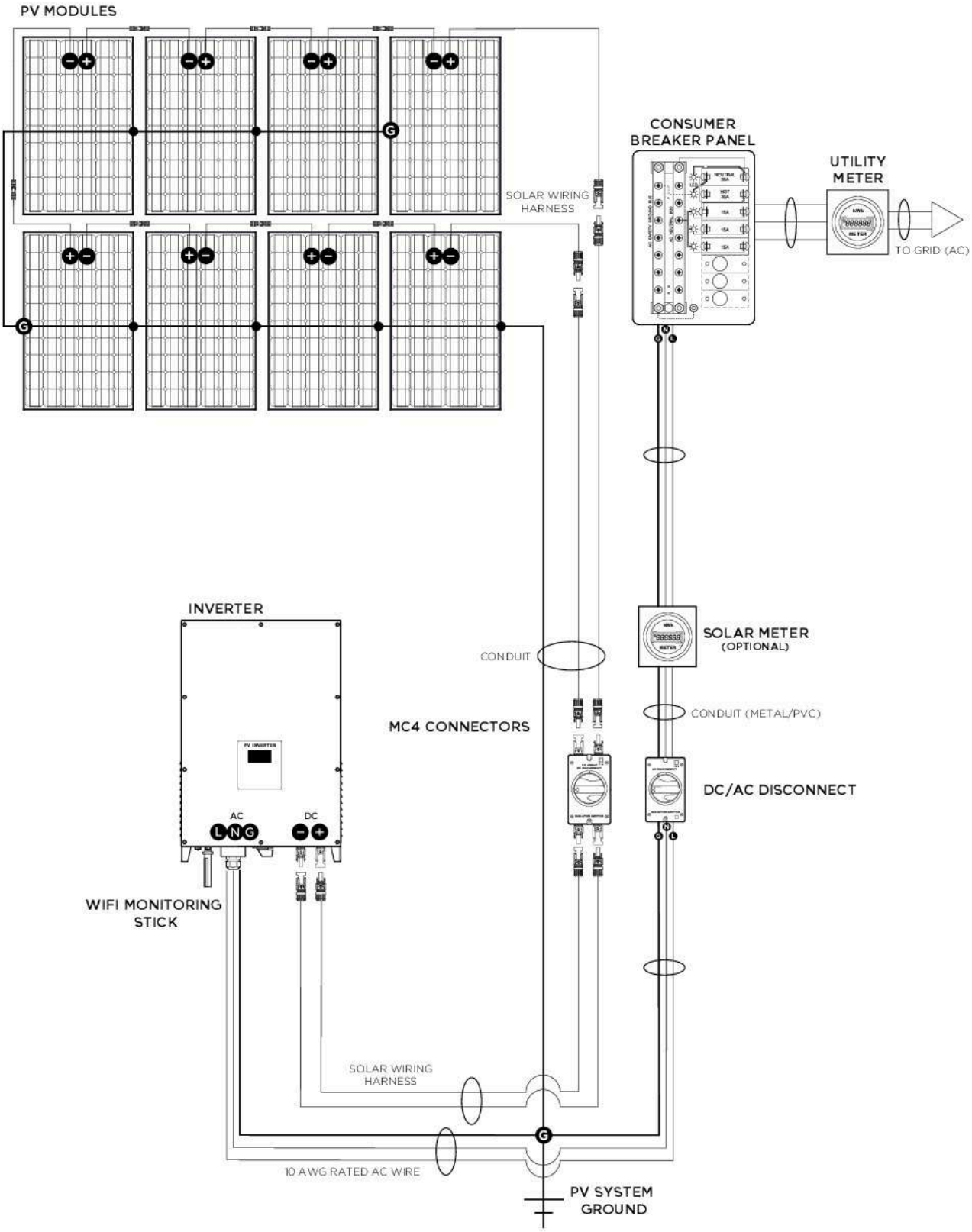
SYSTEM LAYOUT								
# of Modules		2	6	8	12	16	20	40
# of Inverters		1			1			
PV Layout options		Portrait	Landscape or Portrait					
PV Array Surface Area (m2)		3.3	10.2	13.6	20.4	27.2	34	68
PV Array Weight (kg)		39	117	156	234	312	390	780
PV Module String Configuration 600VDC	No. of PV Modules / String	1	6	8	12	8	10	10
	Total Strings	2		1		2		4
	String Voc	38.2	229.2	305.6	458.4	305.6	382	
	String Vmp	31.1	186.6	248.8	373.2	248.8	311	
	String Imp	8.55						

