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# **EnergyPal**

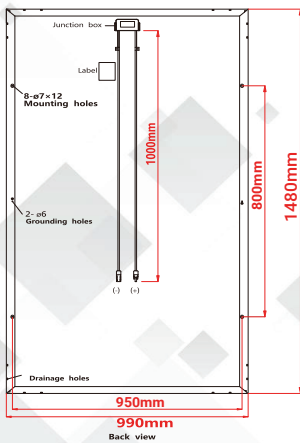
## **Solar Panel Guide Specification Data Sheet**

**Solex Energy Ltd.  
210-250W (5BB) 54 Cells Poly  
SES18210**

Also available on the web at  
[EnergyPal.com/solex-energy-ltd-solar-panels/ses18210](http://EnergyPal.com/solex-energy-ltd-solar-panels/ses18210)

# 210-250W (5BB)

## 54 CELLS POLY



Electrical Characteristics STC*						
Model No	SES18210	SES18215	SES18220	SES18230	SES18240	SES18250
Maximum Power at STC (Pmax)	210W	215W	220W	230W	240W	250W
Optimum Operating Voltage (Vmp)	26.40V	26.50V	27.10V	27.70V	27.90V	28.70V
Optimum Operating Current (Imp)	7.95A	8.11A	8.13A	8.31A	8.61A	8.74A
Open Circuit Voltage (Voc)	33.10V	33.40V	33.50V	33.80V	34.10V	35.20V
Short Circuit Current (Isc)	8.80A	8.60A	8.70A	8.90A	9.20A	9.35A
Module Efficiency	14.31%	14.65%	14.99%	15.67%	16.35%	17.03%
Maximum System Voltage	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC
Maximum Series Fuse Rating	15A	15A	15A	15A	15A	15A
Power Tolerance	0W - 3W	0W - 3W	0W - 3W	0W - 3W	0W - 3W	0W - 3W

\*Standard Test Conditions: Irradiance: 1000 W / m<sup>2</sup> • Cell temperature: 25°C • with cleaned modules

### Electrical Data at NOCT\*

Power output (Pmax)	154.80W	158.50W	162.30W	169.80W	177.30W	184.80W
Maximum Power Voltage (Vmp)	23.90V	24.25V	24.50V	25.00V	25.10V	25.80V
Maximum Circuit Voltage (Voc)	6.52A	8.55A	6.60A	6.70A	6.92A	6.97A
Open Circuit Voltage (Voc)	30.50V	30.80V	30.90V	31.20V	31.50V	32.60V
Short Circuit Current (Isc)	6.9A	6.95A	7.00A	7.10A	7.40A	7.65 A

\*NOCT(Nominal Operating Cell Temperature): Irradiance: 800 W / m<sup>2</sup> • Ambient temperature: 20°C • AM: 1.5 • Wind speed: 1 m/s

### Mechanical Characteristics

Cell Type	Polycrystalline Size 156.75x156.75mm
Number of Cells	54(6x9)
Dimensions	1480x990x35mm
Weight	18.50 kg
Front Cover	Tempered Glass with Anti Reflective Coating
Frame Material	Anodized Aluminium Alloy
Standard Packaing (Modules per Pallet)	26pcs

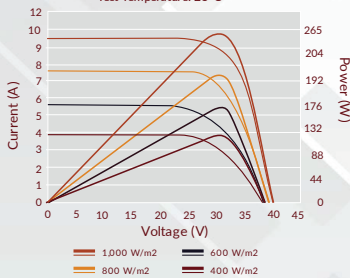
### Maximum Ratings

Operating Temperature range	-45°C ~+85°C
Maximum system Voltage	1000V
Max series fuse rating	15A
Max front load (e.g.: snow)	5400Pa
Max back load (e.g.: wind)	2400Pa

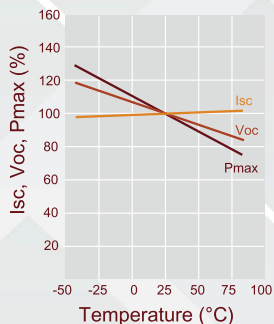
### Temperature Characteristics

Nominal Operating Cell Temperature	45±2°C
Temperature Coefficient of Pmax	-0.42%/°C
Temperature Coefficient of Voc	-0.30%/°C
Temperature Coefficient of Isc	0.06%/°C

I-V Curves at Different Irradiances (250W)  
Test Temperature: 25°C



Irradiance: AM 1.5, 1,000W/m<sup>2</sup> (250W)

