

# HES PV HES - Small Area Solar Modules // HES-10 · HES-20 · HES-100 · HES-165











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## HES PV SMALL AREA SOLAR MODULES

Offer reliable battery charging in all Canadian climates. Their rugged design makes them a popular choice for industrial systems, remote homes, and RV battery charging systems.

#### BUILT TOUGH FOR CANADA'S TOUGHEST CLIMATES

HES-50, 100, & 165 feature cUL certifications to offer reliable battery charging in all Canadian climates. They also include MC 4 type connectors for ease of installation.

## MECHANICAL STRENGTH

The anodized aluminium frame mates with the Fast-Rack pole, roof, and ground mounts for a strong and secure solar system. Modules may be installed in portrait or landscape.

# RELIABLE

10 year mechanical warranty and 25 year power output warranty ensure your solar system delivers power to your load.





ELECTRICAL CHARACTERISTICS							
Module	HES-10-40PV	HES-20-40PV	HES-50-36PV	HES-100-36PV	HES-165-36PV		
Max Power (Pmax)	10 W	20 W	50 W	100 W	165 W		
Open Circuit Voltage (Voc)	19.8 V	20.1 V	20.4 V	20.6 V	21.2 V		
Maximum Power Voltage (Vpm)	17.6 V	17.9 V	18.5 V	18.2 V	18.6 V		
Short Circuit Current (Isc)	0.65 A	1.26 A	3.15 A	6.23 A	9.86 A		
Maximum Power Current (Ipm)	0.57 A	1.12 A	2.77 A	5.5 A	8.87 A		
Max Series Fuse Rating	10 A	10 A	10 A	10 A	10 A		

STC - Standard Test Conditions: Irradiation 1000  $W/m^2$  - Air mass AM 1.5 - Cell temperature 25°C Calculated using maximum power.

MECHANICAL CHARACTERISTICS							
Module	HES-10-40PV	HES-20-40PV	HES-50-36PV	HES-100-36PV	HES-165-36PV		
Dimensions (H x W x D)		450 x 356 x 20 mm 17.7 x 14 x .8"	670 x 540 x 25 mm 26.3 x 21.2 x 1"	1020 x 670 x 30 mm 40 x 26.3 x 1.2"	1480 x 670 x 35 mm 58.3 x 26.3 x 1.3"		
Output Interconnect Cable	1 Meter Sunlight Resistant Cables	1 Meter Sunlight Resistant Cables	MC 4 Type	MC 4 Type	MC 4 Type		
Operating Temperature	-40 to 85°C / -40 to 185°F						

WARRANTY & CERTIFICATIONS							
Module	HES-10-40PV	HES-20-40PV	HES-50-36PV	HES-100-36PV	HES-165-36PV		
	CE	CE	cUL & CE	cUL & CE	cUL & CE		
10 Year limited warranty on material and workmanship							
25 Year Power Guarantee							
Years 0 - 10 > 90%							
Years 10 - 25 > 80%							





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