

# Vision Module System



The Vision Module System is the most aesthetic, efficient and durable bifacial solar module system available.

## FEATURES & BENEFITS

### INFINITY EDGE GLASS™

- PID free
- Continuous glass surface

### GLASS GLASS CONSTRUCTION

- Ultra durable
- Maximum efficiency

### INTEGRATED MOUNTING SYSTEM

- Built in wireways
- Concealed junction boxes and conductors
- Can be weatherproofed

### CUSTOM INFILL GLASS

- Custom shapes and sizes
- Custom silkscreen, vinyl, or frit graphic applications available



The Vision Module System offers designers unparalleled freedom to meet their project’s power and light transmittance requirements with an off-the-shelf, modular system. The Vision Module System is based on glass-glass bifacial modules offered in two primary form factors, each with a variety of cell layout and mounting options.

The L Series mounting options include long edge, short edge and corner mounts that create cantilevered glass edges for a floating glass edge at the perimeter of your array. The L Series also includes full perimeter mount options for the interior of the array.

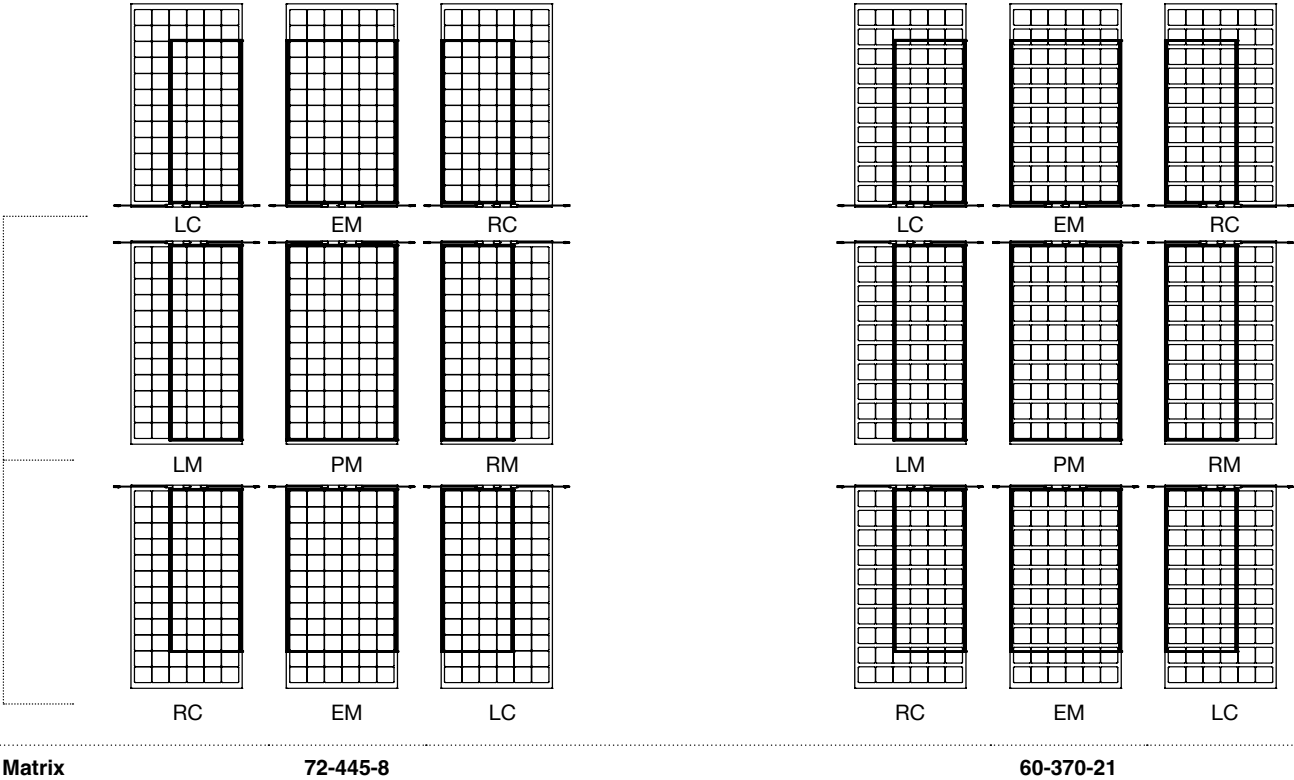
The S Series is an interior mount solution meaning all edges of the module are exposed. The S Series is ideal for unique module mounting scenarios and non-contiguous arrays.

