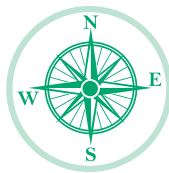




# SMART MODULE



Eliminates mismatches



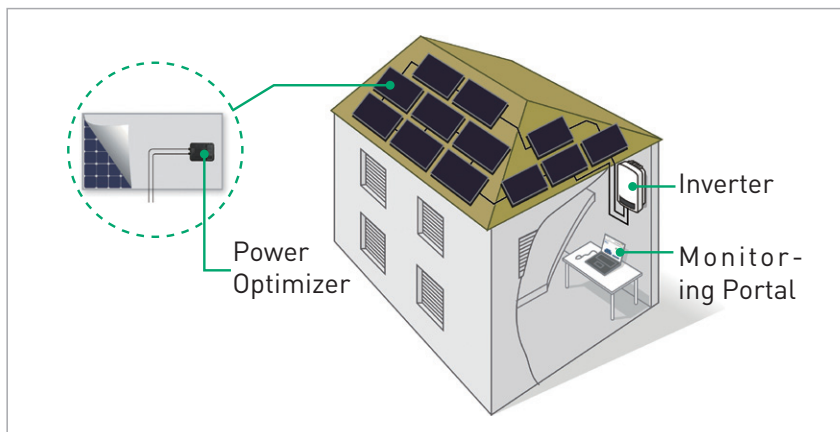
Suitable for diverse direction



SafeDC™



Module-level monitoring\*



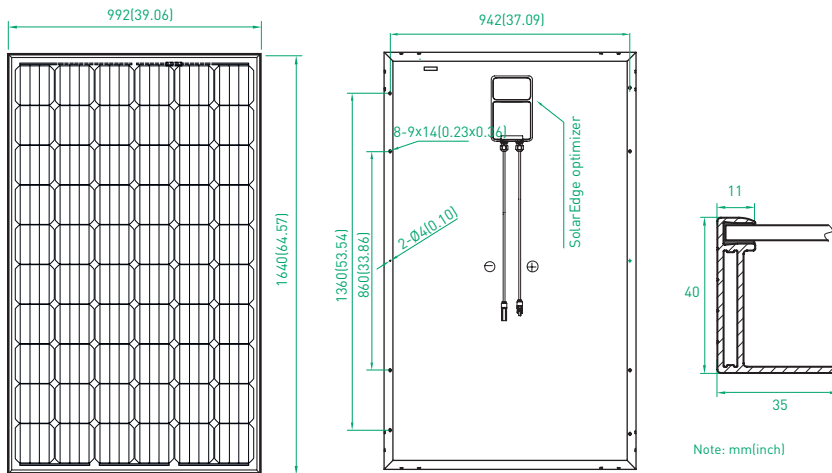
Up to  
**25%**  
more output

Optimized by  
**solar**edge

# SMART SOLAR MODULES 270-280W MONO



## DIMENSIONS



Note: mm[inch]

## MECHANICAL CHARACTERISTICS

<b>Solar Cells</b>	Monocrystalline 156mm x 156mm square, 6 x 10 pieces in series
<b>Dimension</b>	Length: 1640mm (64.6 inch)
	Width: 992mm (39.1 inch)
	Height: 40mm (1.6 inch)
<b>Weight</b>	19kg (41.9 lbs)
<b>Front Glass</b>	3.2mm toughened glass
<b>Frame</b>	Anodized aluminium alloy
<b>Cable</b>	6mm <sup>2</sup> (IEC) / 12AWG (UL), 95 0mm
<b>Junction Box</b>	IP 67 rated

## ABSOLUTE MAXIMUM RATING

Parameter	Values
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Surface Maximum Load Capacity	Up to 5400Pa
IEC Application Class (IEC61730)	A
Fire Rating (UL 1703)	C
Maximum System Voltage	DC 1000V (IEC)
	DC 600V (UL) / 1000V (ETL)

## ELECTRICAL TYPICAL VALUES<sup>[1]</sup>

Model	Rated Power (P <sub>mpp</sub> )	Tolerance	Rated Current (I <sub>mpp</sub> )	Rated Voltage (V <sub>mpp</sub> )	Short Circuit Current (I <sub>sc</sub> )	Open Circuit Voltage (V <sub>oc</sub> )	Module Efficiency (%)
PS270M-20/U	270W	±3%	8.65A	31.2V	9.05A	38.3V	16.60
PS275M-20/U	275W	±3%	8.75A	31.4V	9.10A	38.4V	16.90
PS280M-20/U	280W	±3%	8.86A	31.6V	9.15A	38.5V	17.21

