

Photovoltaic Module  
**ES 25-125 P36**



**More  
Efficiency  
More  
Reliability**



# Photovoltaic Module

## ES 25-125 P36



### Electrical Data at 1000 W/m<sup>2</sup>, 25 °C and AM 1.5 (STC in Accordance with EN 60904-3)

rated power at STC <sup>1</sup>	25 Wp	37 Wp	50 Wp	75 Wp	100 Wp	125 Wp
module efficiency at STC <sup>2</sup>	11.0 %	11.2 %	12.2 %	11.8 %	12.0 %	13.3 %
open-circuit voltage V <sub>oc</sub>	21.6 V	21.6 V	21.6 V	21.6 V	21.6 V	21.6 V
short-circuit current I <sub>sc</sub>	1.52 A	2.39 A	2.99 A	4.42 A	5.98 A	7.30 A
rated voltage V <sub>mpp</sub>	17.71 V	17.82 V	17.82 V	17.82 V	17.82 V	17.82 V
rated current I <sub>mpp</sub>	1.44 A	2.27 A	2.84 A	4.20 A	5.68 A	7.02 A

<sup>1</sup> The measurement tolerance of the rated power is ± 3%.

<sup>2</sup> At low irradiance (200 W/m<sup>2</sup>, 25 °C and AM 1.5) the module yields at least 97% of the STC efficiency.

### Electrical Data at 800 W/m<sup>2</sup>, NOCT, 1m/s Wind Speed and AM 1.5

rated power P <sub>max</sub>	20.3 W	30.0 W	40.5 W	60.8 W	81.0 W	97.2 W
open-circuit voltage V <sub>oc</sub>	21.4 V	21.4 V	21.4 V	21.4 V	21.4 V	21.4 V
short-circuit current I <sub>sc</sub>	1.22 A	1.92 A	2.40 A	3.55 A	4.80 A	5.86 A
rated voltage V <sub>mpp</sub>	17.77 V	17.88 V	17.77 V	17.88 V	17.77 V	17.77 V
rated current I <sub>mpp</sub>	1.16 A	1.83 A	2.29 A	3.39 A	4.58 A	5.66 A

### Thermal Data

temperature coefficient open-circuit voltage	-0.34 %/K
temperature coefficient short-circuit current	+0.05 %/K
temperature coefficient rated power	-0.43 %/K
noct (normal operating cell temperature)	48 °C ± 2K

### Mechanical Data

number of cells and cell type	36 polycrystalline solar cells				
module dimensions: length (a) x width (b)	491 x 461 mm	612 x 669 mm	1242 x 669 mm	988 x 952 mm	
mounting dimensions: length (c) x width (d)	428 x 327 mm	408 x 636 mm	828 x 636 mm	956 x 635 mm	
weight	2.5 kg	6.0 kg	12.0 kg	14.0 kg	
frame thickness	35 mm anodized aluminum				
front glass	3.2 mm high transmission, tempered glass				
embedding	EVA				
back sheet	composite film, white				
junction box	plastic, protection class IP 65				
number of bypass diodes	1	1	2	2	
cables	no				

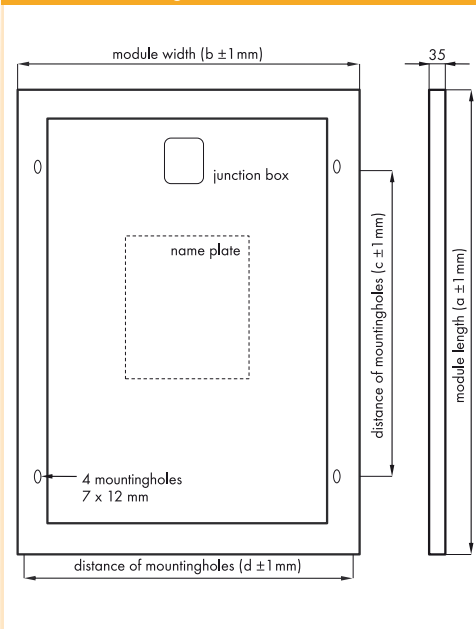
### Permissible Operating Conditions

operating temperature range	-40 °C to 85 °C				
max. system voltage	600 V DC				
max. reverse current	5 A	5 A	15 A	15 A	
maximum surface load capacity	5400 Pa or 550 kg/m <sup>2</sup>				
resistance against hail	maximum diameter of 24 mm with impact speed of 83 km/h				
protection class	II				

### Warranty and Certificates

product warranty	5 years
performance warranty	90 % up to 10 years
certifications	IEC 61215 Ed. II, IEC 61730 ISO 9001, ISO 14001

### Technical Drawing – All Dimensions in mm



Your Retailer:

Datasheet according to EN 50380.