PRODUCTION ESTIMATES (kWh AC)							
*Projected yearly output at 1100 GHI/ year	496	1487	1982	2973	3964	4956	9911
*Projected yearly output at 1460 GHI/ year	658	1973	2631	3946	5262	6577	13155
*Projected yearly output at 1825 GHI/ year	822	2466	3289	4933	6577	8222	16443

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

SYSTEM OPTIONS		
Wifi Monitor	Wifi	Wi-Fi or GPRS
PV Module Type	Polycrystalline (Mono also available upon request)	
PV System Color	based	
Mounting System Types	Metal Roof, Asphalt Shingle, Tile roof, Tin Roof, Flat Concrete	

SHIPPING							
PV Kit Weight (kg)	50	250	275	375	475	585	1160
PV Kit Shipping Size (L x W x H) (meters)	1.700 x 1.00 x 1	1.7 x 0.45 x 1	1.7 x 0.55 x 1	1.7 x 0.7 x 1	1.7 x 0.95 x 1	1.7 x 1.1 x 1	
Total number of Boxes	1						2
Packing Material	Sympack Cardboard	Symtech SymPack Wood Crates					


PV MODULES
SOLAR WIRING HARNESS
CONSUMER BREAKER PANEL
UTILITY METER
TO GRID (AC)
INVERTER
AC
DC
L N G
CONDUIT
MC4 CONNECTORS
SOLAR METER (OPTIONAL)
CONDUIT (METAL/PVC)
DC/AC DISCONNECT
WIFI MONITORING STICK
SOLAR WIRING HARNESS
10 AWG RATED AC WIRE
PV SYSTEM GROUND

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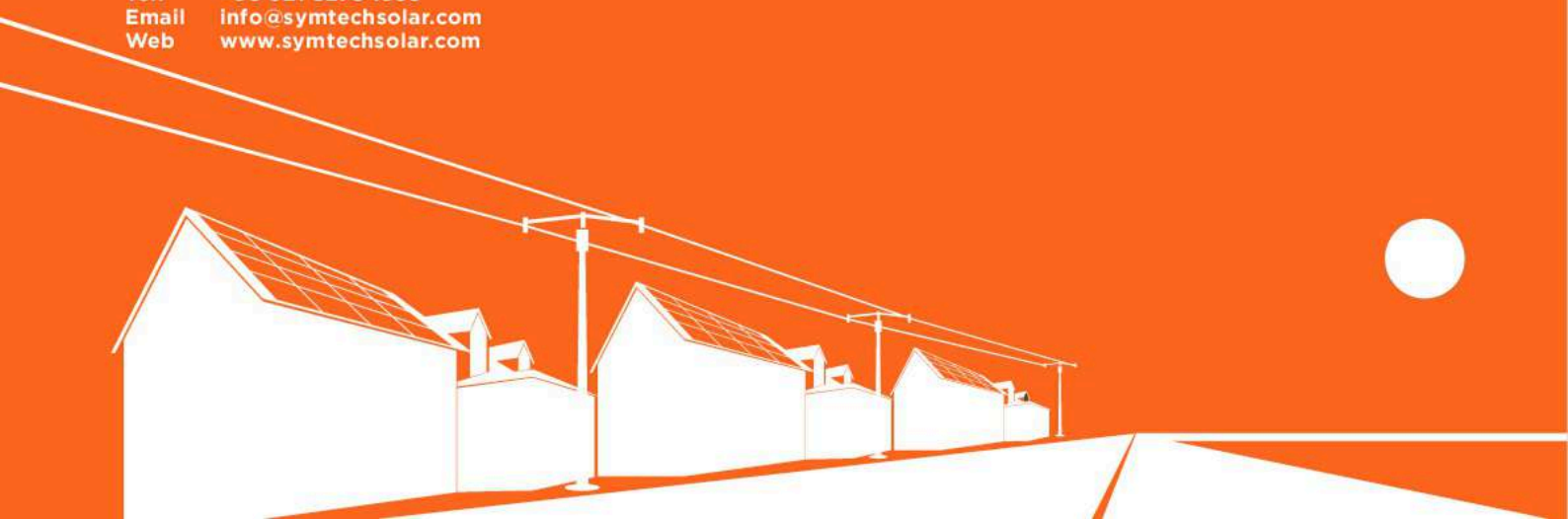
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