

The solar dream factory



LUMOS



What we do

Solar power and shade are a match made in heaven. Our focus is on the magical interaction that occurs where solar panels produce power on one side and shade on the other.



Our module systems are designed to optimize solar power generation and the shade and shelter created by installing solar in overhead applications like canopies, awnings, carports, etc..



Who we are

Lumos Solar was founded in 2006 with the mission of helping solar become a mainstream energy source. We saw a need in the market for solar products that were efficient, durable, functional, and beautiful. We believe solar can be an interactive and functional design element that enhances users experience and enjoyment and does not have to be an afterthought.

Our systems approach to product design ensures that all products work together seamlessly to achieve the best aesthetics and functionality.

“When I am working on a problem, I never think about beauty, but when I have finished, if the solution is not beautiful, I know it is wrong.”

Buckminster Fuller

We use the highest quality components and state-of-the-art US manufacturing to create the most beautiful and functional solar products available.

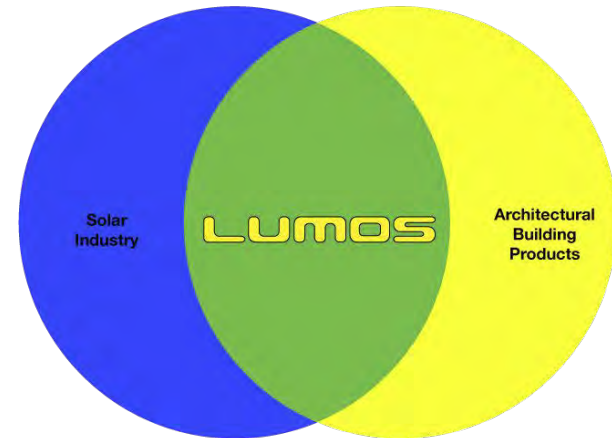






How we do it

Lumos Solar designs, engineers and produces architectural solar products. We support design professionals, installers, developers and facility owners in integrating our products into new and existing buildings. Helping take projects from concept to installation is our specialty and we have an unparalleled track record of successful project completion.



Our unique solutions occupy a space where the solar industry and architectural building products overlap.

We are here to help make your solar dreams come true.



LUMOS

LUMOS

MADE IN
USA
★ ★ ★



SolarZone Cafe

Stand alone battery based solar charging & shade structure.

System Overview

The **SolarZone** is an off-grid solar charging station and shade structure. It can be installed anywhere and does not require foundations or underground electrical work. Featuring Bluetooth programmable LED lighting and data monitoring, the **SolarZone** is available with optional bench seats and is ADA Compatible.

The **SolarZone** solar charging and shade table is the perfect solution for creating a comfortable and functional outdoor workspace or classroom. Ideal for outdoor spaces at universities, colleges, schools, corporate campuses, stadiums, cafes, restaurants, soccer fields, golf courses, or anywhere you need a seat in the shade and a place to get a charge!

PRODUCT FEATURES

- Meets the highest wind, snow and seismic loads
- Concealed conductors
- Concealed junction boxes
- No foundation required
- No underground electrical
- Bolt together assembly & pre-wired

MATERIAL & FINISH

- Powder coated steel construction
- CNC milled for precision fit
- ADA compliant

ELECTRICAL COMPONENTS

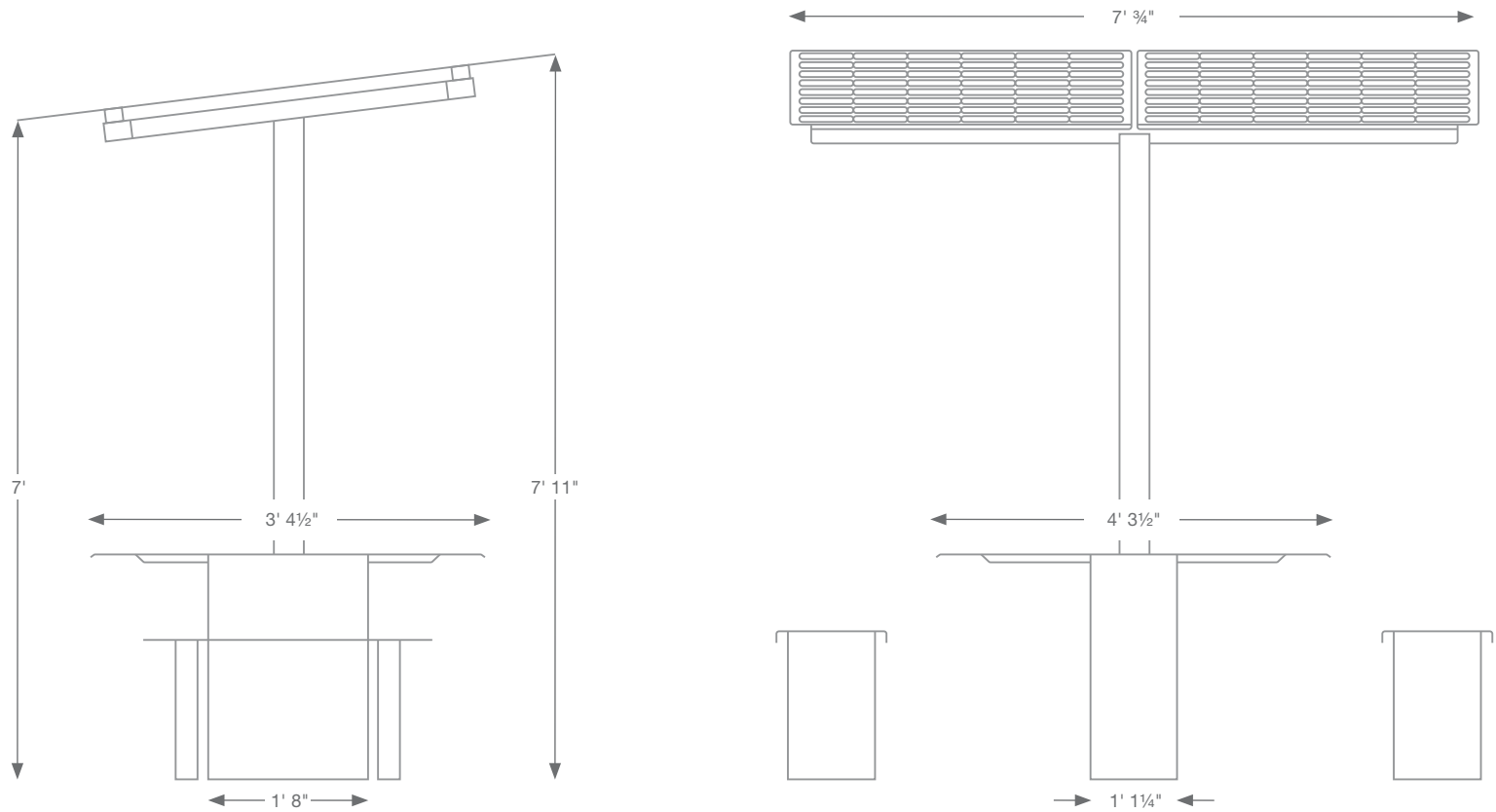
- (2) Wireless chargers for mobile devices
- (2) 110v weatherproof outlets with USB A and C
- Integrated LED lighting
- Bluetooth data monitoring and controls