The Vision Module system is configured by selecting the following:

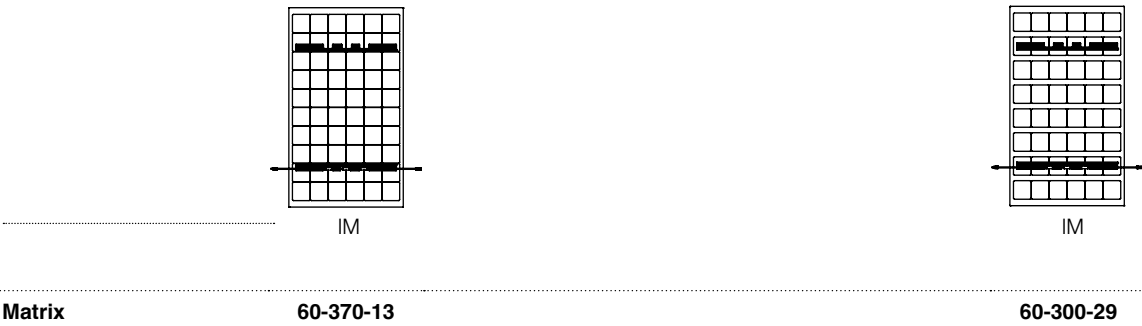
- Series** specifies module dimension.
- Matrix** determines cell count and resulting power and light transmittance.
- Mount** determines mounting frame type.

## MODULE CONFIGURATIONS

### L Series



### S Series



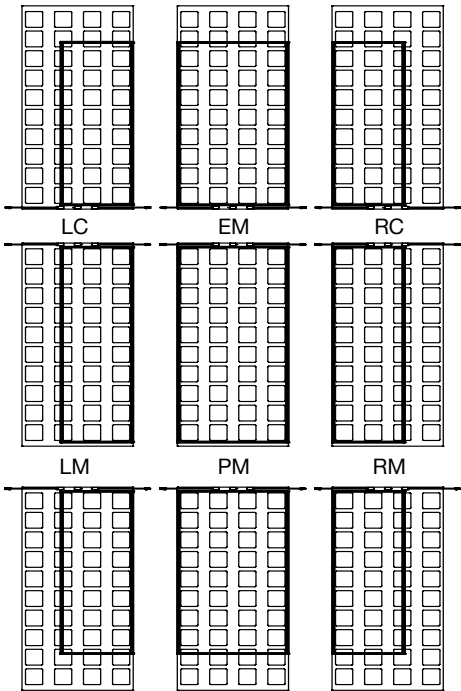
- Power Output is Rated Power at STC (front side)
- Light Transmittance is calculated based on cell coverage and not a result of testing



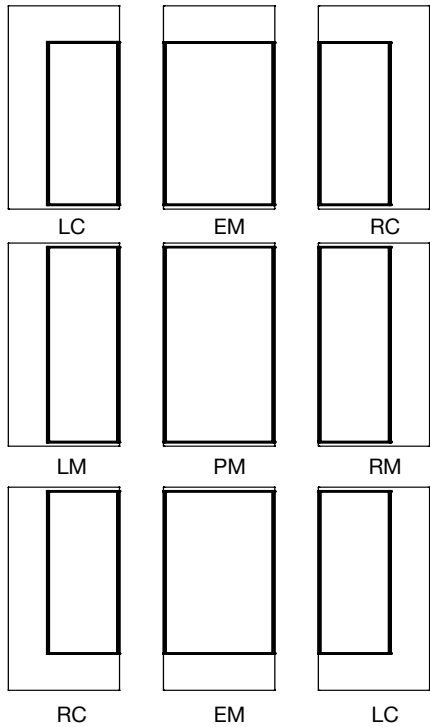
Series	Matrix	Power	Transmittance	Mount
Module Dimensions	Cell Count	Watts	%	Type
<b>L</b> 2134mm x 1078.85mm	<b>72</b>	430	08	<b>LC</b>
	<b>60</b>	355	21	<b>EM</b>
	<b>40</b>	240	47	<b>PM</b>
	<b>00</b>	000	86	<b>LM</b>
				<b>RM</b>
<b>S</b> 1797.50mm x 1072.50mm				<b>RC</b>
	<b>60</b>	355	13	<b>IM</b>
	<b>48</b>	285	29	
	<b>32</b>	190	50	
	<b>00</b>	000	88	

