

Power Series FS

Amorphous Silicon Thin Film Modules



- ▶ **Eco-friendly** – Made from Non Toxic Materials and easily recyclable, the product is compliant as per RoHS directive 2002/95/EC
- ▶ **Traceability** – Modules are attached with UHF Passive RFID Tags for identification & traceability
- ▶ **Rigorous Quality Control** – The only solar company in the world to be awarded a 5-star rating for quality systems by TUV two years in a row
- ▶ **Manufacturing Excellence** – Top-of-the-line manufacturing equipment along with raw materials from renowned international suppliers, backed by in-house reliability testing capabilities
- ▶ **Superior Performance** – Deliver stabilized power enabled by a high efficiency CVD process. Excellent performance under diffuse (low) light and indirect sunlight conditions
- ▶ **Ease of Installation** – Modules come with bonded back rails and rivets and are fitted with CE and UL approved MC Junction box with Schottky by-pass diode
- ▶ **Best-in-class warranty** – Mechanical warranty of 5 years and performance warranty of 10 years at 90% of minimum stabilized rated output power and 25 years at 80% of minimum stabilized rated output power
- ▶ **Certifications:** IEC 61646, IEC 61730, CE, IEC 61701 (Salt Mist Corrosion Test), Ammonia Resistance Test



Member of PV Cycle for voluntary take-back and Recycling Program

Power Series FS modules are Single Junction Amorphous Silicon (a-Si) Technology based modules, with monolithic cell to cell serial connection enabled via laser technology. Manufactured in highly automated, state-of-the-art facilities, the frameless Glass-PVB-Glass modules with highly translucent soda lime glass are available in 2600mmx2200mm configuration from stabilized power of 350W, 360W, 370W, 380W, 390W & 400W bins.

Automated inspection and in-house technical expertise ensure tight tolerances and greater reliability with world-class quality. These modules provide cost-effective solar photovoltaic solutions that are ideal for large grid-connected solar farms and rooftop systems.

Power Series FS

Amorphous Silicon Thin Film Modules



REGGIO EMILIA, ITALY | 20 KW_p



TAMIL NADU, INDIA | 5 MW



SICILY, ITALY | 2 MW

ELECTRICAL CHARACTERISTICS

	BIN 350W	BIN 360W	BIN 370W	BIN 380W	BIN 390W	BIN 400W
Maximum Power (W)	418 / 350	430 / 360	442 / 370	454 / 380	466 / 390	478 / 400
Power Output Tolerance (%)	± 3	± 3	± 3	± 3	± 3	± 3
Open circuit Voltage, V _{oc} (V)	187.2 / 184.2	189.4 / 186.4	190.1 / 187.1	190.9 / 187.8	192.8 / 189.7	195.0 / 191.9
Short Circuit Current, I _{sc} (A)	3.45 / 3.29	3.45 / 3.29	3.44 / 3.28	3.42 / 3.27	3.42 / 3.27	3.44 / 3.28
Maximum Power Voltage, V _{mp} (V)	141.1 / 133.6	144.6 / 136.9	148.0 / 140.2	151.4 / 143.4	154.3 / 146.1	157.0 / 148.7
Maximum Power Current, I _{mp} (A)	2.96 / 2.62	2.98 / 2.63	2.99 / 2.64	3.00 / 2.65	3.02 / 2.67	3.04 / 2.69
Maximum System Voltage (V)	1000	1000	1000	1000	1000	1000

(Initial/Stable)

MECHANICAL CHARACTERISTICS

Dimensions L×W (mm)	2600×2200
Surface Area (m ²)	5.72
Thickness* (mm)	7±0.15
Weight** (kg)	100

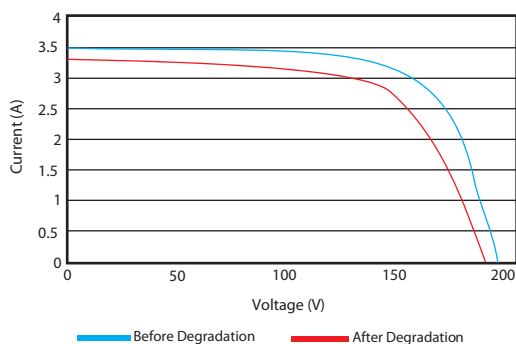
*without junction box
**without rails

TEMPERATURE COEFFICIENT

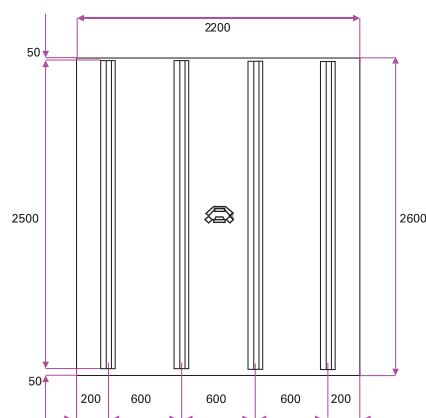
Maximum Power (%/°C)	-0.2
Open Circuit Voltage (%/°C)	-0.33
Short Circuit Current (%/°C)	0.09
Maximum Power Voltage (%/°C)	-0.32
Maximum Power Current (%/°C)	0.14

Operating temperature range: -40°C to +85°C

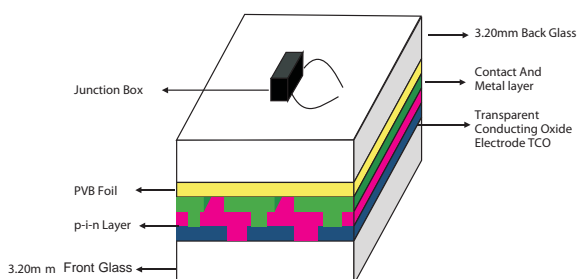
I-V CURVE OF A TYPICAL POWER SERIES FS MODULE AT STC (BEFORE & AFTER DEGRADATION)



DIMENSIONS FOR 2600MM x 2200MM MODULE



CROSS-SECTION OF a-Si THIN FILM MODULE



Thickness not to scale

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