TECHNICAL DETAILS

Solar Capacity:	750W
Nominal battery capacity:	1,500 Wh (12V, 125Ah)
Allowable depth of discharge:	50%
Battery chemistry:	AGM
Maximum continuous load (77°F):	500W

COVERAGE

- 30 year warranty on Lumos Vision Modules
- 5 year warranty on electrical components
- 2 year warranty on batteries
- 1 year warranty on **SolarZone** finish



System Details

With it's clean, timeless design, precision construction and best in class components, the **SolarZone** is built to last.

CONSTRUCTION



- Powder coated steel construction
- All components CNC milled for precision fit
- All welds completed by certified welders

CUSTOMIZATION



- **SolarZones** are primed and powder coated with a minimum coating thickness of 10mil and maximum of 15mil
- Coatings tested per ASTM D3451 guidelines
- (9) standard Puroplaz colors and custom colors available

LIGHTING



- Integrated outdoor rated LED lighting
- Bluetooth lighting controls



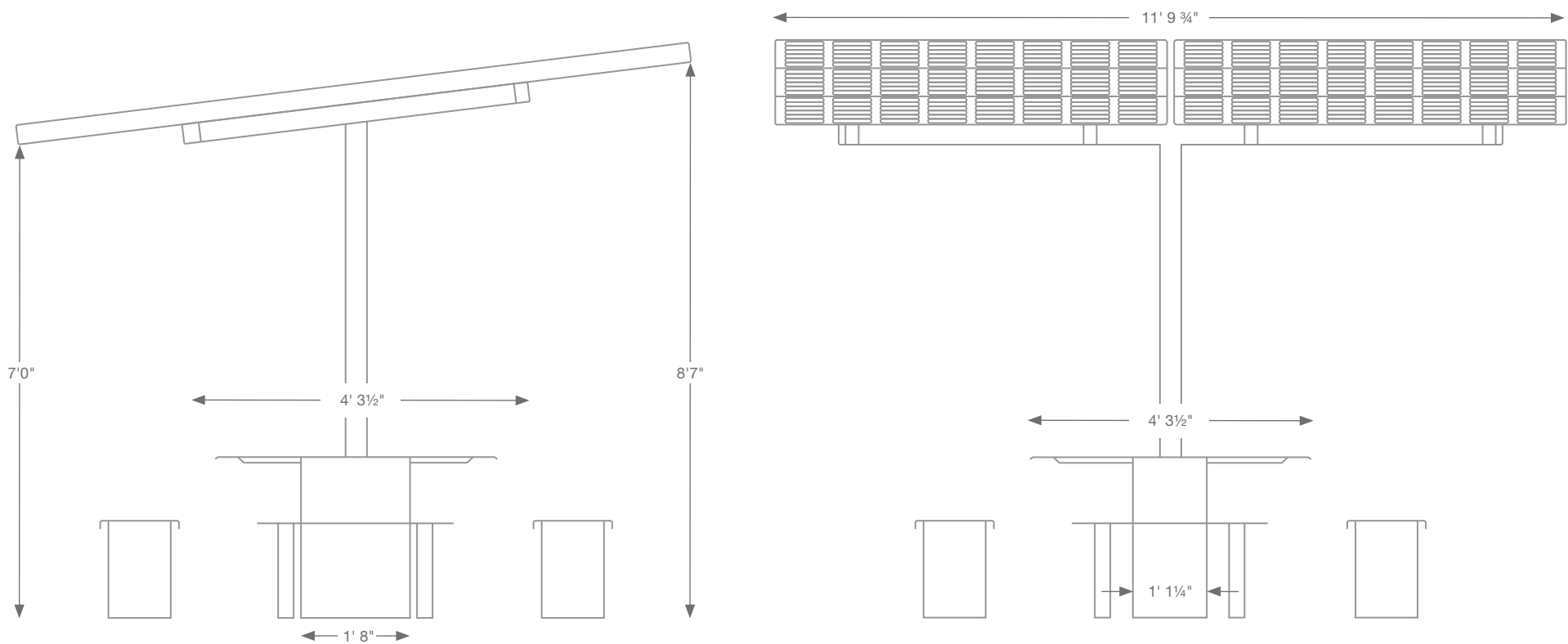
SolarZone Team

Stand alone battery based solar charging & shade structure.

System Overview

The **SolarZone** is an off-grid solar charging station and shade structure. It can be installed anywhere and does not require foundations or underground electrical work. Featuring Bluetooth programmable LED lighting and data monitoring, the **SolarZone** is available with optional bench seats and is ADA Compatible.

The **SolarZone** solar charging and shade table is the perfect solution for creating a comfortable and functional outdoor workspace or classroom. Ideal for outdoor spaces at universities, colleges, schools, corporate campuses, stadiums, cafes, restaurants, soccer fields, golf courses, or anywhere you need a seat in the shade and a place to get a charge!



PRODUCT FEATURES

- Meets the highest wind, snow and seismic loads
- Concealed conductors
- Concealed junction boxes
- No foundation required
- No underground electrical
- Bolt together assembly & pre-wired

MATERIAL & FINISH

- Powder coated steel construction
- CNC milled for precision fit
- ADA compliant

ELECTRICAL COMPONENTS

- (4) Wireless chargers for mobile devices
- (4) 110v weatherproof outlets with USB A and C
- Integrated LED lighting
- Bluetooth data monitoring and controls

TECHNICAL DETAILS

Solar Capacity:	1710W
Nominal battery capacity:	2,040 Wh (12V, 170Ah)
Allowable depth of discharge:	50%
Battery chemistry:	AGM
Maximum continuous load (77°F):	800W

COVERAGE

- 30 year warranty on Lumos Vision Modules
- 5 year warranty on electrical components
- 2 year warranty on batteries
- 1 year warranty on **SolarZone** finish

System Details

With it's clean, timeless design, precision construction and best in class components, the **SolarZone** is built to last.

CONSTRUCTION



- Powder coated steel construction
- All components CNC milled for precision fit
- All welds completed by certified welders

CUSTOMIZATION



- SolarZones are primed and powder coated with a minimum coating thickness of 10mil and maximum of 15mil
- Coatings tested per ASTM D3451 guidelines
- (9) standard Puroplaz colors and custom colors available

LIGHTING



- Integrated outdoor rated LED lighting
- Bluetooth lighting controls



SolarScapes Classic

The original wide flange design for a classical industrial look.



