

## Cascade Series

### PV Module and Installation System

*see the difference*

Silicon Energy's mission is to manufacture quality PV systems specifically for the US market that advance durability, longevity of performance and aesthetics.

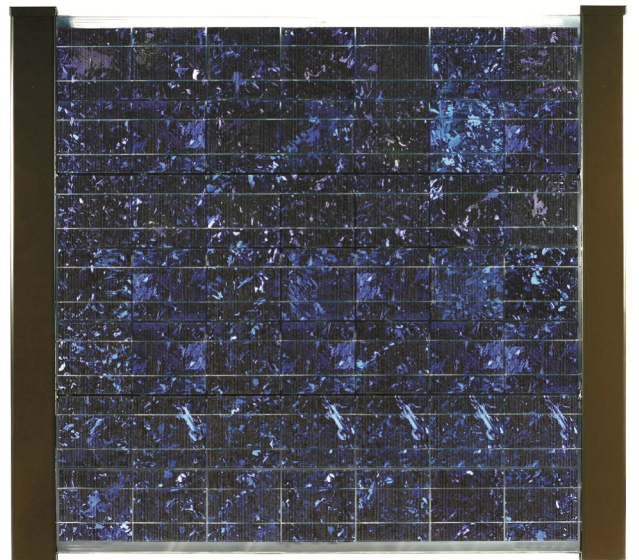
The Cascade Series PV Module and Installation System has some unique features that differentiate it from other PV systems presently on the market.

#### PV Module Features:

- High efficiency crystalline silicon cells
- Strong and durable
- Double-glass module construction allows light to pass between cells
- Six bypass diodes per module provide improved performance in partial shading
- Highest fire rating - Class A
- 30-year limited power warranty, 5-year materials and workmanship

#### Installation Systems Features:

- Cascade design allows water, snow and ice to easily flow off
- Increased air flow behind modules increases performance
- Mounting system conceals and protects wires for a clean wireless look
- Squirrel proof
- Installs on standard 4-foot centers - specifically designed for the US market
- Aesthetically pleasing modern appearance
- Customer colors available (architectural bronze standard)