Example Part Number:

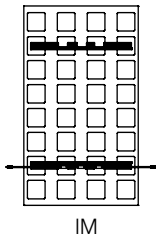
**L-72-430-08-LC**



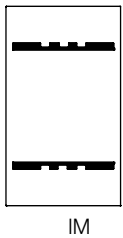
40-250-47



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32-200-50

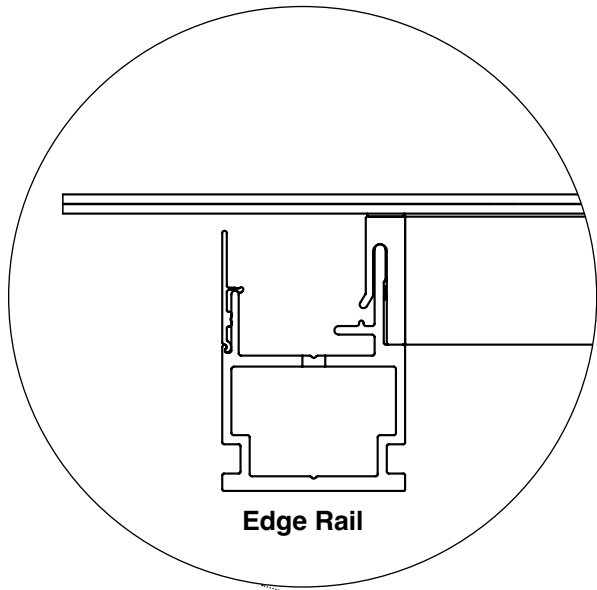


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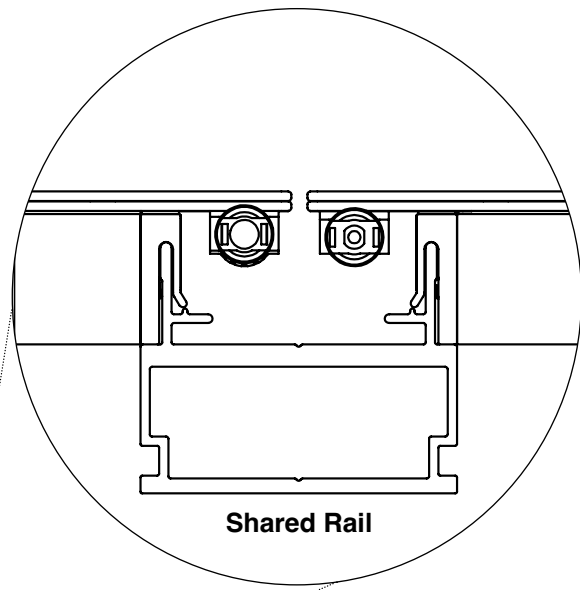
The Vision System features a super easy to design and install mounting rail system.

- Vision System Mounting rails run in portrait mode, parallel with the short side of the glass
- Integrated wireways that conceal all conductors and module junction boxes
- Vision System Mounting rails can be cut to length to fit any array and accomodate any module layout.