System Overview

SolarScapes are modular solar structures made from powder coated aluminum or steel with virtually infinite configurations to meet the needs of any project.

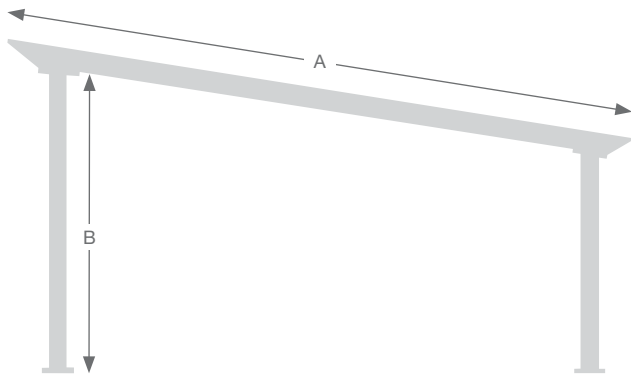
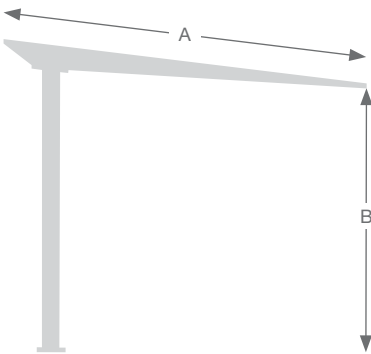
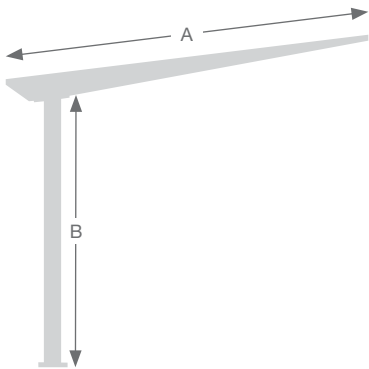
Built with state-of-the-art U.S. manufacturing, **Solar**Scapes integrate our frameless Vision Module System and meet the highest snow, wind, hail ratings, giving you unbeatable aesthetics, functionality and durability.

- Meets the highest high wind, snow, and seismic loads
- Powder coated aluminum or steel construction
- Bolt together assembly with no field welding
- Stamped structural engineering
- Foundation design
- Permit package

Structural Configurations

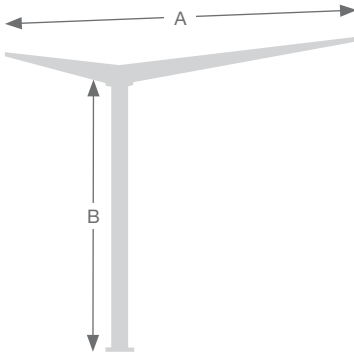
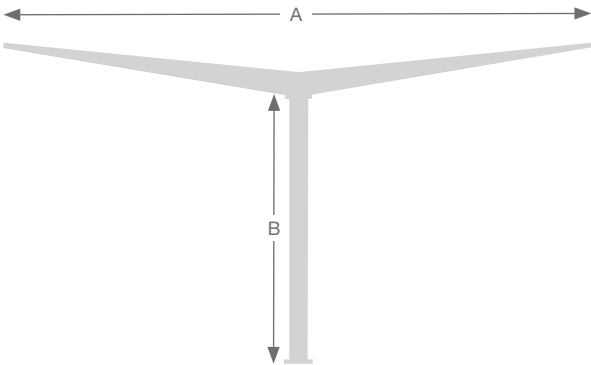
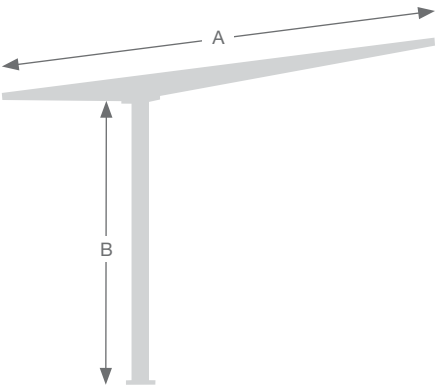
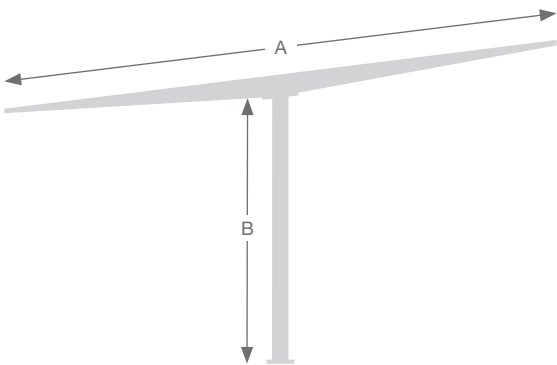
With seven primary pre-engineered shapes, a range of column spacing options and cantilever span capabilities, **SolarScapes** have you covered.

- Classic Structures only available in steel.
- Standard column spacing up to 20’. Longer spans can be accommodated depending on location.
- Standard 7° Tilt on all **SolarScape** structures.



MODEL	LS	HS	DS
S Type Maximum Modules Deep (A)	4	4	10
L Type Maximum Modules Deep* (A)	3	3	10
Standard Low Side Clearance (B)	8'	8'	8'
Tall Low Side Clearance (B)	14'	14'	14'

**Depends on L Type Module used*



MODEL	TS	OTS	VS	OVS
S Type Maximum Modules Deep (A)	7	6	7	7
L Type Maximum Modules Deep* (A)	6	6	6	6
Standard Low Side Clearance (B)	8'	8'	8'	8'
Tall Low Side Clearance (B)	14'	14'	14'	14'

**Depends on L Type Module used*

Mechanical Specifications

Use the table below to determine which structure type will provide the desired coverage for your project.

VISION S	MODULES DEEP	ARRAY DEPTH	ARRAY WIDTH	LS	HS	DS	TS	VS	OTS	OVS
	1	5' - 10" 7/8	Unlimited	X	X	X	X			
	2	11' - 9" 3/4	Unlimited	X	X	X	X	X		
	3	17' - 8" 3/4	Unlimited	X	X	X	X		X	X
	4	23'- 7" 3/4	Unlimited	X	X	X	X	X	X	X
	5	29' - 6" 3/4	Unlimited			X	X		X	X
	6	35' - 5" 3/4	Unlimited			X	X	X	X	X
	7	41' - 4" 3/4	Unlimited			X	X		X	X
	8	47' - 3" 3/4	Unlimited			X	X	X		
	9	53' - 2" 3/4	Unlimited			X				
	10	59' - 1" 3/4	Unlimited			X				
VISION L										
	1	7' - 10" 1/8	Unlimited	X	X	X	X			
	2	14' - 0" 1/4	Unlimited	X	X	X	X	X		
	3	21' - 0" 1/2	Unlimited	X	X	X	X		X	X
	4	28' - 0" 2/3	Unlimited			X	X	X	X	X
	5	35' - 1"	Unlimited			X	X		X	X
	6	42' - 1" 1/4	Unlimited			X	X	X		
	7	49' - 1" 1/2	Unlimited			X	X			
	8	56' - 1" 3/4	Unlimited			X	X			
	9	63' - 2"	Unlimited			X				
	10	70' - 2" 1/4	Unlimited			X				

System Details

SolarScapes are precision fabricated structures that are built to last and look and work great for many years.

