

Solar Module



Eine Marke von
SONNENKRAFT

Power-Alpin-60

325 Wp mono silver

320 Wp mono black

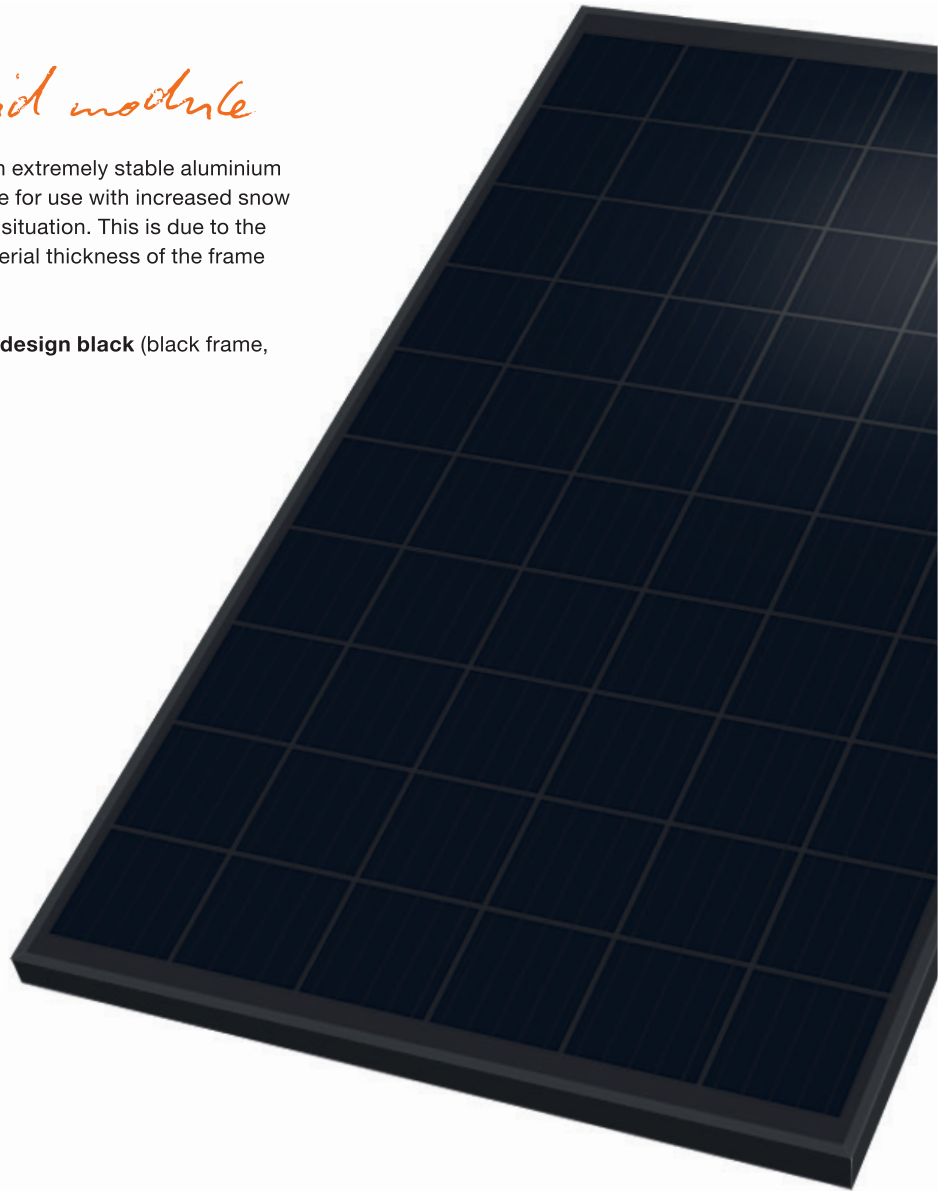
EXTREME! The solid module

KIOTO Power Alpine modules are available with an extremely stable aluminium frame and 4mm solar glass. The module is suitable for use with increased snow loads up to 8.000 Pa, depending on the mounting situation. This is due to the extended bearing surface of the laminate, the material thickness of the frame and the constructive geometry.