## L SERIES ARRAY CONFIGURATION OPTIONS



Edge Rail

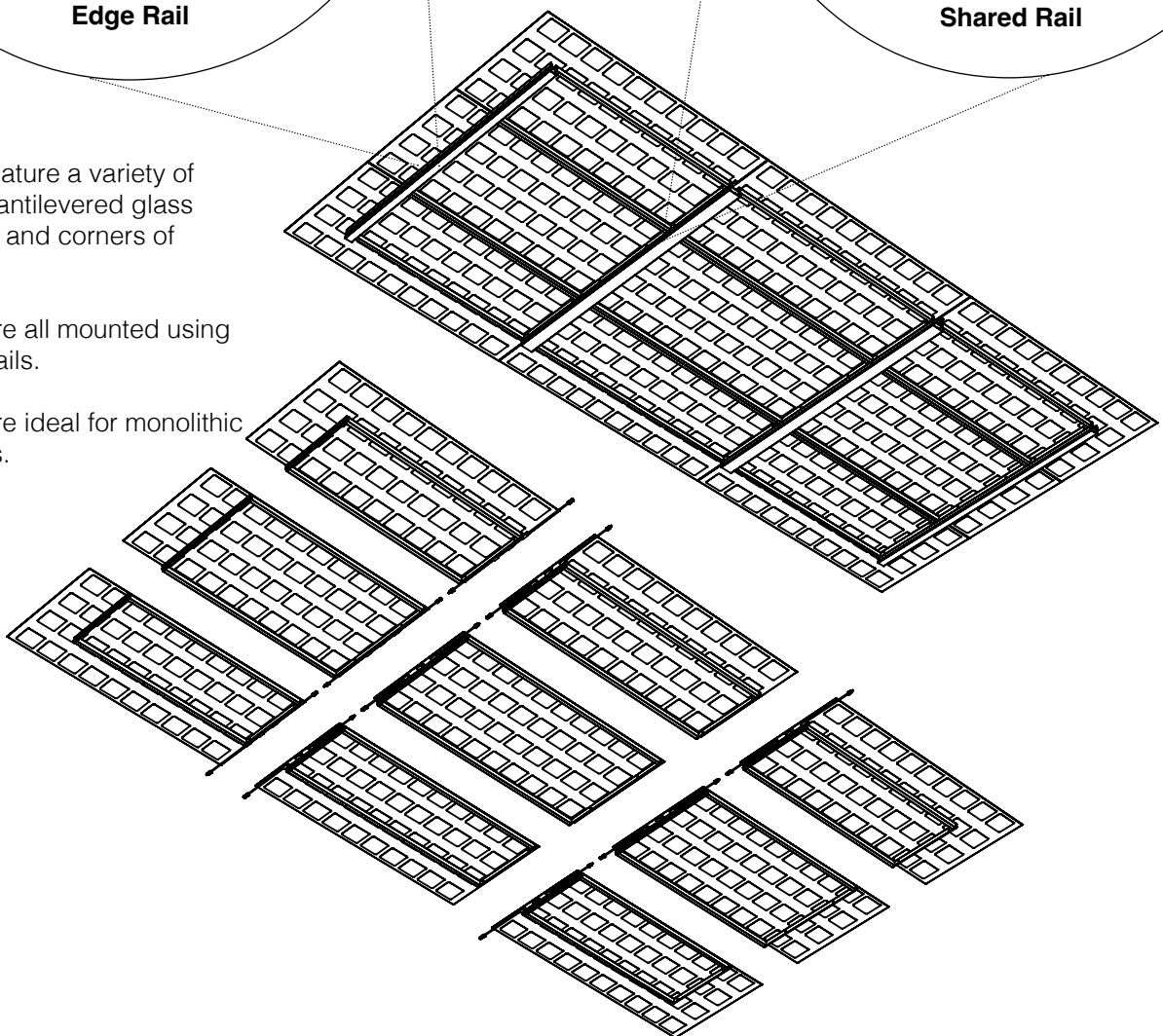


Shared Rail

**L Series** modules feature a variety of mounts to provide cantilevered glass edges on the edges and corners of arrays.

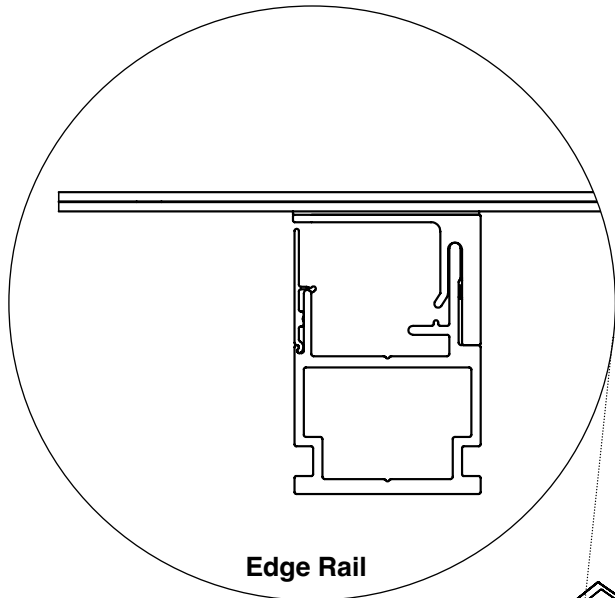
**L Series** modules are all mounted using Edge and Shared Rails.

