

TECH SPECS

ELECTRICAL CHARACTERISTICS

	Cell Count in module			
	1x2	2x2	4x5	4x7
Max power (± 3%)	6.1 Wp	12.2 Wp	78.5 Wp	109.3 Wp
Open Circuit Voltage (Voc)	1.1 V	2.2 V	12.4 V	17.4 V
Short Circuit Current (Isc)	6.3 A	6.3 A	8.8 A	8.8 A
Voltage at max power (Vmp)	1.1 V	2.1 V	9.6 V	13.5 V
Current at max power (Imp)	5.5 A	5.5 A	8.2 A	8.1 A

Note: Application specific module geometries and power outputs can be customized.
STC is 25 Celsius, AM 1.5, 1000 W/sq. m

ELECTRIC WIRING

UL Rated PV Underground or within Amber Interface layer
MC4 UL listed junction boxes and connectors
Low Voltage (max 50V) DC output

CERTIFICATIONS

Tested against a customized UL 1703/61730

MECHANICAL CHARACTERISTICS

	Cell count			
	1x2	2x2	4x5	4x7
Dimensions (mm)	299 x 149 x 8	299 x 299 x 8	760 x 710 x 8	1350 x 700 x 8
Weight	0.5 kg	1 kg	5 kg	7 kg
Junction Box	NA	NA	IP68 rated (3 bypass diodes)	
Output Cables	AWG 14	AWG 14	AWG 12	
Connectors	Custom	Custom	MC4	

Note: Application specific module geometries and power outputs can be customized.



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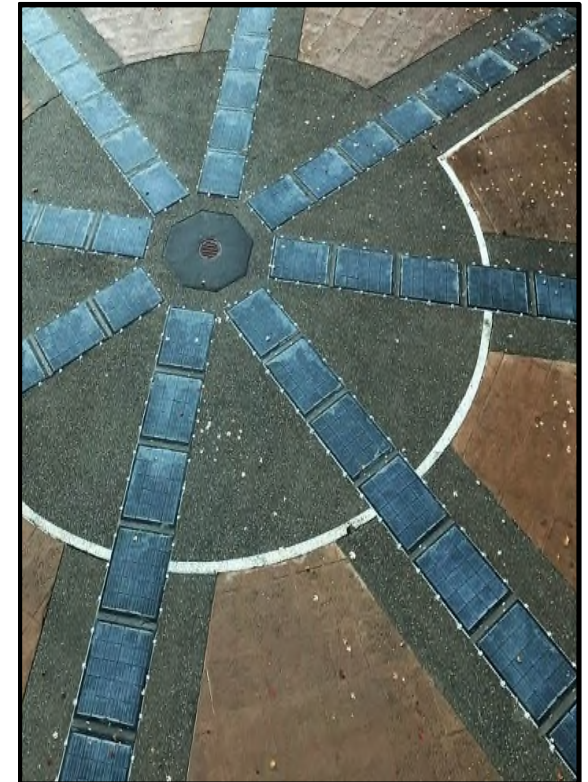
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**INNOVATION FOR TOMORROW'S
SUSTAINABLE INFRASTRUCTURE**



Solar Earth Solutions

PRODUCT LINE - NORTH AMERICA



OUR PRODUCTS

At Solar Earth we are building novel solar systems for walkways, driveways, patios, roofs and roadways. Our Amber One™ product line features application-specific modules that are mounted directly on flat concrete, or on an interface layer that provides levelling and cabling functionality. The Solar Stone™ units are surface-mounted on concrete or recycled plastic pavers. The Amber Interface™ layer provides a low-cost mounting solution that is optionally available with a hydronic sub-system used in solar thermal applications. Amber ICE™ modules are available with an electric de-icing capability.

Any system may be bought with or without the balance of system components required to deliver the electric and thermal energy to your home, office, electric vehicle or custom application.

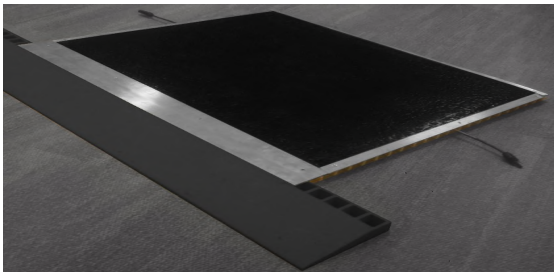
PANELS

Amber One™ Panels have been installed in Canada, China and the United States. They can be mounted either directly to concrete, asphalt, or on top of the optional Amber Interface™ Layer.



Panels directly adhered to concrete. Aluminum edging optional.

The Amber Interface™ provides top-mounted installation for existing surfaces. Interface panels are built with an integrated pathway for cables and (optionally) hydronic tubing. The Amber Interface™ is available in various depths starting at 25mm.



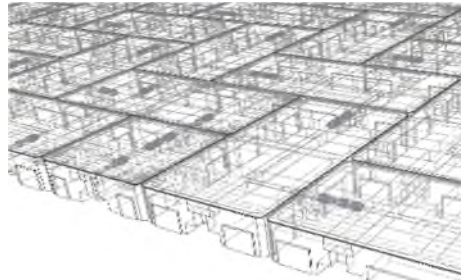
Solar Earth 80 watt Amber One™ sidewalk panel with an Amber Interface™ 25 layer and edge ramp.

PAVERS

The Solar Stone™ series is now being released to select partners. They provide an excellent low voltage solution for application on top of contoured (or flat) surfaces. High efficiency (22%) crystalline solar cells deliver system level power output of 130 watts per square meter (under standard test conditions). Solar Stone™ are available with an optional de-icing feature.



Solar Stone™ pavers with de-icing technology



Solar Stone™ system using one-cell and two-cell pavers

The Solar Stone™ is designed for aesthetically pleasing results on uneven terrain.



Solar Stone™ with Glass/Poly traction layer



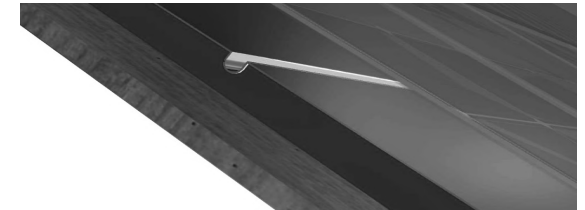
Glass-poly traction layer

The Solar Stone™ system can be installed with a selection of traction surfaces. More efficient but more fragile tempered glass surfaces are designed for residential applications. Heavy duty glass-polymer surfaces are recommended for public installations.

HYBRID SYSTEMS

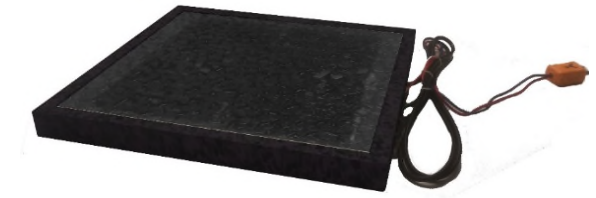
Solar Earth hybrid systems combine photo-voltaic output with solar thermal and de-icing options.

The Amber X Therm™ Panels produce 200 watts of solar thermal energy for every 100 watts of electricity. Thermal pickup is provided by our hydronic underlay systems.



Amber X Therm™ on aluminum spreader plate with pex channels

Amber X Therm™ Panels provide de-icing capability when coupled with the hydronic subsystem. Alternatively, our Amber ICE™ Panels use low voltage power to electrically heat the solar modules.



Amber ICE™ prototype