CONSTRUCTION



- Classic structures produced from steel
- All welding completed per AWS D1

CUSTOMIZATION



- SolarScapes are primed and powder coated with a minimum coating thickness of 5mil and a maximum of 10mil
- Duplex galvanized and powder coating finish available
- Coatings tested per ASTM D3451 guidelines
- Over 50 standard super durable powder coat color options. Custom color match is also available.

LIGHTING



- Outdoor rated LED lighting option
- Project specific photometric analysis and lighting engineering



SolarScapes Modern

Modular solar structures that provide shade & power.



System Overview

SolarScapes are modular solar structures made from powder coated aluminum or steel with virtually infinite configurations to meet the needs of any project.

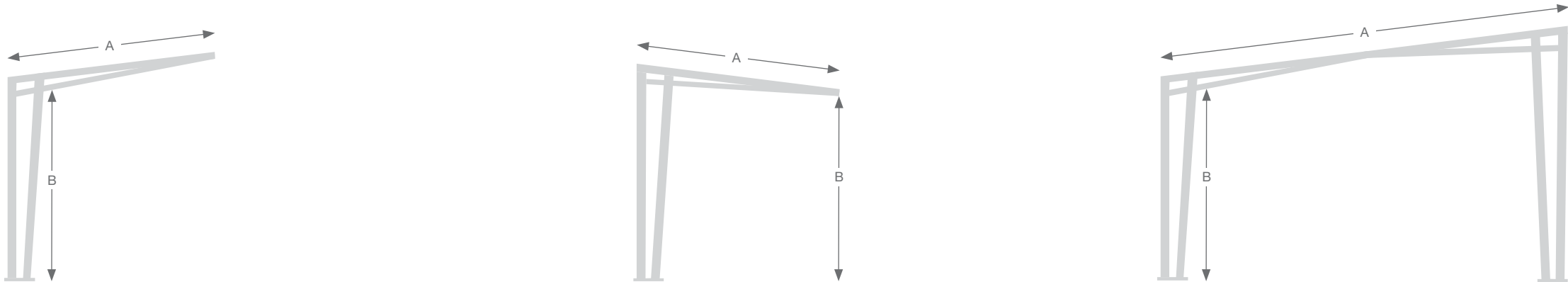
Built with state-of-the-art U.S. manufacturing, **Solar**Scapes integrate our frameless Vision Module System and meet the highest snow, wind, hail ratings, giving you unbeatable aesthetics, functionality and durability.

- Meets the highest high wind, snow, and seismic loads
- Powder coated aluminum or steel construction
- Bolt together assembly with no field welding
- Stamped structural engineering
- Foundation design
- Permit package

Structural Configurations

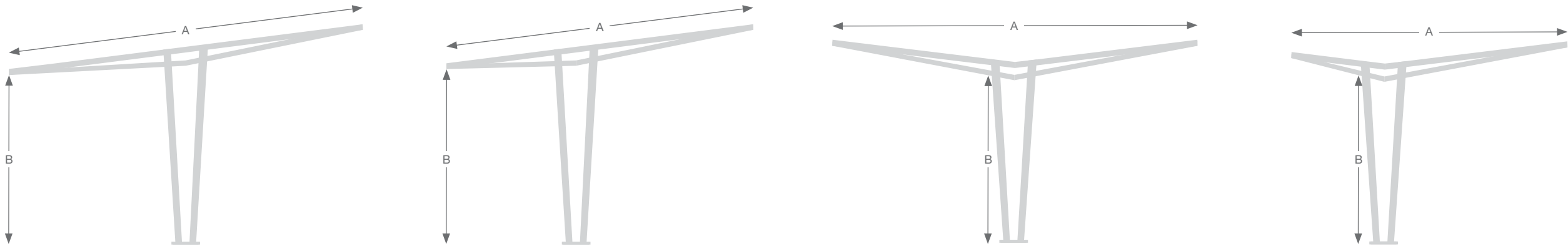
With seven primary pre-engineered shapes, a range of column spacing options and cantilever span capabilities, **SolarScapes** have you covered.

- Modern Structures available in steel or aluminum
- Standard column spacing up to 20'. Longer spans can be accommodated depending on location.
- Standard 7° Tilt on all **SolarScape** structures.



MODEL	LS	HS	DS
S Type Maximum Modules Deep (A)	4	4	10
L Type Maximum Modules Deep* (A)	3	3	10
Standard Low Side Clearance (B)	8'	8'	8'
Tall Low Side Clearance (B)	14'	14'	14'

**Depends on L Type Module type used*



MODEL	TS	OTS	VS	OVS
S Type Maximum Modules Deep (A)	7	6	7	7
L Type Maximum Modules Deep* (A)	6	6	6	6
Standard Low Side Clearance (B)	8'	8'	8'	8'
Tall Low Side Clearance (B)	14'	14'	14'	14'

**Depends on L Type Module type used*

Mechanical Specifications

Use the table below to determine which structure type will provide the desired coverage for your project.

VISION S	MODULES DEEP	ARRAY DEPTH	ARRAY WIDTH	LS	HS	DS	TS	VS	OTS	OVS
	1	5' - 10" 7/8	Unlimited	X	X	X	X			
	2	11' - 9" 3/4	Unlimited	X	X	X	X	X		
	3	17' - 8" 3/4	Unlimited	X	X	X	X		X	X
	4	23'- 7" 3/4	Unlimited	X	X	X	X	X	X	X
	5	29' - 6" 3/4	Unlimited			X	X		X	X
	6	35' - 5" 3/4	Unlimited			X	X	X	X	X
	7	41' - 4" 3/4	Unlimited			X	X		X	X
	8	47' - 3" 3/4	Unlimited			X	X	X		
	9	53' - 2" 3/4	Unlimited			X				
	10	59' - 1" 3/4	Unlimited			X				
VISION L										
	1	7' - 0" 1/8	Unlimited	X	X	X	X			
	2	14' - 0" 1/4	Unlimited	X	X	X	X	X		
	3	21' - 0" 1/2	Unlimited	X	X	X	X		X	X
	4	28' - 0" 2/3	Unlimited			X	X	X	X	X
	5	35' - 1"	Unlimited			X	X		X	X
	6	42' - 1" 1/4	Unlimited			X	X	X		
	7	49' - 1" 1/2	Unlimited			X	X			
	8	56' - 1" 3/4	Unlimited			X	X			
	9	56' - 1" 3/4	Unlimited			X				
	10	70' - 2" 1/4	Unlimited			X				

System Details

SolarScapes are precision fabricated structures that are built to last and look and work great for many years.