## Output during operation (modules connected to SolarEdge inverter)

Maximum output current	15 Adc
Operating output voltage	5-60 Vdc
Output in Standby mode with SolarEdge inverter or with SM1 and Non-SolarEdge inverter (when disconnected from inverter or inverter off)	1 Vdc

## PV system design using a solaredge inverter

		1ph	3ph	3ph-MV
Minimum number of modules per string	270W	8	16	18
	275W			
	280W			
Maximum number of modules per string	270W	19	41	47
	275W	19	40	46
	280W	18	40	45
Maximum power per string		5250	11250	12750
Parallel strings of different lengths or orientations	Yes			

## TEMPERATURE CHARACTERISTICS

NOCT (Nominal Operation Cell Temperature)	45°C ± 2°C
Power Temperature Coefficient	-0.45%/k

## PACKING CONFIGURATION

Container	40' HQ	20' GP
Pieces per container	728	264

## WEAK LIGHT PERFORMANCE

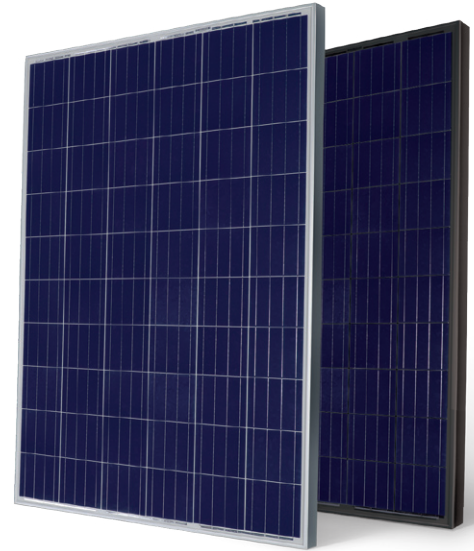
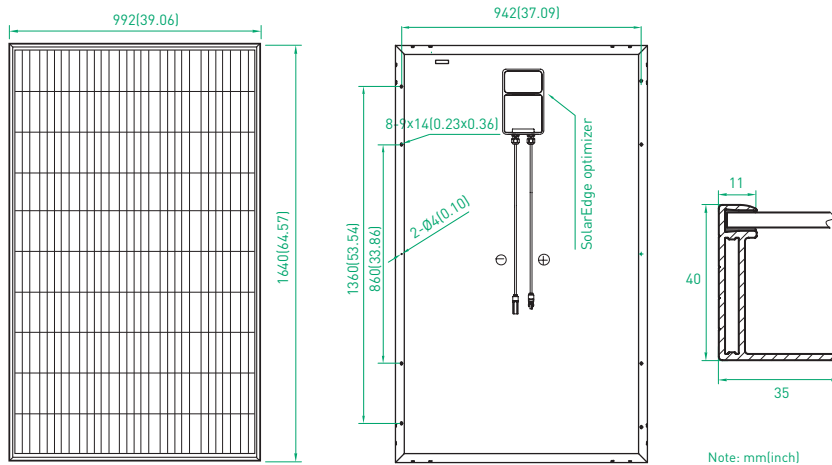
Intensity [W/m <sup>2</sup> ]	I <sub>mpp</sub>	V <sub>mpp</sub>
1000	1.0	1.000
800	0.8	0.996
600	0.6	0.990
400	0.4	0.983
200	0.2	0.952

1. Measurement conditions under irradiance level of Standard Test Conditions(STC): 1000W/m<sup>2</sup>, Air mass 1.5 Spectrum, cell temperature of 25°C.

# SMART SOLAR MODULES 260-270W POLY



## DIMENSIONS



## MECHANICAL CHARACTERISTICS

<b>Solar Cells</b>	Polycrystalline 156mm x 156mm square, 6 × 10 pieces in series
<b>Dimension</b>	Length: 1640mm (64.6 inch)
	Width: 992mm (39.1 inch)
	Height: 40mm (1.6 inch)
<b>Weight</b>	19kg (41.9 lbs)
<b>Front Glass</b>	3.2mm toughened glass
<b>Frame</b>	Anodized aluminium alloy
<b>Cable</b>	6mm <sup>2</sup> (IEC) / 12AWG (UL), 950mm
<b>Junction Box</b>	IP 67 rated

