Reliable system – high yields.
Bosch Solar Module µm-Si plus EU1510

High-yield – easy-to-assemble – reliable.
Solar modules from Bosch Solar Energy.

BOSCH

Our thin-film modules offer impressive features including:

- Excellent annual yields for you and your customers, using non-toxic materials
- Higher specific yields due to positive power sorting
- Good usage options on e.g. east-facing, west-facing and slightly sloping roofs
- Simple and secure installation with dovetailed mounting systems
- Solar panels do not require grounding in use Bosch Solar Rack products [1]

Quality
Product certification to IEC 61646 and IEC 61730

Product features
Performance sorting –0/+4,99 Wp
Temperature coefficient P_{mpp} –0,33 %/K

Value chain
Cell – Module

Components
Thermally strengthened front and rear glass, MC4, Multi-junction-cell

Warranty
5 years product warranty
25-year performance guarantee
(90% up to 12 years, 80% up to 25 years)

Power classes
105–130 Wp

Our certificates – quality stamped in writing.
Bosch Solar Energy modules go trough strict quality test during the different stages of production according to international standards.

CE

www.tuv.com TÜVRheinland ID 0000033646
- Qualified, IEC 61646
- Safety tested, IEC 61730
- Periodic inspection

PV CYCLE

Length [x]	Width [y]	Height [z]	Weight	Junction box	Plug connector	Cable [l]
1300	1100	7.1	25	MultiContact	MC4	Plus 500, Minus 1000
x, y, l in mm, –1/+4 mm; z in mm, ±0.5 mm; weight in kg ±0.7						

Thin-film solar module	
Performance classes	**105 Wp, 110 Wp, 115 Wp, 120 Wp, 125 Wp , 130 Wp**
Performance sorting	–0/+4.99 Wp
Structure	**Frameless glass-glass laminate** ▶ Thermally strengthened front glass ▶ PVB (white) or EVA foil ▶ Thermally strengthened rear glass ▶ Junction box without bypass diode ▶ IP-Code Junction Box (IP 65)
Cells	**Amorphous and microcrystalline silicon** Multi-junction cell

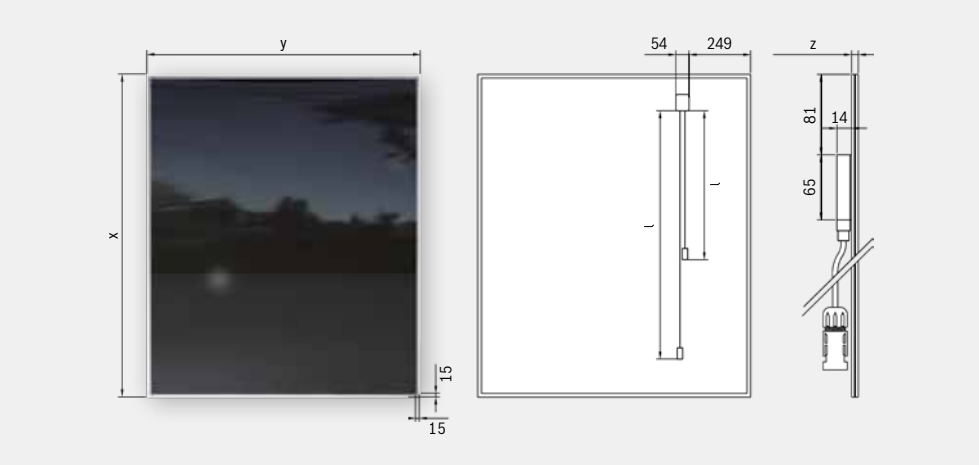
Electrical characteristics for STC[2]:

Designation	Pmpp [Wp]	Vmpp [V]	Impp [A]	Voc [V]	Isc [A]	Voc initial [V]	Isc initial [A]
µm-Si plus 130	130	70	1.88	89	2.19	90	2.27
µm-Si plus 125	125	69	1.86	88	2.15	89	2.23
µm-Si plus 120	120	67	1.84	88	2.11	89	2.18
µm-Si plus 115	115	65	1.81	88	2.03	89	2.13
µm-Si plus 110	110	64	1.76	87	1.98	88	2.08
µm-Si plus 105	105	63	1.72	86	1.92	87	2.04
Reduction in module efficiency with decrease in irradiation level from 1000 W/m² to 200 W/m² (at 25 °C): –0.60% (absolute); Measurement tolerance Pmpp ±5%							

Electrical characteristics for NOCT[2]:

Designation	Pmpp [W]	Vmpp [V]	Voc [V]	Isc [A]
µm-Si plus 130	98	64	81	1.78
µm-Si plus 125	94	62	80	1.75
µm-Si plus 120	90	60	80	1.72
µm-Si plus 115	87	59	80	1.65
µm-Si plus 110	83	58	79	1.61
µm-Si plus 105	79	57	78	1.56
NOCT: Normal Operation Cell Temperature 48 °C: Irradiation level 800 W/m², AM 1.5, temperature 20 °C, wind speed 1 m/s, electrical open circuit operation				

Dimensions[3]:



[1] Other mounting systems may have restrictions. Follow the instructions in the installation guide.
[2] Electrical parameters are typical mean values from historical production data. Bosch Solar Energy AG does not assume any guarantee for the accuracy of this data for future production batches. All data and figures are subject to a tolerance of 10%, unless specified otherwise. The measurement tolerance figure for NOCT and low light performance refers to the relative output (Pmpp).
[3] Drawings and diagrams are not to scale. Detailed dimensions and tolerances are available on request.

Permissible operating and assembly conditions:

- ▶ Temperature range –40 °C to +85 °C, humidity max. 85% (rh)
- ▶ Upright assembly, laser lines running vertically
- ▶ Panels must be unshaded during installation and operation
- ▶ Mechanical load-bearing capacity tested up to 2400 Pa
- ▶ Transformerless DC-AC converters are not permitted
- ▶ Reverse-current load capacity (Ir) 6 A
- ▶ Maximum 1000 V system voltage

Weak light performance:

Intensity [W/m²]	Vmpp [%]	Impp [%]
800	–0.9	–20
600	–2.5	–39
400	–4.8	–58
200	–8.8	–79
The electrical data applies for 25 °C and AM 1.5.		

Thermal characteristics:

Temperature coefficient Pmpp	–0.33%/K
Temperature coefficient Voc	–0.37%/K
Temperature coefficient Isc	+0.08%/K
Measurement tolerance ±0,04 %/K	

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