



HIGH-EFFICIENCY AND LIGHTWEIGHT PHOTOVOLTAIC MODULES
AND BIPV PRODUCTS

25 YEARS OF SHINING IN THE RENEWABLE
ENERGY WORLD UNFADINGLY

FDS MODULE SERIES

Balcony specific lightweight photovoltaic modules

LIGHTWEIGHT AND FLEXIBLE | SAFE AND RELIABLE | EASY INSTALLATION
SIGNIFICANT BENEFITS | SUITABLE FOR MULTIPLE SCENARIOS



FDS400-24M10 380~410W



MODIFICATION TECHNOLOGY

- ◆ The light transmittance is $\geq 91\%$, far higher than similar products, and no barrier for photoelectric conversion.
- ◆ Ultra-high UV blocking ability ensures lasting protection of power generation efficiency for 25 years

(Data support: 20 years of practical outdoor application data of polymer materials, 20,000 hours of accelerated aging experimental data, Yellowing index $\Delta \leq 3$)



RESIN AND FIBER INTERFACE STRENGTH IMPROVEMENT TECHNOLOGY

- ◆ The modulus is 1300MPa, 100% higher than competing products, which improves the overall strength of the module and solves the problem of cell cracks



NANOHYBRID MODIFICATION AND SURFACE TREATMENT FLAME RETARDANT TECHNOLOGY

- ◆ The flame retardant grade of the module reaches building B1 level & UL94 -V0 level

(Passed EN45545 EU flame retardant standard, TB/T3237 Chinese railway standard flame retardant standard)



All data contained in this specification are subject to change without prior notice. The final right of interpretation belongs to Fortunes Solar. Please follow our official account to obtain the latest product information.
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FDS400-24M10 (380~410W)

TYPICAL ELECTRICAL CHARACTERISTICS AT STANDARD TEST CONDITIONS(STC)

STC : AM=1.5, irradiance 1000W/m², Component temperature 25°C

Typical Type	Unit	FDS380-24M10	FDS385-24M10	FDS390-24M10	FDS395-24M10	FDS400-24M10	FDS405-24M10	FDS410-24M10
Max-Power(Pm)	W	380	385	390	395	400	405	410
Power Tolerance	W	0~+5W						
Max-Operating Voltage(Vm)	V	30.23	30.38	30.54	30.69	30.85	31.02	31.18
Max-Operating Current (Im)	A	12.59	12.69	12.79	12.89	12.99	13.08	13.17
Open Circuit Voltage (Voc)	V	36.00	36.20	36.40	36.60	36.80	37.00	37.20
Short Circuit Current(Isc)	A	13.42	13.49	13.56	13.63	13.70	13.76	13.82
Module Efficiency(ηm)	%	19.2	19.5	19.7	20.0	20.2	20.5	20.7

ELECTRICAL CHARACTERISTICS AT NOMINAL MODULE OPERATING TEMPERATURE (NMOT)

NMOT : irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s

Typical Type	Unit	FDS380-24M10	FDS385-24M10	FDS390-24M10	FDS395-24M10	FDS400-24M10	FDS405-24M10	FDS410-24M10
Max-Power(Pm)	W	286	290	294	298	302	306	310
Max-Perating Voltage(Vm)	V	28.09	28.24	28.42	28.55	28.70	28.85	29.00
Max-Operating Current (Im)	A	10.21	10.30	10.39	10.47	10.55	10.62	10.71
Open-Circuit voltage (Voc)	V	33.80	34.00	34.20	34.40	34.60	34.80	35.00
Short-Circuit Current (Isc)	A	10.70	10.77	10.85	10.90	10.96	11.01	11.08

THERMAL CHARACTERISTIC

Nominal Module Operating (NMOT)	41 ± 2°C
Temperature Coefficient of Pmax	-0.38%/°C
Temperature Coefficient of Voc	-0.28%/°C
Temperature Coefficient of Isc	0.02%/°C

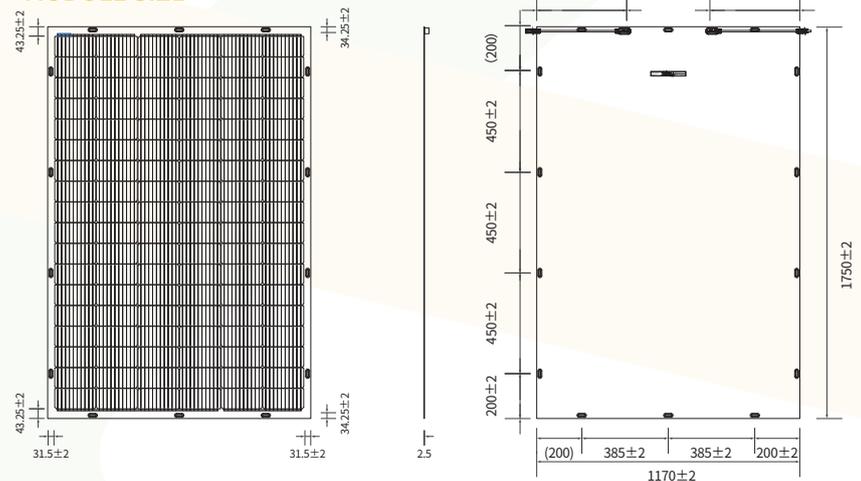
OPERATING CONDITIONS

Maximum System Voltage	DC1500V(IEC)
Maximum Series Fuse Rating	20A
Operating Temperature Range	-40°C~+85°C

MECHANICAL PROPERTY

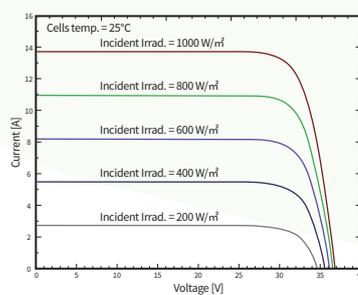
Dimension (L*W*H)	1750mmx1170mmx2.5mm (without junction box)
Weight	6.0kg
Backboard Specification	backboard (black)
Cell	108(6x18)/10BB p type single crystalline silicon/182*91mm
Encapsulat Material	EVA
Frame	none
Weight Per Unit Area	2.93kg/m ²
Power Per Unit Area	185.6~202.2W/m ²
Connector	MC4 compatible
Junction Box	IP68
Cable Specifications	4mm ² , 1000mm Or customized by customers
Bending Radius	0.5m

MODULE SIZE

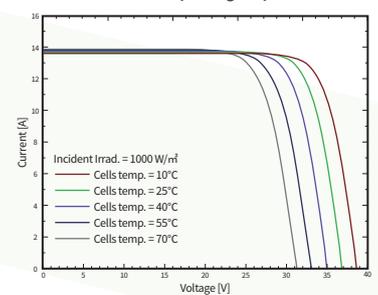


IV CURVE

I-V curve under different irradiance (JY1-54H400PC)



I-V curves at different operating temperatures (JY1-54H400PC)



PACKAGE AND TRANSPORTATION

Transportation	Loading Unit	Modules/UYnit	Modules/Pallet
Container	20'GP	420pcs	70pcs
Container	40'HQ	1820pcs	70pcs
Platform Lorry	13m	1960pcs	70pcs
Platform Lorry	17.5m	3360pcs	70pcs