## ABSOLUTE MAXIMUM RATING

Parameter	Values
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Surface Maximum Load Capacity	Up to 5400Pa
IEC Application Class (IEC61730)	A
Fire Rating (UL 1703)	C
Maximum System Voltage	DC 1000V (IEC)
	DC 600V (UL) / 1000V (ETL)

## ELECTRICAL TYPICAL VALUES<sup>[1]</sup>

Model	Rated Power (P <sub>mpp</sub> )	Tolerance	Rated Current (I <sub>mpp</sub> )	Rated Voltage (V <sub>mpp</sub> )	Short Circuit Current (I <sub>sc</sub> )	Open Circuit Voltage (V <sub>oc</sub> )	Module Efficiency (%)
PS260P-20/U	260W	±3%	8.54A	30.6V	8.90A	38.0V	15.98
PS265P-20/U	265W	±3%	8.61A	30.8V	9.00A	38.1V	16.29
PS270P-20/U	270W	±3%	8.71A	31.0V	9.10A	38.2V	16.60

## Output during operation (modules connected to SolarEdge inverter)

Maximum output current	15 Adc
Operating output voltage	5-60 Vdc
Output in Standby mode with SolarEdge inverter or with SMI and Non-SolarEdge inverter (when disconnected from inverter or inverter off)	1 Vdc

## PV system design using a solaredge inverter

		1ph	3ph	3ph-MV
Minimum number of modules per string	260W			
	265W	8	16	18
	270W			
Maximum number of modules per string	260W	20	43	49
	265W	19	42	48
	270W	19	41	47
Maximum power per string		5250	11250	12750
Parallel strings of different lengths or orientations	Yes			

## TEMPERATURE CHARACTERISTICS

NOCT (Nominal Operation Cell Temperature)	45°C ± 2°C
Power Temperature Coefficient	-0.40%/k

## PACKING CONFIGURATION

Container	40' HQ	20' GP
Pieces per container	728	264

## WEAK LIGHT PERFORMANCE

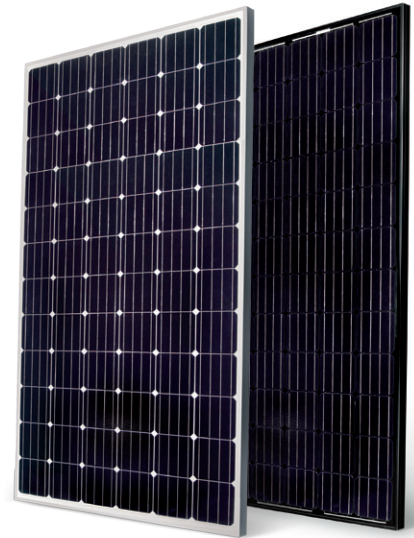
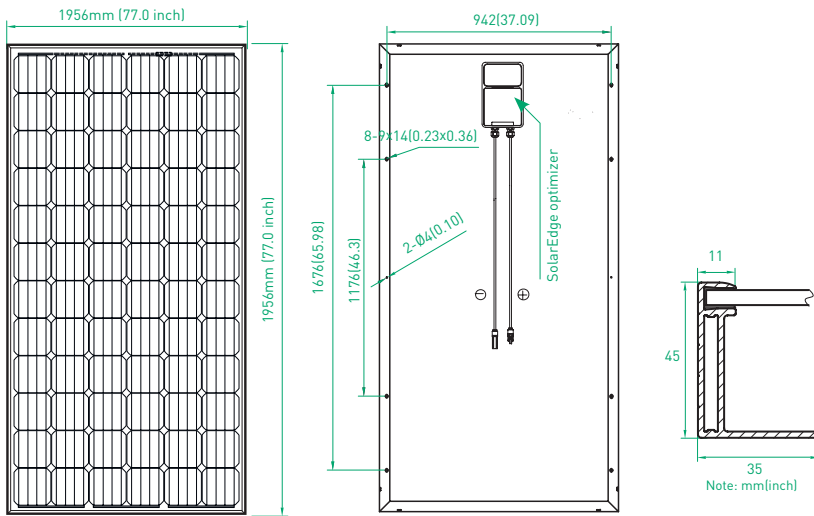
Intensity [W/m <sup>2</sup> ]	I <sub>mpp</sub>	V <sub>mpp</sub>
1000	1.0	1.000
800	0.8	0.996
600	0.6	0.990
400	0.4	0.983
200	0.2	0.952

1. Measurement conditions under irradiance level of Standard Test Conditions(STC): 1000W/m<sup>2</sup>, Air mass 1.5 Spectrum, cell temperature of 25°C.