CONSTRUCTION



- Structures produced from aluminum or steel depending on project requirements
- All components CNC milled for precision fit
- All hardware 18–8 stainless steel
- All welding completed per AWS D1.2
- All welds third party inspected and ultrasonically tested

CUSTOMIZATION

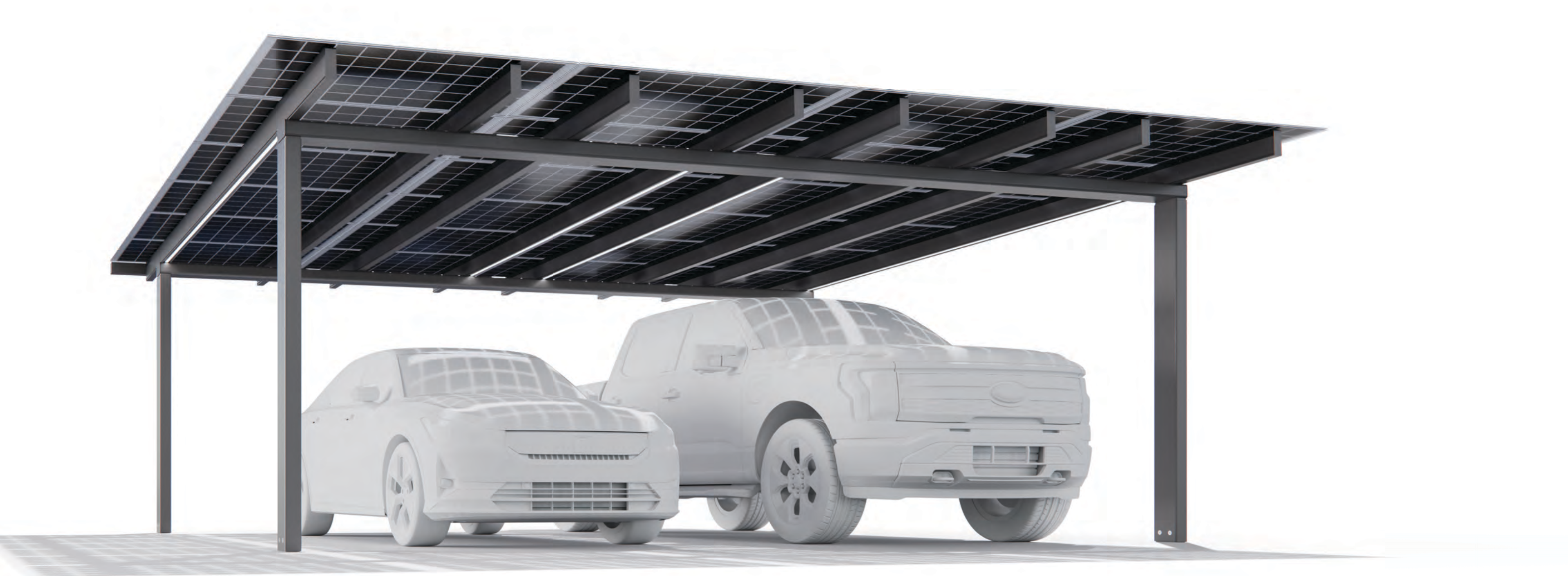


- **Solar**Scapes are primed and powder coated with a minimum coating thickness of 5mil and a maximum of 10mil
- Coatings tested per ASTM D3451 guidelines
- Over 50 standard super durable powder coat color options. Custom color match is also available.

LIGHTING



- Outdoor rated LED lighting option
- Project specific photometric analysis and lighting engineering



SolarPort

Start every morning with a full tank of sunshine



System Overview

The **SolarPort** changes everything. A **SolarPort** is like having your own gas pump where the fuel is free, never runs out and has no emissions.

According to the US Department of Transportation, Americans drive on average, 13,476 miles per year, or 36.92 miles per day. Using the average EV's energy consumption, this translates to about 11.81 kWh per day, 353.3 kWh per month and 4,310.65 kWh per year.

Check out the table below to get an idea how much energy a **SolarPort** will produce at your location

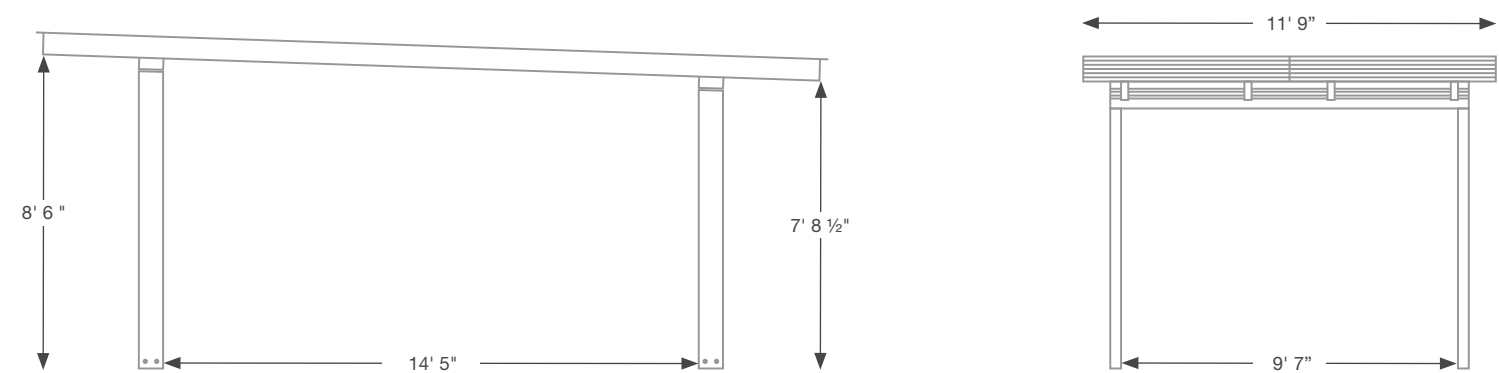
ESTIMATED ANNUAL PRODUCTION (KWH)								
	SYSTEM SIZE (W)	LOS ANGELES	MIAMI	DENVER	AUSTIN	ATLANTA	BOSTON	SEATTLE
SolarPort Single	4,260	6,749	6,398	6,286	6,042	5,770	5,174	4,356
SolarPort Double	8,520	13,498	12,796	12,572	12,084	10,348	10,348	8,712

A **SolarPort** can produce all of the energy you need to drive just from the sun. How cool is that?