**L Series** modules are ideal for monolithic or contiguous arrays.

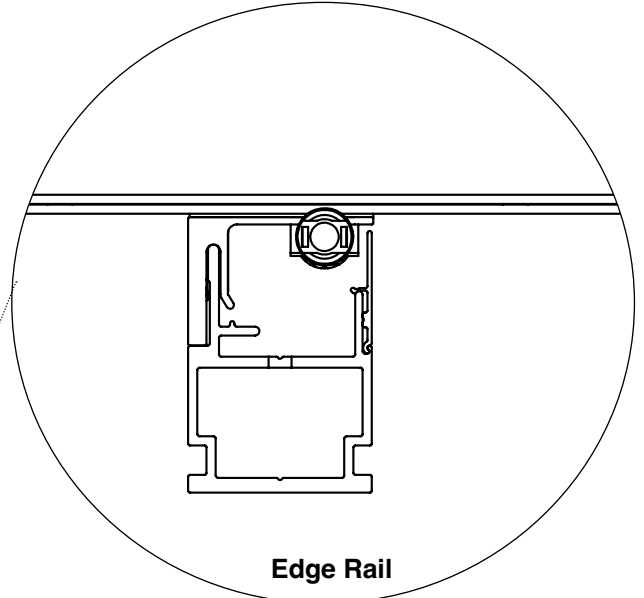




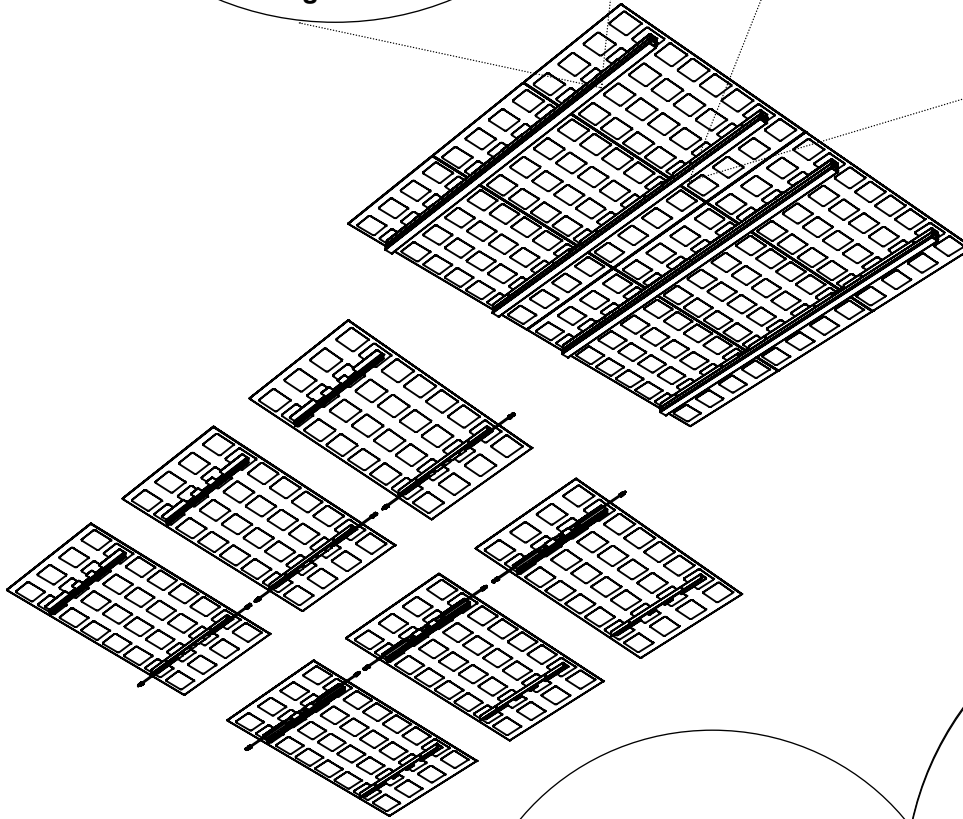
## S SERIES ARRAY CONFIGURATION OPTIONS



Edge Rail



Edge Rail



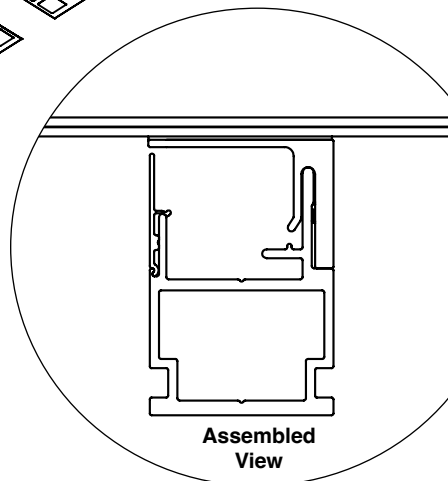
**Vision Module System** features an extremely simple, adjustable and unique mounting system.

Vision modules are mounted to the mounting rail by placing the module anywhere desired along the rail and then tightening with a simple set screw.

