

# SkyHawk R<sup>+</sup>-type Module Specification(182mm / M10 Solar Cell)

Monocrystalline 6X20 Solar Modules for Rooftop Type

435-460Wp

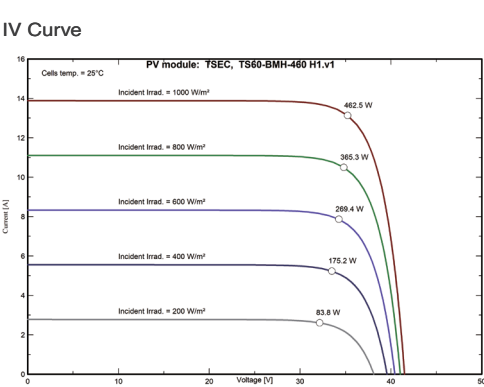


Electrial Data								General Data	
Model Name		TS60-BMH-435 H1	TS60-BMH-440 H1	TS60-BMH-445 H1	TS60-BMH-450 H1	TS60-BMH-455 H1	TS60-BMH-460 H1	Cell type	M10 Monocrystalline
Max. power at STC	P <sub>max</sub> W	435	440	445	450	455	460	Cell per module	Mono-crystalline silicon solar cell (120 pcs)
Max. power voltage	V <sub>mp</sub> V	33.71	33.86	34.01	34.16	34.31	34.46	Front	Low-iron tempered glass
Max. power current	I <sub>mp</sub> A	12.93	13.01	13.11	13.20	13.29	13.38	Encapsulant Flim	Ethylene Vinyl Acetate(EVA)
Open circuit voltage	V <sub>oc</sub> V	40.75	40.90	41.05	41.20	41.35	41.50	Rear	Composite film
Short circuit current	I <sub>sc</sub> A	13.38	13.45	13.56	13.66	13.76	13.88	Frame	Anti-Salt Mist aluminum (silver/black)
Module Conversion Eff.	%	20.1%	20.4%	20.6%	20.8%	21.1%	21.3%	Junction Box	IP68
								Connector	EVO-2 Compatible
								Cable	1500mm / 4mm <sup>2</sup>

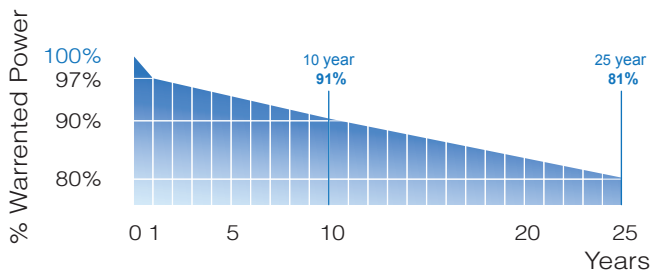
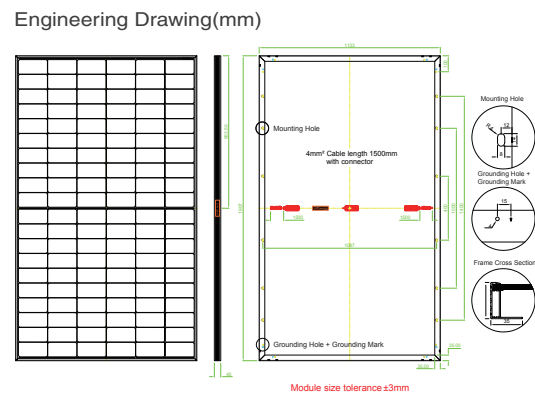
\* Under Standard Test Condition(1,000W/m<sup>2</sup>,25°C,AM 1.5): Power Tolerance ±3%  
 \* Module Conversion Eff. (%) = [Max power at STC(w) / ((Solar Module Area(m<sup>2</sup>) x 1000 (w/m<sup>2</sup>))] x 100%



Temperature Coefficient				Operation Conditions		Module Dimensions and Weight	
Nominal Operating	NOCT	°C	45±2	Max. system voltage	1500V	Dimension	1907 x 1133 x 40 mm
Cell Temperature				Module fire resistance class	Class C	Weight	24.5 Kg
TC I <sub>sc</sub>	α	%/ °C	+0.06	Protection Class (IEC 61140)	Class II		
TC V <sub>oc</sub>	β	%/ °C	- 0.27	Series fuse rating	25 A		
TC P <sub>max</sub>	γ	%/ °C	- 0.35	Number of bypass diodes	3		
				Temperature range	-40 to +85°C		
				Max. mechanical load	5400 pa(front side) 3600 Pa(rear side)		



- Certifications**
- IEC 61215:2016 · IEC 61730-1:2016 & IEC 61730-2:2016
  - ISO 9001:2015 Quality management system
  - ISO 14001:2015 Environmental management system
  - ISO 45001:2018 Occupational health and safety management system



- Warranty**
- 12-year materials and workmanship warranty
  - 25-year linear power warranty

**Made in Taiwan** \* The information in this document is subject to change without notice \* TSEC reserves the rights of final interpretation and revision of datasheet. Version: Third edition, March 2023.

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