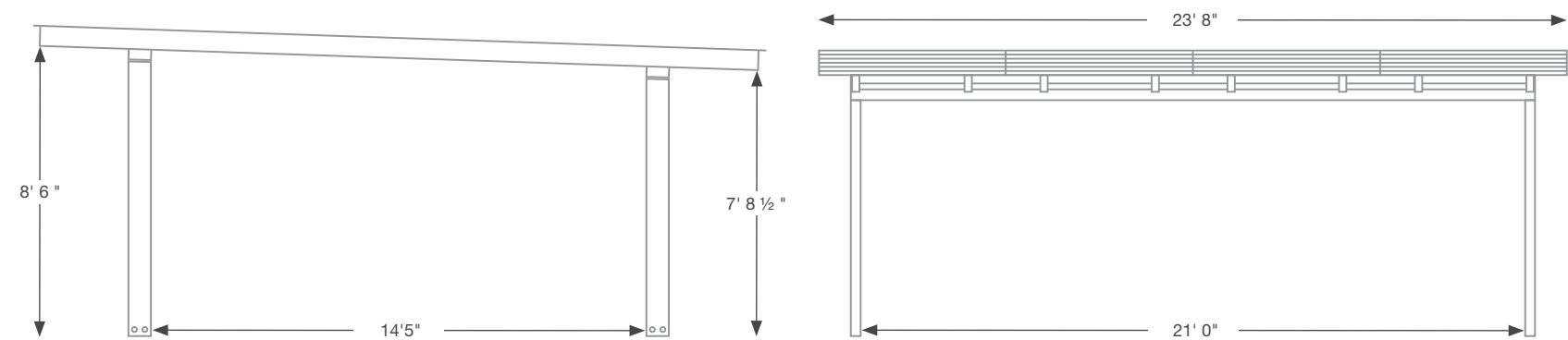
Structural Configurations

The **SolarPort** is way more than just a solar array to charge your EV, it is also a beautiful free standing solar structure that provides a weatherproof cover for your car. The **SolarPort** comes standard with integrated LED lighting, leveling feet and is available in Single and Double car configurations.

SolarPort Single



SolarPort Double



DETAILS

SolarPort Single: (12) Vision S60 355w Modules
System Size 4.26kW

SolarPort Double: (24) Vision S60 355w Modules
System Size 8.52kW

INCLUDES

- Integrated LED lighting
- Integrated leveling
- Optional gutter and downspout

MATERIAL & FINISH

- Steel
- Powder Coat

COLOR

- **SolarPorts** are powder coated with Puroplaz thermoplastic powder for the highest weathering capability and corrosion resistance
- (9) Standard Puroplaz colors available

System Details

SolarPorts are precision fabricated structures that are built to last and look and work great for many years.

CONSTRUCTION



- Powder coated steel construction
- All components CNC milled for precision fit
- All welds completed by certified welders

CUSTOMIZATION

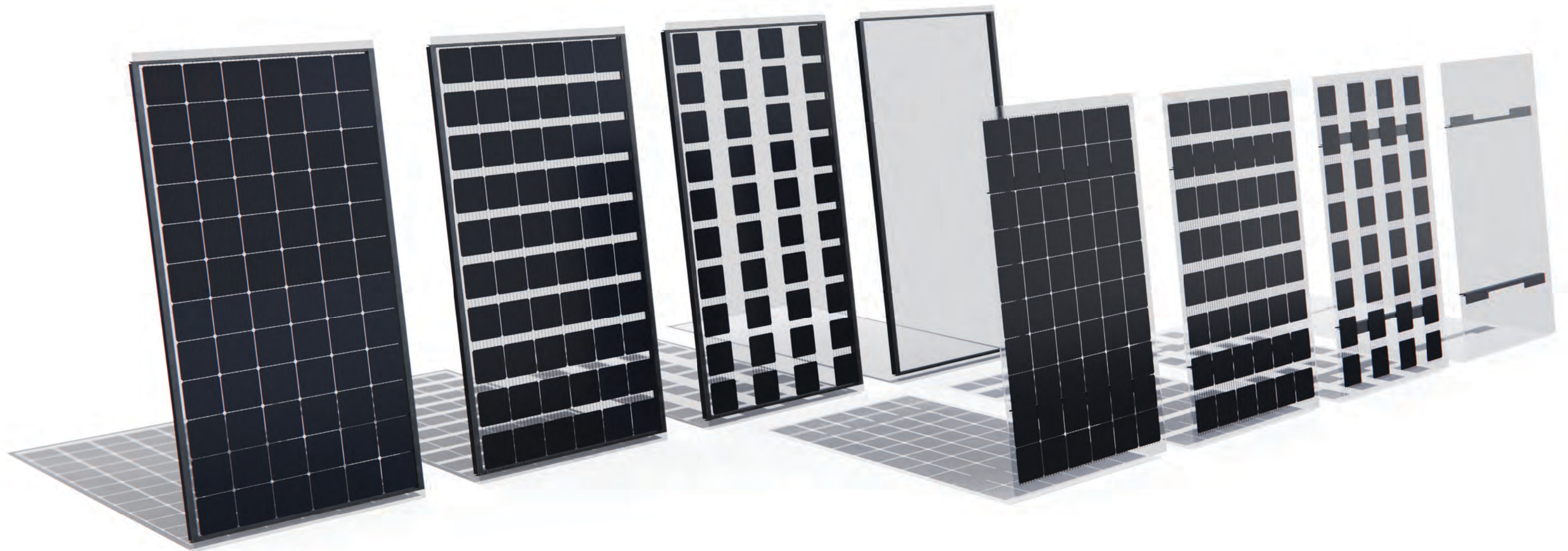


- SolarPorts are powder coated with Puroplaz thermoplastic powder for the highest weathering capability and corrosion resistance
- (9) Standard Puroplaz colors available

