



**440W** **20.33 %**  
Module efficiency

**450W** **20.79 %**  
Module efficiency

### Electrical Characteristics at Standard Test Conditions (STC)

Module Type	SPV440-PM10-120	SPV450-PM10-120
Module Type	SPV440-PM10-120	SPV450-PM10-120
Maximum Power - Pmax (W)	440	450
Maximum Power Voltage - Vmp (V)	34.61	35.12
Maximum Power Current - Imp (A)	12.72	12.82
Open-circuit Voltage - Voc (V)	41.35	41.98
Short-circuit Current - Isc (A)	13.47	13.57
Module Efficiency STC (%)	20.33 %	20.79 %

Tolerance of Rating Pmax /Voc/ Isc[%]: ±5/ ±4/ ±4

### Electrical Characteristics at Normal Operating Cell Temperature (NOCT)

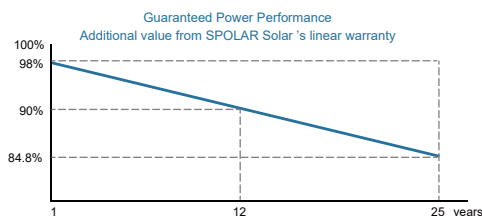
Module Type	SPV440-PM10-120	SPV450-PM10-120
Module Type	SPV440-PM10-120	SPV450-PM10-120
Maximum Power - Pmax (W)	331	338
Maximum Power Voltage - Vmp (V)	32.62	33.01
Maximum Power Current - Imp (A)	10.17	10.24
Open-circuit Voltage - Voc (V)	38.82	39.21
Short-circuit Current - Isc (A)	10.76	10.85

### Temperature & Maximum Ratings

Operating Temperature (°C)	-40 °C ~ +85 °C
Nominal Operating Cell Temperature	45 ± 2 °C
Temperature Coefficients of Pmax	-0.35% / °C
Temperature Coefficients of Voc	-0.275% / °C
Temperature Coefficients of Isc	0.045% / °C
Power Tolerance	0 ~ +3W
Maximum System Voltage	1500 V
Maximum Series Fuse Rating	25 A

### Mechanical Characteristics

Cell Type	Mono-crystalline
No. of Cells	120 (6x20)
Dimensions	1910x1133x30 mm
Weight	23.5 kg
Glass	3.2mm, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, MC4 Compatible, 3 Bypass Diode Connector: Type PV-XT101.1[Xtong] or Type PV-KST4-EVO 2/xy UR(male) &PV-KBT4-EVO2/xy UR (female)[Stäubli]
Fire Rating	Class C
Safety Class	Class II
Packaging Configuration	1x4.0 mm <sup>2</sup> , Length: 300 mm or Customized Length
Output Cables	72pcs/stack, 864pcs/40'HQContainer ( Two pallets=One stack )



**12**  
years  
Product warranty

**25**  
years  
Linear power warranty



## SPV440-PM10-120 SPV450-PM10-120



### High Efficiency

Higher power conversion efficiency benefited from advanced SpolarPV technology.



### Anti-reflection

Less than 20% reflectivity with minimum glare.



### Good Mechanical Load

Certified to withstand: wind load (2400 Pa), snow load and hail strike(5400 Pa) .



### Low Light Resilience

Advanced glass and cell surface texture designs ensure excellent performance in low light environment.



### Environmental Durability

Good performance of Anti-PID & Salt mist certified by 2 PfG 2387/01.18 and IEC61701.

