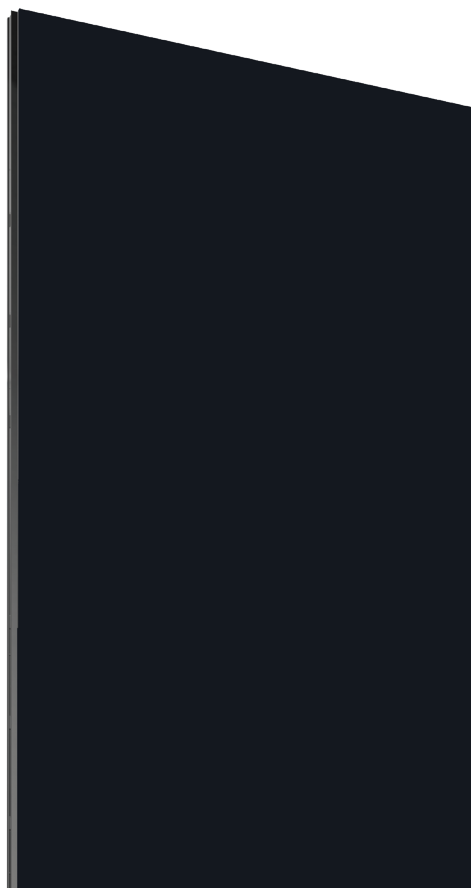




Series 6 *Plus* V2.

455-480 Watt Thin Film Solar Module

Series 6 *Plus* V2 incorporates CuRe technology, First Solar's latest groundbreaking semiconductor innovation that significantly reduces long-term degradation and delivers more lifetime energy per nameplate watt. Built on the field-tested Series 6 *Plus* platform, the advanced design also provides reduced balance of system, shipping, and operating costs.



More Lifetime Energy per Nameplate Watt

- Industry's best (0.1%) warranted degradation rate
- Superior temperature coefficient, spectral and shading response
- No power loss from LID or LeTID
- Anti-reflective coated glass enhances energy production
- Added bifacial energy yield



Innovative Module Design

- Under-mount frame provides the cleaning and snowshedding benefits of a frameless module while protecting edges against breakage
- Innovative SpeedSlot mounting feature delivers the industry's fastest installation times and lowest mounting hardware costs
- Dual junction box design reduces wire management complexity and cost



Unmatched Quality & Reliability

- End-to-end manufacturing process for globally consistent quality
- Tested and certified to IEC standards and beyond
- Durable glass/glass construction
- Immune to and warranted against power loss from cell cracking
- 12-year Limited Product Warranty



Industry's Most Eco-efficient PV Solution

- Industry-leading carbon footprint, water footprint and energy payback time
- Globally available PV module recycling services

19.0%
HIGH BIN EFFICIENCY

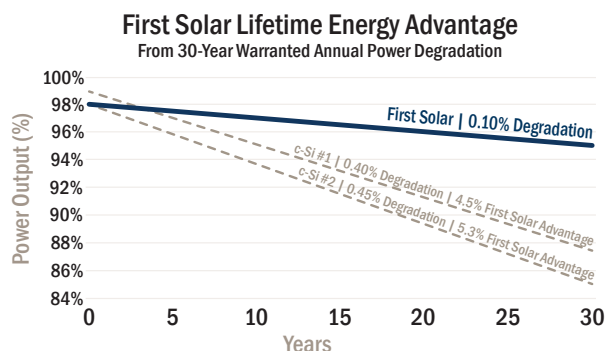
30YR
LINEAR PERFORMANCE
WARRANTY

98%
WARRANTY START POINT

0.1%
WARRANTED ANNUAL
DEGRADATION RATE¹



Learn more about First Solar
and Series 6 *Plus* V2
at firstsolar.com/S6



Series 6 Plus V2.



Electrical Specifications

RATINGS AT STANDARD TEST CONDITIONS (1000W/m², AM 1.5, 25°C)²

SERIES 6 PLUS V2 MODEL TYPES: FS-6XXX-P-B-2 / FS-6XXXA-P-B-2 (XXX = NOMINAL POWER)

