





**HES solar modules** with high efficiency crystalline solar cells, offers high charge current at a voltage suitable for both summer and winter temperatures. The cells are bonded to a special tempered solar glass for watertight integrity and a deep anodized aluminum frame makes them strong and rugged for all Canadian environments.

## **BUILT FOR CANADA**

The HES-50 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.

## MECHANICAL STRENGTH

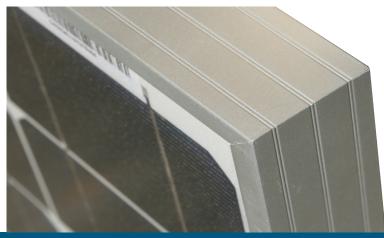
The rugged anodized aluminum frame mates with the HES pole and roof mounts for a strong and secure solar system. Panels may be installed in portrait or landscape.

## PLUG AND PLAY WIRING

The HES-50 uses MC-4 type wiring connectors, and offers secure, plug and play electrical connections. Use the sunlight resistant HES MC Series cables to extend the array cabling up to 50 ft, or HES combiners to transition to conduit or Teck cable.

## RELIABLE

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



# CONTACT YOUR HES PV SOLAR PROVIDER TODAY



# HES-50 // 50 Watt Max Power Solar Module

ELECTRICAL CHARACTERISTICS	
Max Power (Pmax)	50 W
Tolerance of (Pmax)	0~+ 3W
Type of Cell	Mono-Crystalline
Cell Configuration	36 in series
Open Circuit Voltage (Voc)	22.1 V
Maximum Power Voltage (Vpm)	17.2 V
Short Circuit Current (lsc)	3.14 A
Maximum Power Current (Ipm)	2.91 A
Series Fuse Rating	10 A

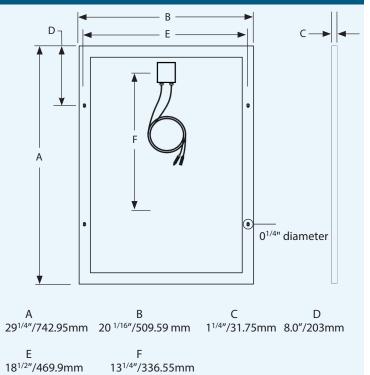
STC - Standard Test Conditions: Irradiation 1000 W/m2 - Air mass AM 1.5 - Cell temperature 25 °C

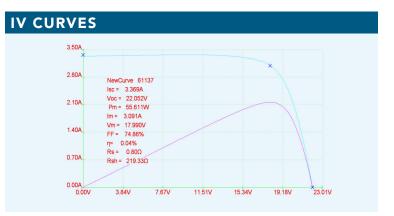
\* Calculated using maximum power

MECHANICAL CHARACTERISTICS		
Dimensions (A x B x C right)	29.25" x 20.06" x 1.25" 742.95 x 509.9 x 31.75mm	
Cable Length	336.55 mm	
Weight	5.2 kg / 11.5 lbs	
Operating Temperature	-40 to 85° C -40 to 185°F	

CE

#### DIMENSIONS





# CERTIFICATIONS

CE Standard

### WARRANTY

10 Year limited warranty on material and workmanship25 Year Power Guarantee

Years 0 - 10 > 90%

Years 10 - 25 > 80%



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