The Power Alpine modules are also available with **design black** (black frame, black backsheet).

Advantages:

- // 12 years product warranty and 25 years linear performance warranty
- // 5 busbar cell technology
- // Use of PID-resistant module components
- // Extremely solid up to 8.000 Pa, depending on the mounting situation
- // Stable frame concept for technical safety and flexibility



POWER-ALPIN-60

KPV ME NEC 325 Wp mono silver

KPV ME NEC 320 Wp mono black

Module specifications

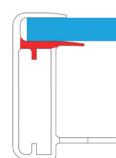
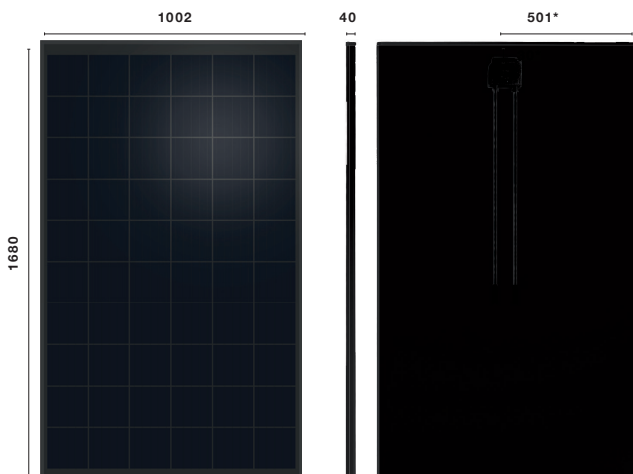
POWER Silver	Pmpp _[Wp]	Ump _[V]	Impp _[A]	Uoc _[V]	Isc _[A]	efficiency rate	area per kWp
325 mono	325 Wp	33,81 V	9,65 A	40,12 V	10,09 A	19,30%	5,17m ²
POWER Black							
320 mono	320 Wp	33,57 V	9,57 A	39,87 V	10,04 A	19,01%	5,26m ²

Electrical data

60 crystalline cells	158,75mm x 158,75mm
Connecting System	Tyco-PV4 4mm ²
Max. system voltage	1000V DC
Power tolerance	(+5W/-0W) Measurement: STC (standard test conditions)
Temperature coefficients	Pmpp -0,37 %/K Uoc -90,7 mV/K Isc +2,85 mA/K
Max. reverse over current	15 A
Operation temperature	+85°C up to -40°C
Cable length	2 x 1000mm
Bypass diodes	3pcs. Tyco SL1515
Efficiency guarantee	min. 97% im ersten Jahr, danach max. Reduktion um 0,7% p.a. bis zu 25 Jahren
Product guarantee	12 years

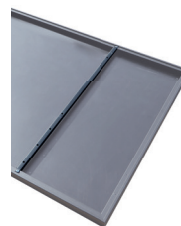
Technical data

incl. aluminium frame / laminate	1680mm x 1002mm x 40mm (+/-2mm) / 1673mm x 995mm x 5mm (+/-2mm)
Weight incl. aluminium frame / laminate	21,50kg / 18,50kg
Glass specification	Solar glass ESG 4,0mm with high-strength antireflective coating
Test certificate	IEC 61215, Ed. 2 incl. mechanical load test up to 8.000 Pa, depending on the mounting situation, IEC 61730; IP 65
Extended hail test	Grainsize 25 mm, max. velocity of 46 m/s (165,6 km/h) and Grainsize 55 mm, max. velocity of 33,5 m/s (120,6 km/h)
Salt mist corrosion test	A minimum of 96 hours continuous exposure to a highly concentrated salt mist
Ammonia resistance	1500h at 750ppm Ammonia concentration
Packaging	24 modules/pal., 720 modules / truck



Alpin frame

- // extremely durable frame
- // suitable for higher snow loads
- // extended bearing surface of the laminate, higher material thickness of the frame, perfect constructive geometry



Optional available: Backrails

- // Frame stiffening
- // higher loads