Nominal Power ³ (-0/+5%)	P _{MAX} (W)	455		460		465		470		475		480	
		STC ⁴	BNPI ⁵	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Nominal Power	P _{MAX} (W)	455	467	460	472	465	478	470	483	475	488	480	493
Voltage at P _{MAX}	V _{MAX} (V)	181.5	181.5	182.5	182.5	183.5	183.5	184.5	184.5	185.5	185.5	186.4	186.4
Current at P _{MAX}	I _{MAX} (A)	2.51	2.57	2.52	2.59	2.53	2.60	2.55	2.62	2.56	2.63	2.57	2.64
Open Circuit Voltage	V _{OC} (V)	228.7	228.7	229.3	229.3	229.9	229.9	230.6	230.6	231.2	231.2	231.8	231.8
Short Circuit Current	I _{SC} (A)	2.70	2.78	2.71	2.78	2.71	2.79	2.72	2.79	2.72	2.80	2.73	2.80
Efficiency (%)	%	18.1		18.3		18.5		18.7		18.9		19.0	
Maximum System Voltage	V _{SYS} (V)	1500 ⁶											
Limiting Reverse Current	I _R (A)	5.0											
Maximum Series Fuse	I _{CF} (A)	5.0											

TEMPERATURE CHARACTERISTICS

Module Operating Temperature Range	°C	-40 to +85
Temperature Coefficient of P _{MAX} ²	T _K (P _{MAX})	-0.22%/°C [Temperature Range: 15°C to 75°C]
Temperature Coefficient of V _{OC} ²	T _K (V _{OC})	-0.24%/°C
Temperature Coefficient of I _{SC} ²	T _K (I _{SC})	+0.04%/°C
Bifaciality Factor ⁷	%	20 (+10/-5)

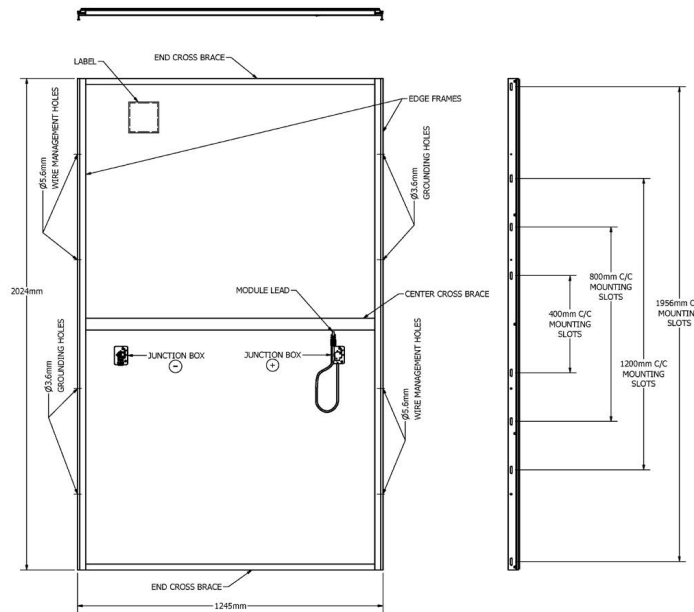
MECHANICAL DESCRIPTION

Module/Glass Length	2024mm/2016mm
Module/Glass Width	1245mm/1216mm
Module/Glass Area	2.52m ² /2.45m ²
Module Weight	34.0kg
Leadwire ⁸	2.5mm ² , 733mm (+) & Bulkhead (-)
Connectors	TE Connectivity PV4-S, or alternate
Junction Box	IP68 Rated
Bypass Diode	N/A
Cell Type	Thin film CdTe semiconductor, up to 268 cells
Frame Material	Anodized Aluminum
Front Glass	Heat strengthened
Back Glass	Heat strengthened
Encapsulation	Laminate material with edge seal
Frame to Glass Adhesive	Silicone
Load Rating ⁹	+/-2400Pa

PACKAGING INFORMATION

Model Type	Modules Per Pack	Packs per 40' Container
FS-6XXX-P-B-2 / FS-6XXXA-P-B-2	28	18

Mechanical Specifications



Certifications & Tests

CERTIFICATIONS AND LISTINGS

IEC 61215:2021 & 61730:2023⁶, CE
UL 61730
IEC 61701 Salt Mist Corrosion
IEC 60068-2-68 Dust and Sand
Resistance
IEC 62716 Ammonia Corrosion

REGIONAL CERTIFICATIONS

SII

EXTENDED DURABILITY TESTS

IEC TS 63209-1 Extended-Stress
Testing
Long-Term Sequential
Thresher Test
PID Resistant

QUALITY & EHS

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 14064-3:2006
EPEAT Silver Registered



Disclaimer

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Install in portrait only

- Limited power output and product warranties subject to warranty terms and conditions
- All ratings $\pm 10\%$, unless specified otherwise. Specifications are subject to change
- Measurement uncertainty applies
- Frontside electrical ratings
- Bifacial Name Plate Irradiance, as per IEC 61215:2021
- IEC 61730: 2023 Class II
- Bifaciality factor is Bif_{irr} in accordance with IEC 60904-1-2
- Leadwire length from junction box exit to connector mating surface
- 1200Pa test load rating for 1956mm mounting slots. Higher loads may be acceptable, subject to testing