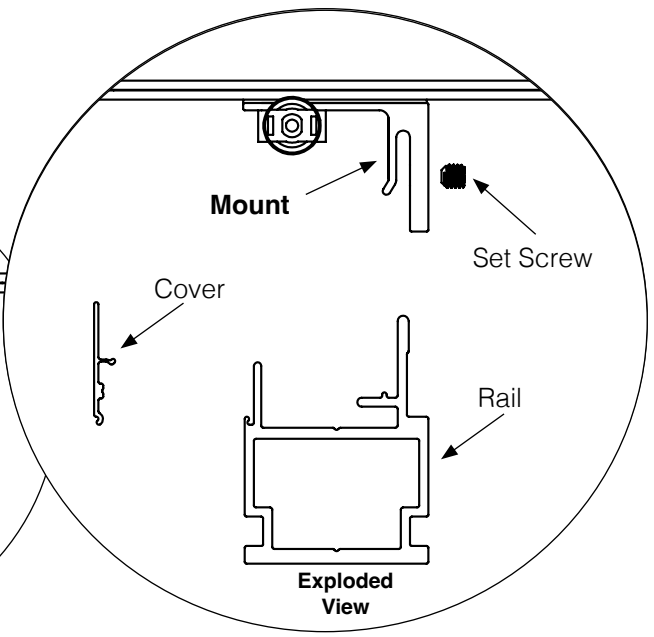
**S Series** modules feature interior mounts that provide floating glass edge visible on all sides of the module.

**S Series** modules are all mounted using Edge Rail meaning there are no shared rails.

**S Series** modules are ideal for unique installations and mounting configurations.



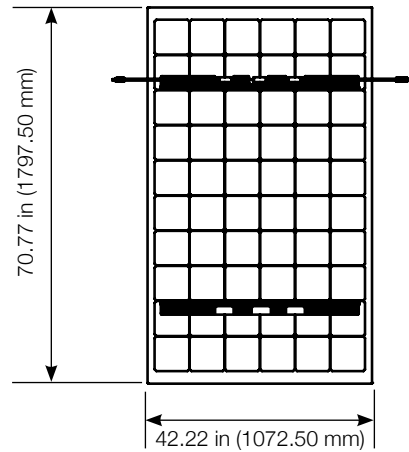
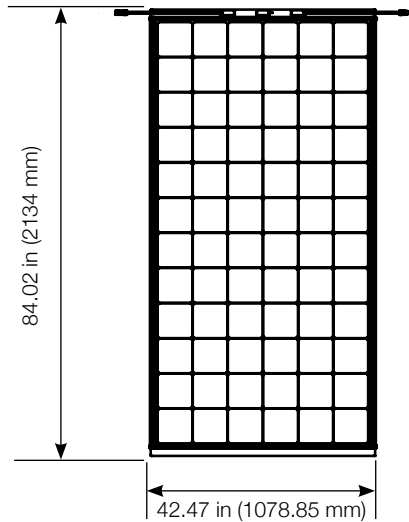
Assembled View