# SMART SOLAR MODULES 310-330W MONO



## DIMENSIONS



## MECHANICAL CHARACTERISTICS

<b>Solar Cells</b>	Monocrystalline 156mm x 156mm square, 6 x 12 pieces in series
<b>Dimension</b>	Length: 1956mm (77.0 inch)
	Width: 992mm (39.1 inch)
	Height: 45mm (1.8 inch)
<b>Weight</b>	24kg (52.9 lbs)
<b>Front Glass</b>	3.2mm toughened glass
<b>Frame</b>	Anodized aluminium alloy
<b>Cable</b>	4mm <sup>2</sup> (IEC) / 12AWG (UL), 950mm
<b>Junction Box</b>	IP 67 rated

## ABSOLUTE MAXIMUM RATING

Parameter	Values
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Surface Maximum Load Capacity	Up to 5400Pa
IEC Application Class (IEC61730)	A
Fire Rating (UL 1703)	C
Maximum System Voltage	DC 1000V (IEC)
	DC 600V (UL) / 1000V (ETL)

## ELECTRICAL TYPICAL VALUES<sup>[1]</sup>

Model	Rated Power (P <sub>mpp</sub> )	Tolerance	Rated Current (I <sub>mpp</sub> )	Rated Voltage (V <sub>mpp</sub> )	Short Circuit Current (I <sub>sc</sub> )	Open Circuit Voltage (V <sub>oc</sub> )	Module Efficiency (%)
PS310M-24/T	310W	±3%	8.36A	37.1V	8.75A	46.3V	15.98
PS315M-24/T	315W	±3%	8.46A	37.2V	8.82A	46.5V	16.23
PS320M-24/T	320W	±3%	8.55A	37.4V	8.90A	46.7V	16.49
PS325M-24/T	325W	±3%	8.62A	37.7V	8.95A	46.9V	16.75
PS330M-24/T	330W	±3%	8.68A	38.0V	8.99A	47.1V	17.00

## Output during operation (modules connected to SolarEdge inverter)

Maximum output current	15 Adc
Operating output voltage	5-60 Vdc
Output in Standby mode with SolarEdge inverter or with SMI and Non-SolarEdge inverter (when disconnected from inverter or inverter off)	1 Vdc

## PV system design using a solaredge inverter

		1ph	3ph	3ph-MV
		Minimum number of modules per string	8	16
Maximum number of modules per string	310W	16	36	41
	315W	16	35	40
	320W	16	35	39
	325W	16	34	39
	330W	15	34	38
Maximum power per string		5250	11250	12750
Parallel strings of different lengths or orientations	Yes			

## TEMPERATURE CHARACTERISTICS

NOCT (Nominal Operation Cell Temperature)	45°C ± 2°C
Power Temperature Coefficient	-0.40%/k

## PACKING CONFIGURATION

Container	40' HQ	20' GP
Pieces per container	576	200

## WEAK LIGHT PERFORMANCE

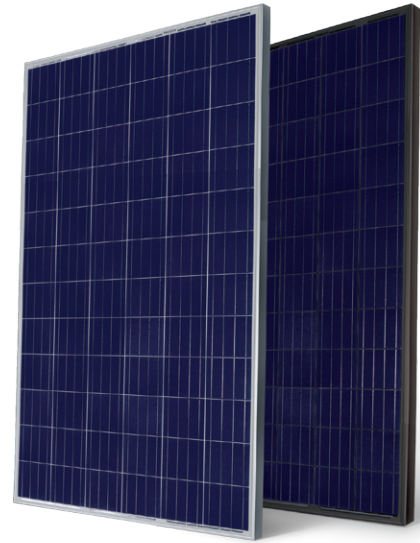
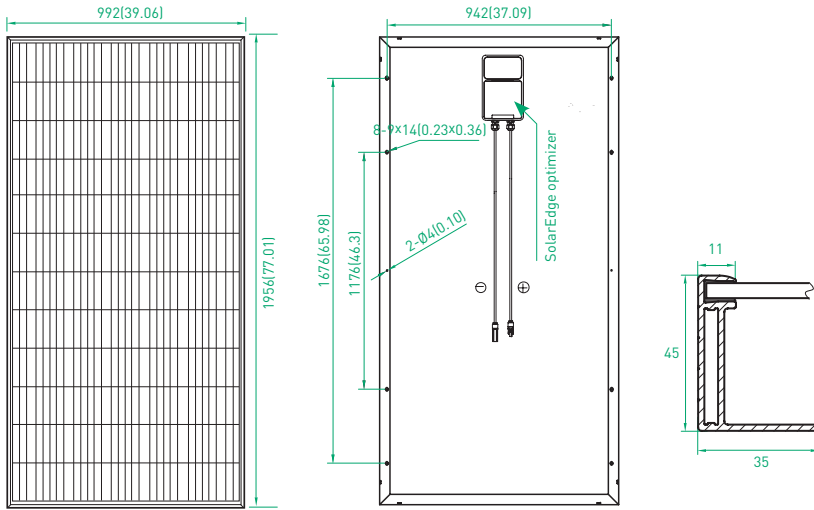
Intensity [W/m <sup>2</sup> ]	I <sub>mpp</sub>	V <sub>mpp</sub>
1000	1.0	1.000
800	0.8	0.996
600	0.6	0.990
400	0.4	0.983
200	0.2	0.952

