Sunpal Malaysia · sunpal.my

SP200M-39 — 200W Dual-Glass Bifacial Half-Cell Module

Complete technical datasheet for research / system design (STC electricals + Malaysia retail mechanicals)

1. Electrical data (STC)

Source: Sunpal factory series datasheet **SP180–200W.pdf** (model column **SP200M-39**). STC: 1000 W/m², AM 1.5G, cell 25°C.

Parameter	Symbol	SP200M-39	Unit
Peak power	Pmax	200	W
Voltage at max power	Vmp	22.45	V
Current at max power	Imp	8.91	A
Open-circuit voltage	Voc	26.01	V
Short-circuit current	Isc	9.41	A
Module efficiency	η	20.8	%
Power tolerance	—	0 ~ +3	%

2. Temperature coefficients & ratings

Parameter	Value
Pmax temperature coefficient	–0.350 %/°C
Voc temperature coefficient	–0.270 %/°C
Isc temperature coefficient	+0.048 %/°C
NOCT	45 ± 2 °C
Operating / storage temperature	–40 ~ +85 °C
Maximum system voltage	1000 V
Maximum series fuse rating	10 A

3. Malaysia retail mechanicals (Dual-Glass Bifacial)

As sold on sunpal.my — glass–glass bifacial construction. Differs from the factory monofacial single-glass series outline.

Parameter	Malaysia retail (Dual-Glass Bifacial)	Factory series sheet (monofacial)
Construction	Dual glass (glass–glass), bifacial	Single glass (front), monofacial
Dimensions (L×W×H)	1320 × 670 × 30 mm	1485 × 668 × 30 mm
Weight	~12 kg	10.5 kg
Cells	Mono half-cut (bifacial)	210×105 mono, 39 (3×13)
Frame	Anodized aluminium alloy	Anodized aluminium alloy
Junction box	IP65 / IP67 class (typical)	IP65 / IP67
Cables	MC4-compatible (typical)	2.5 mm² · ~50 cm + MC4
Wind / snow load	Per module label / IEC design	2400 Pa / 5400 Pa

4. Bifaciality factor

The official Sunpal **SP180–200W** factory series datasheet (monofacial) does **not** publish a bifaciality factor (ϕ). For the Malaysia Dual-Glass Bifacial retail module, rear-side contribution depends on albedo, height, and racking. For PhD / lab work: use the **module nameplate / flash-test report** shipped with the panel for measured Voc, Isc, Vmp, Imp and any bifaciality rating; request a batch flash report from **hello@sunpal.my** with your order number if required.

5. References & downloads

• Manufacturer series PDF (full STC table): SP180–200W.pdf — https://sunpal.oss-cn-hongkong.aliyuncs.com/wp-content/uploads/sunpalsolar/2025/04/SP180-200W.pdf

• Also mirrored on sunpal.my product Downloads as “Factory series sheet — SP180–200W / SP200M-39”.
• Warranty: 12-year product / 25-year linear power (factory sheet); confirm retail warranty card on delivery.

Important: Always verify the physical nameplate on the delivered module before string design. Mechanical outline of the Malaysia dual-glass bifacial SKU differs from the monofacial factory drawing.

Sunpal Malaysia · hello@sunpal.my · https://sunpal.my