

### PRODUCT DATA SHEET



## **Midsummer BOLD**

## Lightweight solar roofs designed for lowload-bearing structures, including bitumen, PVC, TPO, and metal roofs, ensuring a seamless and easy installation

The Midsummer BOLD ultra-light and flexible thin-film solar panel is ideal for low-load-bearing roofs, as it requires no structural reinforcements, frames, or ballasts. It is securely mounted using double-sided butyl tape, which protects the roof's waterproofing layer without requiring roof penetration. BOLD is compatible with flat, tilted, and vaulted designs and is suitable for commercial properties, industrial buildings, warehouses, sports arenas, and residential properties.

The solar panel is only 2mm thin and is available in two variants:

- BOLD 6: 1.0 meters wide and 1.7 6.0\* meters in lenath.
- BOLD 8: 1.3 meters wide and 1.7 6.0\* meters in length

The BOLD weighs 2.9 kg / m<sup>2</sup>, and its lightweight design allows it to cover up to 90% of the roof area, ensuring optimal energy production per square meter while fully utilizing the roof surface without exceeding the maximum load capacity.

Midsummer ensures fast, secure installations with turnkey solutions. The panels require minimal maintenance, are safe to walk on, and provide full roof access. The solar panels are resistant to microcracks, withstand harsh weather, and protect the roof from UV damage. Bypass diodes for each cell enhance shading performance by isolating affected cells without impacting the entire panel.

## Swedish innovation, manufactured in Stockholm, Sweden, and Bari, Italy

\* IEC 61215 and IEC 61730 certifications for BOLD solar modules longer than 4 meters are pending.

#### **CSR AND SUSTAINABILITY**

Midsummer ensures CSR-compliant sourcing - has full control over our value chain, from raw materials to final products, enabling full social responsibility across economic, environmental, and social dimensions.

We provide the most sustainable **energy solution** with the lowest CO2 on the market, and 90% lower life cycle emissions compared to silicon panels.

Midsummer solar cells have 98% recyclability and contain 63% recycled material.

**Highly efficient CIGS cells without** toxic cadmium, due to our unique and innovative machinery, the Midsummer DUO system.

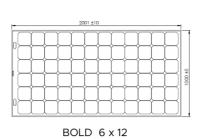


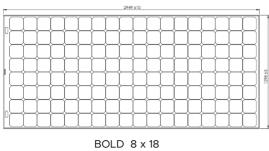
Version 8.4 2025-04-08

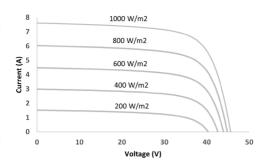




# **Technical Characteristics**







#### Description

Midsummer BOLD consists of a series of interconnected thin-film cells (CIGS) on an ultra-thin, 150-micron stainless steel substrate. The cells are protected and encapsulated by multiple film layers to ensure long-term durability. This exceptional design provides flexible and durable protection with high-light transmissions with very low weight. The module is equipped with IP68-rated junction boxes, to provide a durable and weather-resistant electrical connection. Midsummer BOLD can be retrofitted onto an existing roof or installed concurrently with a complete roof replacement, without the need for roof penetrations, as it is mounted using double-sided butyl tape.

ARTICLE INFORMATION	BOLD 6	BOLD 8		
BOLD model	BOLD 6x12	BOLD 8x18		
Number of cells (1 bypass diode between each cell)	72	144		
Width	<b>1000 ±</b> 5 <b>mm</b>	<b>1298 ±</b> 5 <b>mm</b>		
Length	2001 ±10 mm 2949 ±10 mm			
Weight	2.9 kg/m²			
Thickness	<b>2</b> ±0,5 <b>mm</b>			
Roof pitch	min 2°			
Minimum bend radius	0,25 m			
Cell type thin film	CIGS (Cu (In, Ga) Se2)			
Product warranty	25 years			
Power guarantee after 10 years	90 %			
Power guarantee after 25 years	80 %			
Certifications (TÜV Rheinland certified)	IEC 61730, IEC 61215			
Fire Safety	BROOF (t2)***			
Panel color	Black			