LIGHTING



- Integrated outdoor rated LED lighting



Vision Module System

The state of the art system for overhead solar

System Overview

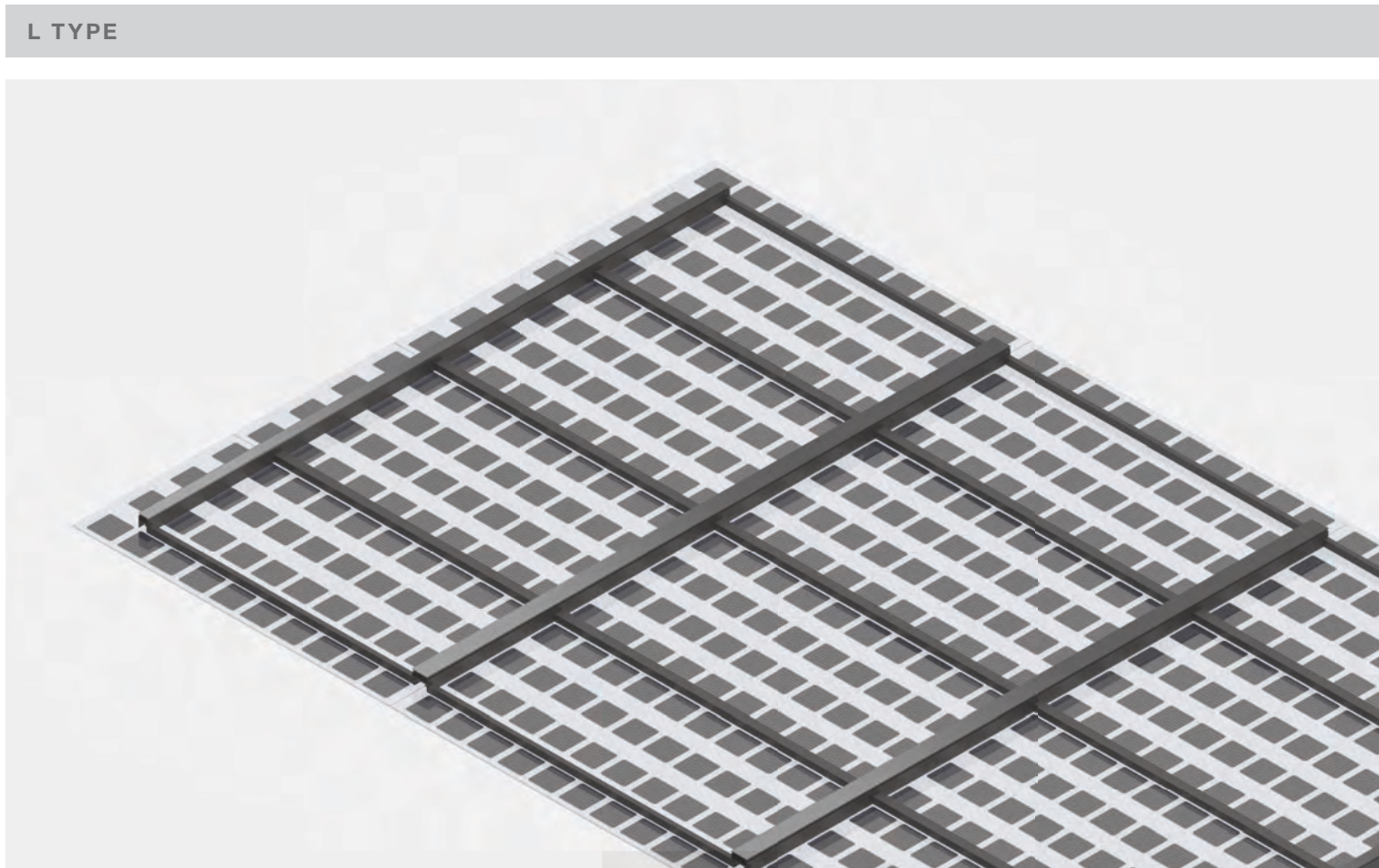
The Vision Module System is an integrated module and racking system that offers designers unparalleled freedom to meet their project's power and light transmittance requirements with an off-the-shelf, modular system. The Vision Module System is based on glass-glass bifacial modules available in two primary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

- Numerous cell layout options
- Ultra durable glass glass construction
- Integrated wireway
- Concealed conductors
- Concealed junction boxes
- Weatherproofing



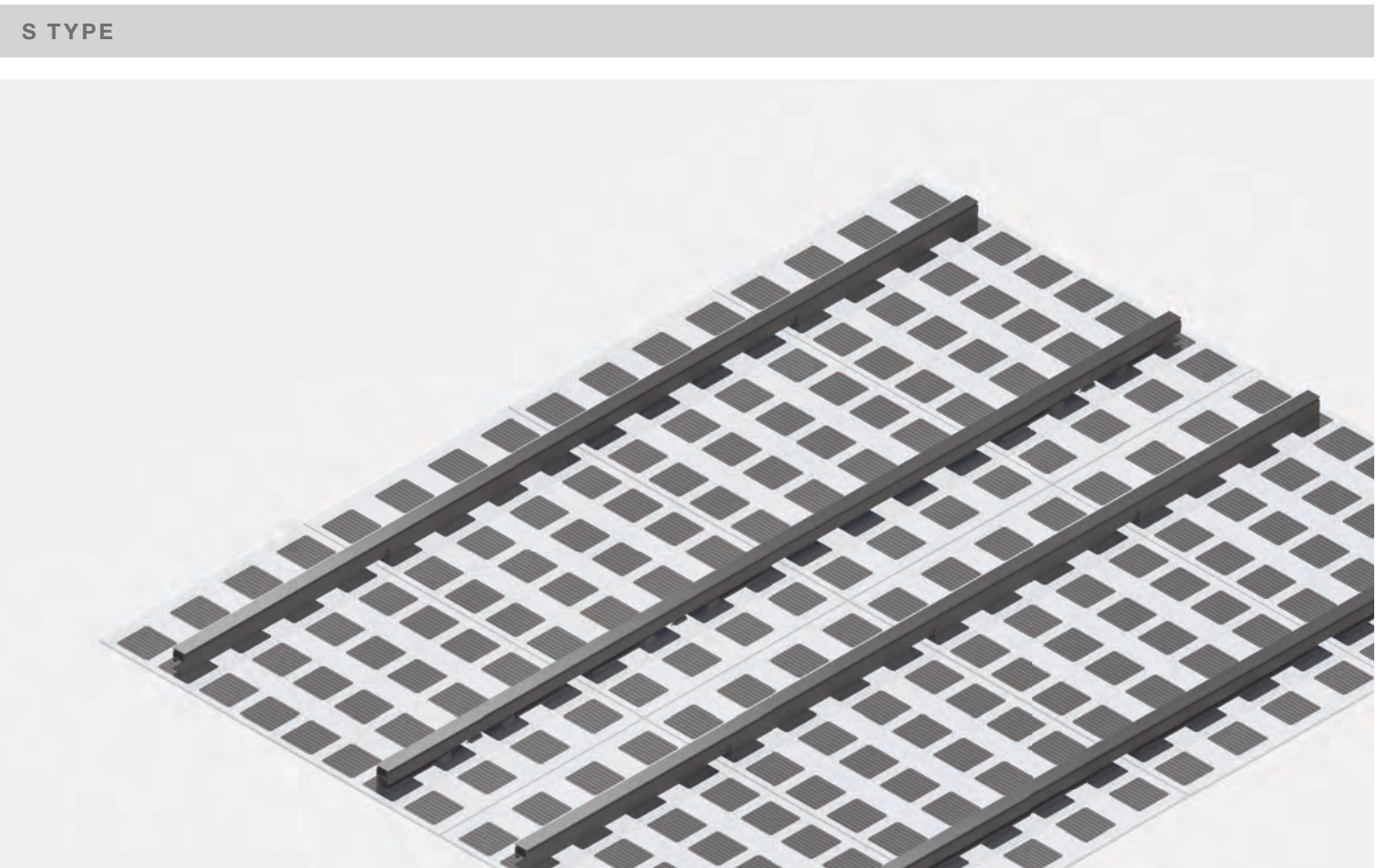
Module Overview

The Vision Module System is based on two primary module Types: L Type or S Type. L Type modules have a maximum of 72 cells and S Type modules have a maximum of 60 cells. Each module Type offers unique mounting options for another level of customization.