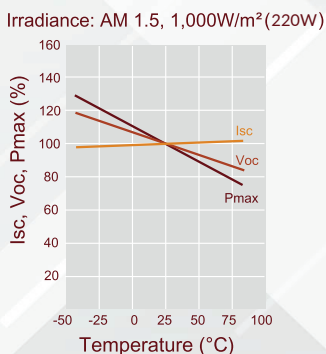
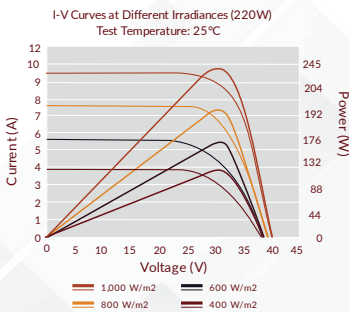
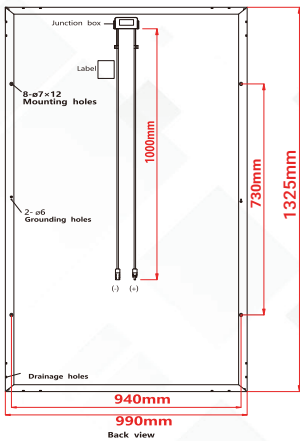


**OUR  
CERTIFICATE**



# 200-220W (5BB)

## 48 CELLS POLY



### Electrical Characteristics STC\*

MODEL NO	SES16200	SES16205	SES16210	SES16215	SES16220
Maximum Power at STC (P <sub>max</sub> )	200W	205W	210W	215W	220W
Optimum Operating Voltage (V <sub>mp</sub> )	24.46V	24.76V	24.97V	25.00V	25.26V
Optimum Operating Current (I <sub>mp</sub> )	8.18A	8.28A	8.41A	8.60A	8.71A
Open Circuit Voltage (V <sub>oc</sub> )	30.31V	30.39V	30.42V	30.50V	30.58V
Short Circuit Current (I <sub>sc</sub> )	8.75A	8.80A	8.95A	9.13A	9.25A
Module Efficiency	15.22%	15.60%	15.98%	16.36%	16.74%
Maximum System Voltage	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC
Maximum Series Fuse Rating	15A	15A	15A	15A	15A
Power Tolerance	0W - 3W	0W - 3W	0W - 3W	0W - 3W	0W - 3W

\*Standard Test Conditions: Irradiance: 1000 W / m<sup>2</sup> • Cell temperature: 25°C • with cleaned modules

### Electrical Data at NOCT\*

Power output (P <sub>max</sub> )	145W	149W	151W	159W	161W
Maximum Power Voltage (V <sub>mp</sub> )	21.90V	22.20V	22.50V	22.80V	23.10V
Maximum Circuit Voltage (V <sub>oc</sub> )	6.59A	6.65A	6.71A	6.80A	6.88A
Open Circuit Voltage (V <sub>oc</sub> )	27.20V	27.50V	27.80V	28.10V	28.80V
Short Circuit Current (I <sub>sc</sub> )	7.18A	7.22A	7.24A	7.35A	7.37A

\*NOCT (nominal operating cell temperature): irradiance 800W/m<sup>2</sup> • wind speed 1m/sec • temperature 20°C • AM= 1.5

### Mechanical Characteristics

Cell Type	Polycrystalline Size 156.75x156.75mm
Number of Cells	48(6x8)
Dimensions	1325x990x35mm
Weight	18kg
Front Cover	Tempered Glass with Anti Reflective Coating
Frame Material	Anodized Aluminium Alloy
Standard Packaing (Modules per Pallet)	26pcs

### Maximum Ratings

Operating Temperature range	-45°C ~+85°C
Maximum system Voltage	1000V
Max series fuse rating	15A
Max front load (e.g.: snow)	5400Pa
Max back load (e.g.: wind)	2400Pa

### Temperature Characteristics

Nominal Operating Cell Temperature	45±2°C
Temperature Coefficient of P <sub>max</sub>	-0.42%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.30%/°C
Temperature Coefficient of I <sub>sc</sub>	0.06%/°C

## Comprehensive Products And System Certificates

IEC 61215 / IEC 61730-1&2 / IEC 62804 / UL 1703  
 ISO 9001: Quality Management System  
 ISO 14001: Environmental Management System  
 ISO14064: Greenhouse gases Emissions Verification  
 OHSAS 18001: Occupation Health and Safety Management System