TECHNICAL DATA	BOLD 6	BOLD 8		
Nominal Power, P <sub>MAX</sub> *	240 W	500 W		
Power/m <sup>2</sup>	120 W/m <sup>2</sup>	131 W/m <sup>2</sup>		
Power/kg	40 W/kg	45 W/kg		
Maximum Power Voltage, V <sub>MPP</sub>	37,4 V	75,0 V		
Maximum Power Current, I <sub>MPP</sub>	6,6 A	6,6 A		
Open Circuit Voltage, Voc*	45,7 V	91,3 V		
Short Circuit Current, Isc*	7,6 A	7,6 A		
Maximum Series Fuse Rating	10 A			
Maximum System Voltage, V <sub>DC</sub>	1000 V			
Protection class against electrical shock	II .			
Design Load**	± 3600 Pa			
Module operating range	-40 to +85 °C			
Temperature coefficient, $P_{MAX}$ (W), $\gamma$	-0,3992 % / °C			
Temperature coefficient, $V_{\text{OC}}$ (V), $\beta$	-0,3279 % / ℃			
Temperature coefficient, $I_{SC}$ (A), $\alpha$	0,0099 % / °C			

<sup>\*</sup> Testing performed at STC (Standard test conditions): solar radiation of 1000 W/m2, module temperature 25°C, Air mass 1.5 (AM 1.5 spectrum). The tolerance for the value is ±10%.

<sup>\*\*</sup> Test load ± 5400 Pa, Max altitude: 2000 m

\*\*\* Classification has been carried out by RISE Research Institutes of Sweden AB in accordance with EN 13501-5-2016





# **BOLD Models – Electrical parameters for different sizes**

# **BOLD 6**

Panel dimension	Number of cells	Length (mm)	P <sub>MAX</sub> (W)	V <sub>MPP</sub> (V)	I <sub>MPP</sub> (A)	V <sub>OC</sub> (V)	I <sub>SC</sub> (A)
6x10	60	1685	200	31,2	6,6	37,9	7,5
6×11	66	1843	220	34,3	6,6	41,9	7,6
6x12	72	2001	240	37,4	6,6	45,7	7,6
6x14	84	2317	280	43,7	6,6	53,3	7,6
6x16	96	2633	320	49,9	6,6	60,9	7,6
6x18	108	2949	360	56,1	6,6	68,6	7,6
6x20	120	3265	400	62,3	6,6	76,2	7,6
6x22	132	3581	440	68,6	6,6	83,9	7,6
6x24	144	3897	480	74,8	6,6	91,3	7,6

## **BOLD 8**

Panel dimension	Number of cells	Length (mm)	P <sub>MAX</sub> (W)	V <sub>MPP</sub> (V)	I <sub>MPP</sub> (A)	V <sub>OC</sub> (V)	I <sub>SC</sub> (A)
8x10	80	1685	265	41,7	6,6	50,7	7,6
8x11	88	1843	295	45,8	6,6	55,8	7,6
8x12	96	2001	330	50,0	6,6	60,9	7,6
8x14	112	2317	385	58,4	6,6	71,0	7,6
8x16	128	2633	440	66,7	6,6	81,2	7,6
8x18	144	2949	500	75,0	6,6	91,3	7,6
8x20	160	3265	550	83,4	6,6	101,4	7,6
8x22	176	3581	600	91,7	6,6	111,6	7,6
8x24	192	3897	660	100,0	6,6	121,7	7,6
8x36*	288	5793	1000	150,0	6,6	182,6	7,6

 $<sup>^{</sup>st}$  IEC 61215 and IEC 61730 certifications for BOLD solar modules longer than 4 meters are pending.

## **BOLD**