Exploded View

**Patent Pending**

## VISION SYSTEM SPECIFICATIONS

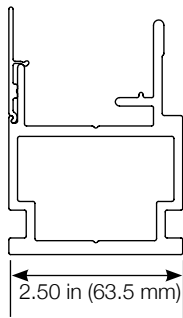


Series		L				S			
Matrix	Cells	72	60	40	00	60	48	32	00
	Power	430 W	355 W	240 W	0 W	355 W	285 W	190 W	0 W
	Transmittance	8%	21%	43%	86%	13%	29%	50%	88%
Peak Power Voltage (Vmp)		39.9 V	32.9 V	22.2 V	0 V	32.9 V	26.6 V	17.7 V	0 V
Maximum Power Current (Imp)		10.8 A	10.8 A	10.8 A	0 A	10.8 A	10.9 A	10.9 A	0 A
Open Circuit Voltage (Voc)		49.2 V	41.0 V	27.4 V	0 V	41.0 V	32.8 V	21.9 V	0 V
Short Circuit Current (Isc)		11.3 A	11.4 A	11.4 A	0 A	11.4 A	11.4 A	11.4v A	0 A
Module Efficiency		18.8%	15.5%	10.5%	0%	18.4%	14.8%	9.9%	0%
Operating Temperature		-40 °C to 85 °C							
Maximum System Voltage		1000 V							
Maximum Series Fuse Rating		20 A							
Power Tolerance		-0/+3%							
Solar Cell		Monocrystalline Bifacial 6.5" x 6.5" (166 mm x 166 mm)							
Cell Layout		6 x 12	6 x 10	4 x 10	0	6 x 10	6 x 8	4 x 8	0
Module Dimensions		84.02 in x 42.47 in x 2.06 in (2134 mm x 1078.85 mm x 52.17 mm)				70.77 in x 42.22 in x 2.06 in (1797.50 mm x 1072.50 mm x 52.17 mm )			
Module Area		24.6 ft² (2.3m²)				20.8 ft2 (1.9m² )			
Front/ Back Glass		Fully Tempered 3.2mm Low-Iron PV Glass							
Module Weight		105.5 lbs (47.8 kg)				78.6 lbs (35.6 kg)			
System Weight / Area		SD 4.85 psf (23.68 kg/m²) MD 5.06 psf (24.71 kg/m²)				SD 4.55 psf (22.22 kg/m²) MD 4.81 psf (23.48 kg/m²)			
Static Load		L Series +113 psf/ -50 psf				S Series +113 psf/ -50 psf			
Output Cables		12 Awg. PV Wire and MC4 Compatible Connectors							
Fire Rating		Class A							
Certifications		UL 61730 PENDING							
Warranty		10 years Workmanship / 30 years Linear Power Production (Power Production Warranty on Front Side STC Only)							

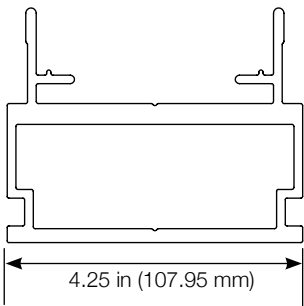
## TEMPERATURE COEFFICIENTS

Nominal Operating Cell Temperature (NOCT)	43.6 °C
Power Temperature Coefficient (Pmpp)	-0.38 % / °C
Voltage Temperature Coefficient (Voc)	-0.36 % / °C
Current Temperature Coefficient (Isc)	0.07 % / °C