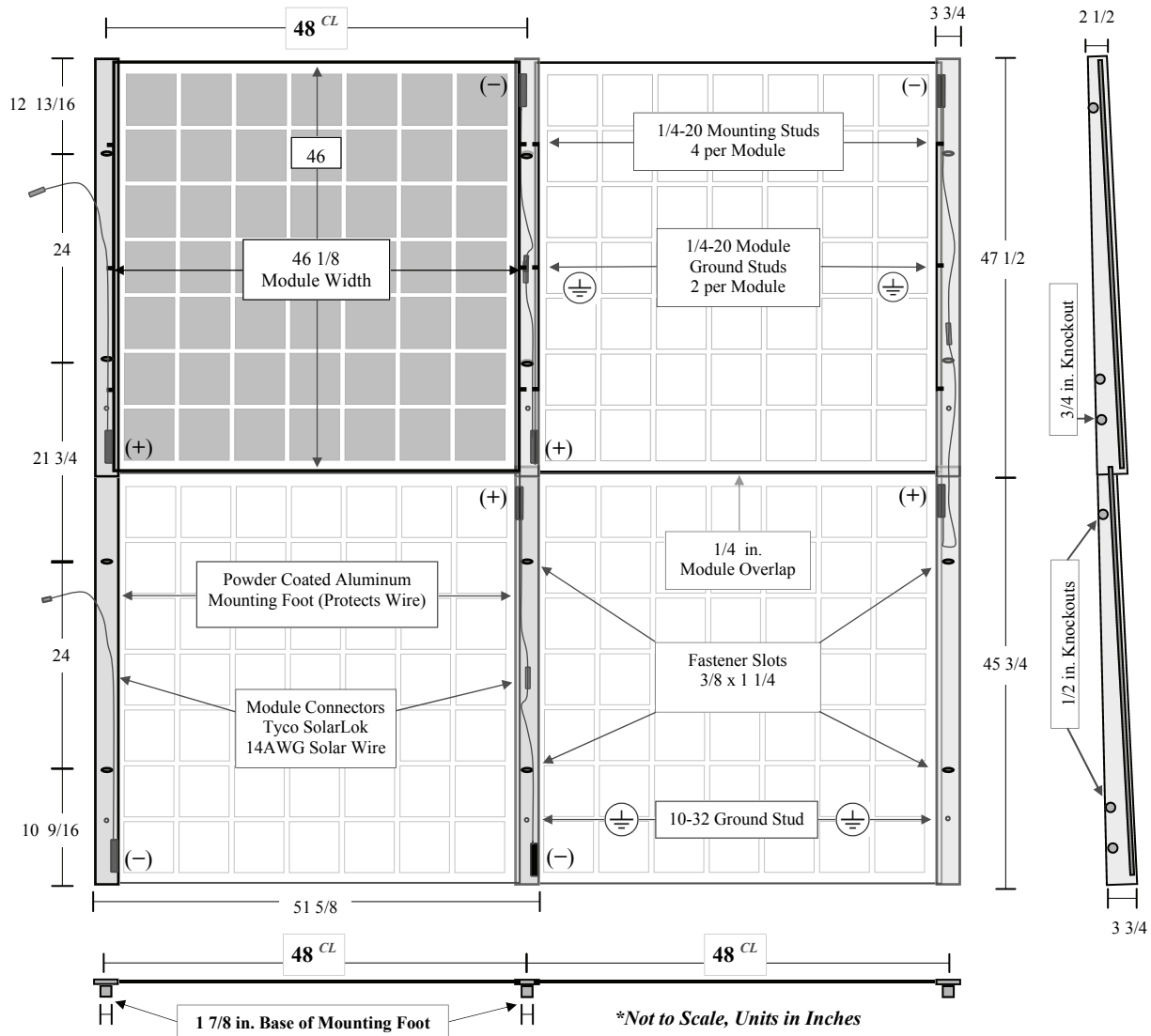


**Made in USA**

Washington \* Minnesota

Electrical Characteristics Measured at STC*	SiE160	SiE165	SiE170	SiE175	SiE180	SiE185	SiE190	SiE195	SiE200
Rated Power (Pmax) Watts	160	165	170	175	180	185	190	195	200
Maximum Power Voltage (Vmp)	24.7	24.8	24.8	24.9	25.0	25.1	25.3	25.5	25.6
Maximum Power Current (Imp)	6.5	6.7	6.9	7.0	7.2	7.4	7.5	7.7	7.8
Open Circuit Voltage (Voc)	29.9	30.0	30.0	30.1	30.2	30.3	30.5	30.5	30.6
Short Circuit Current (Isc)	7.6	7.7	7.8	7.8	7.8	7.9	7.9	8.2	8.4
Maximum System Voltage (VDC)	600								
Series Fuse Rating Amps (Amps-DC)	15								
Temperature Coefficients	Pmax: -0.566%/°C			Voc: -0.389%/°C			Isc: 0.109%/°C		

\* Standard Test Conditions (STC) at 1000w/m<sup>2</sup>, AM 1.5 spectrum, 77°F/25°C cell temp.



Complies to UL1703, specifications subject to change without notice.



Mechanical Specifications and Ratings			
Weight (module + mounts)	58 lbs. (~65 lbs. / ~4.1 lbs./ft <sup>2</sup> )	<b>Construction</b>	<b>Front:</b> 0.125 in. high transmissivity tempered glass
Cells	49 crystalline silicon cells wired in series (7 x 7)		<b>Back:</b> 0.125 in. tempered glass
Diodes	6 bypass diodes per module		<b>Encapsulant:</b> Advanced Encapsulant
Frame	0.09 in. aluminum alloy 5052 H32	<b>Mounting Foot</b>	0.125 in. powder coated aluminum alloy 5052 H32
	1/4-20 stainless steel studs with flange nuts	<b>Slope of Module</b>	1.85° (minimum mounting surface angle 5°)
Temperature Range	-40 to 194°F (-40 to 90°C)	<b>Fire Rating</b>	Class A
Design Load	125 psf	<b>Connectors (Wire)</b>	Tyco SOLARLOK (14 AWG Solar Wire, Length ~32 in.)



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