1. Measurement conditions under irradiance level of Standard Test Conditions(STC): 1000W/m<sup>2</sup>, Air mass 1.5 Spectrum, cell temperature of 25°C.

# SMART SOLAR MODULES 305-320W POLY



## DIMENSIONS



## MECHANICAL CHARACTERISTICS

<b>Solar Cells</b>	Polycrystalline 156mm x 156mm square, 6 x 12 pieces in series
<b>Dimension</b>	Length: 1956mm (77.0 inch)
	Width: 992mm (39.1 inch)
	Height: 45mm (1.8 inch)
<b>Weight</b>	24kg (52.9 lbs)
<b>Front Glass</b>	3.2mm toughened glass
<b>Frame</b>	Anodized aluminium alloy
<b>Cable</b>	4mm <sup>2</sup> (IEC) / 12AWG (UL), 950mm
<b>Junction Box</b>	IP 67 rated

## ABSOLUTE MAXIMUM RATING

Parameter	Values
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Surface Maximum Load Capacity	Up to 5400Pa
IEC Application Class (IEC61730)	A
Fire Rating (UL 1703)	C
Maximum System Voltage	DC 1000V (IEC)
	DC 600V (UL) / 1000V (ETL)

## ELECTRICAL TYPICAL VALUES<sup>[1]</sup>

Model	Rated Power (P <sub>mpp</sub> )	Tolerance	Rated Current (I <sub>mpp</sub> )	Rated Voltage (V <sub>mpp</sub> )	Short Circuit Current (I <sub>sc</sub> )	Open Circuit Voltage (V <sub>oc</sub> )	Module Efficiency (%)
PS305P-24/T	305W	±3%	8.36A	36.5V	8.73A	45.8V	15.72
PS310P-24/T	310W	±3%	8.45A	36.7V	8.80A	46.0V	15.98
PS315P-24/T	315W	±3%	8.55A	36.9V	8.88A	46.2V	16.23
PS320P-24/T	320W	±3%	8.65A	37.0V	8.95A	46.4V	16.49

## Output during operation (modules connected to SolarEdge inverter)

Maximum output current	15 Adc
Operating output voltage	5-60 Vdc
Output in Standby mode with SolarEdge inverter or with SMI and Non-SolarEdge inverter (when disconnected from inverter or inverter off)	1 Vdc

## PV system design using a solaredge inverter

		1ph	3ph	3ph-MV
		Minimum number of modules per string	8	16
Maximum number of modules per string	305W	17	36	41
	310W	16	36	41
	315W	16	35	40
	320W	16	35	39
Maximum power per string		5250	11250	12750
Parallel strings of different lengths or orientations	Yes			

## TEMPERATURE CHARACTERISTICS

NOCT (Nominal Operation Cell Temperature)	45°C ± 2°C
Power Temperature Coefficient	-0.40%/k

## PACKING CONFIGURATION

Container	40' HQ	20' GP
Pieces per container	576	200

## WEAK LIGHT PERFORMANCE

Intensity [W/m <sup>2</sup> ]	I <sub>mpp</sub>	V <sub>mpp</sub>
1000	1.0	1.000
800	0.8	0.996
600	0.6	0.990
400	0.4	0.983
200	0.2	0.952

1. Measurement conditions under irradiance level of Standard Test Conditions(STC): 1000W/m<sup>2</sup>, Air mass 1.5 Spectrum, cell temperature of 25°C.