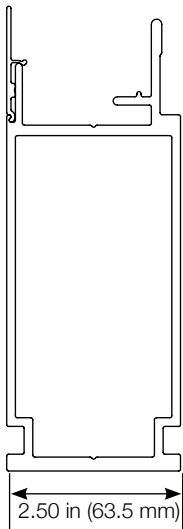
## VISION MOUNTING RAIL



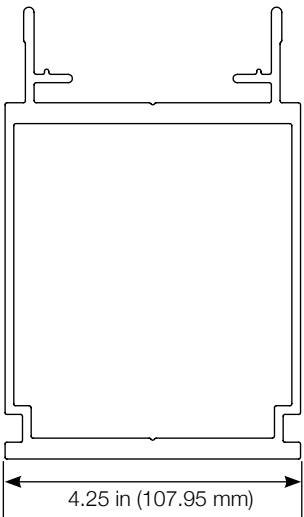
**SD Edge Rail**



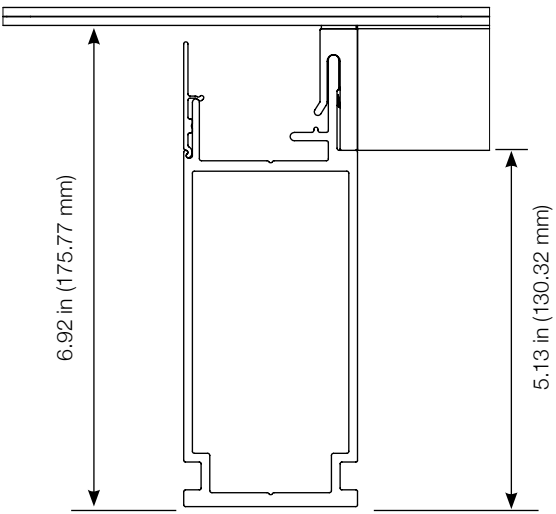
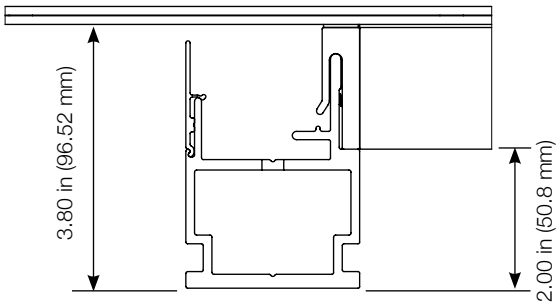
**SD Shared Rail**



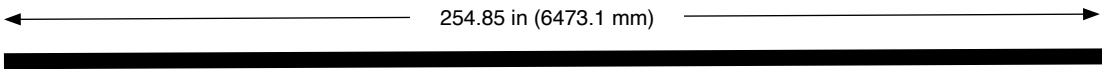
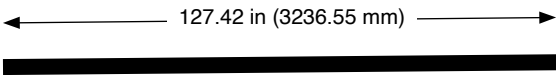
**MD Edge Rail**



**MD Shared Rail**



## VISION RAIL LENGTHS



## VISION RAIL SPANS\*

	Wind Speed (mph)	Snow Load (psf)	SD	MD
			Max Span (ft)	Max Span (ft)
Honolulu	110	0	9' 3"	20'
Los Angeles	110	0	9' 3"	20'
Atlanta	115	5	8' 9"	18' 6"
Denver	110	20	7' 9"	16'
Miami	180	0	7' 3"	15' 3"
Boston	130	40	6'	12' 6"

\*Assumes multiple span condition. Additional site factors outside the scope of this chart can increase or decrease the allowable span.



## VISION SYSTEM CUSTOMIZATION OPTIONS



The Vision Module System offers the ability to create custom infill glass modules to allow the integration of non-functional modules to create continuous arrays. Vision custom infill modules can be created in almost any shape and size and incorporate any of the Vision module mounts. Custom infill modules can be used to create “wedges” in curved arrays, provide infill in shaded areas, integrate graphics or logos, create curved edges, basically, if you can dream it, we can build it.

Contact us to learn more about Vision custom infill modules.

## VISION SYSTEM WEATHERPROOFING OPTIONS

The Vision Module System can be weatherproofed to create sealed, overhead arrays. There are a range of weatherproofing options in terms of cost, durability and project requirements.

Contact us to learn more about weatherproofing options that would be appropriate for your project.

System	Color	Cost	Durability	Warranty
3M 7070 UV	Transparent	Low	Good	NA
3M Extreme Sealing Tape	Opaque	Medium	Better	NA
Glazing	Opaque	High	Best	Provided by installer