The L Type mounting options create cantilevered glass edges for a floating glass edge at the perimeter of your array.

- Cantilevered edge
- Edge and shared rails
- Ideal for contiguous arrays



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

- Floating edges on all sides
- Edge rails only
- Ideal for unique configurations

Module Configurations

The Vision Module System is configured by selecting one of each:

- Type:** Specifies module dimension
- Matrix:** Specifies cell count
- Mount:** Specifies the mounting frame Type

Part Number Configuration

SELECT TYPE	L TYPE				S TYPE			
SELECT MATRIX	72 430 W • 08% T	60 355 W • 21% T	40 240 W • 47% T	0 0 W • 86% T	60 355 W • 13% T	48 285 W • 29% T	32 190 W • 50% T	0 0 W • 86% T
SELECT MOUNT	PM EM RM LM RC LC				IM			

EXAMPLE PART NUMBER:

L

-

72

-

PM

→

L-72-430-08-PM

TYPE

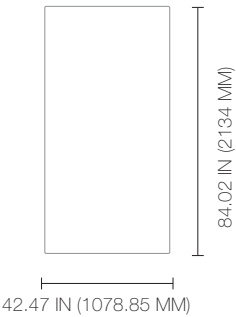
MATRIX

MOUNT

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

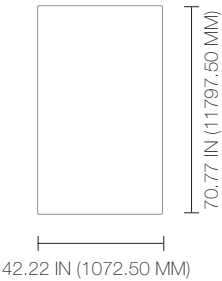
L TYPE

Step 1:
Select Type

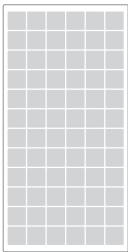


Note: L and S Type modules are different widths due to the L Type mount options extending past the glass edge

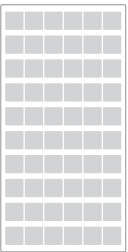
S TYPE



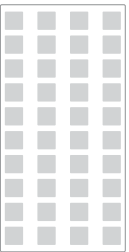
Step 2:
Select Matrix



72 Cells
430W
08% Transmittance



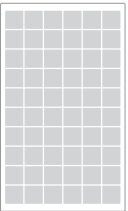
60 Cells
355W
21% Transmittance



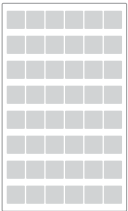
40 Cells
240W
47% Transmittance



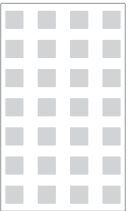
0 Cells
0W
86% Transmittance



60 Cells
355W
13% Transmittance



48 Cells
285W
29% Transmittance



32 Cells
190W
50% Transmittance



0 Cells
0W
86% Transmittance

Step 3:
Select Mount



Left Corner (LC)



Edge Mount (EM)



Right Corner (RC)



Left Mount (LM)



Perimeter Mount (PM)



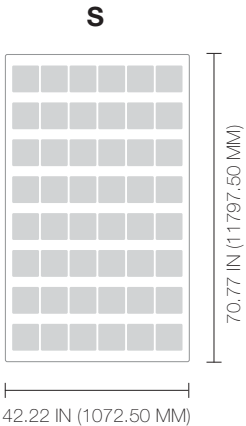
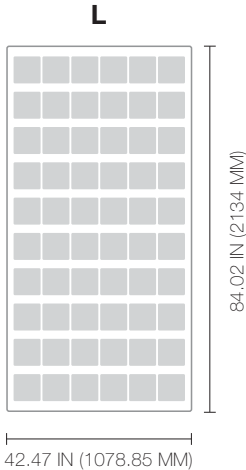
Right Mount (RM)



Interior Mount (IM)

Module Specifications

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



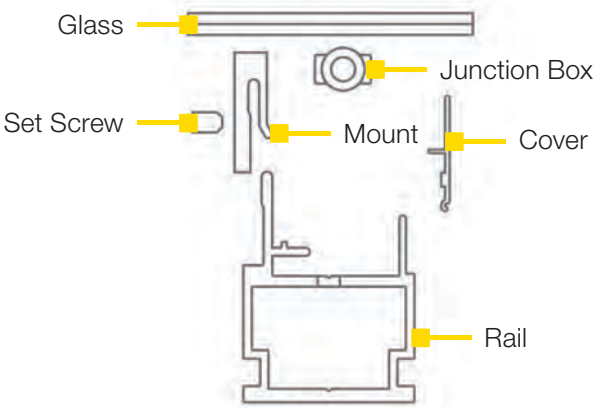
		L TYPE				S TYPE			
MATRIX	CELLS	72	60	40	00	60	48	32	00
	POWER	430 W	355 W	240 W	0W	355 W	285 W	190 W	0 W
	TRANSMITTANCE	8%	17%	43%	86%	13%	29%	50%	88%
PEAK POWER VOLTAGE (VMP)		40.4 V	33.0 V	22.3 V	0 V	33.4 V	27.1 V	17.6 V	0 V
MAXIMUM POWER CURRENT (IMP)		10.2 A	10.3 A	10.3 A	0 A	10.2 A	10.0 A	10.2 A	0 A
OPEN CIRCUIT VOLTAGE (VOC		48.4 V	39.2 V	27.4 V	0 V	41.1 V	31.0 V	20.1 V	0 V
SHORT CIRCUIT CURRENT (ISC)		11.22 A	11.1 A	11.4 A	0 A	11.2 A	11.4 A	11.8 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 TYPE 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 6	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		MAX +105 PSF/ -108 PSF SEE ENGINEERING LETTER FOR TYPE SPECIFIC ENGINEERING							
OUTPUT CABLES		LEAD LENGTH 500MM STAUBLI MC4 CONNECTORS							
FIRE RATING		CLASS A / TYPE 29							
CERTIFICATIONS		UL 61730							
WARRANTY		10 YEARS WORKMANSHIP / 30 YEARS LINEAR POWER PRODUCTION (POWER PRODUCTION WARRANTY ON FRONT SIDE STC ONLY)							

Array Configuration

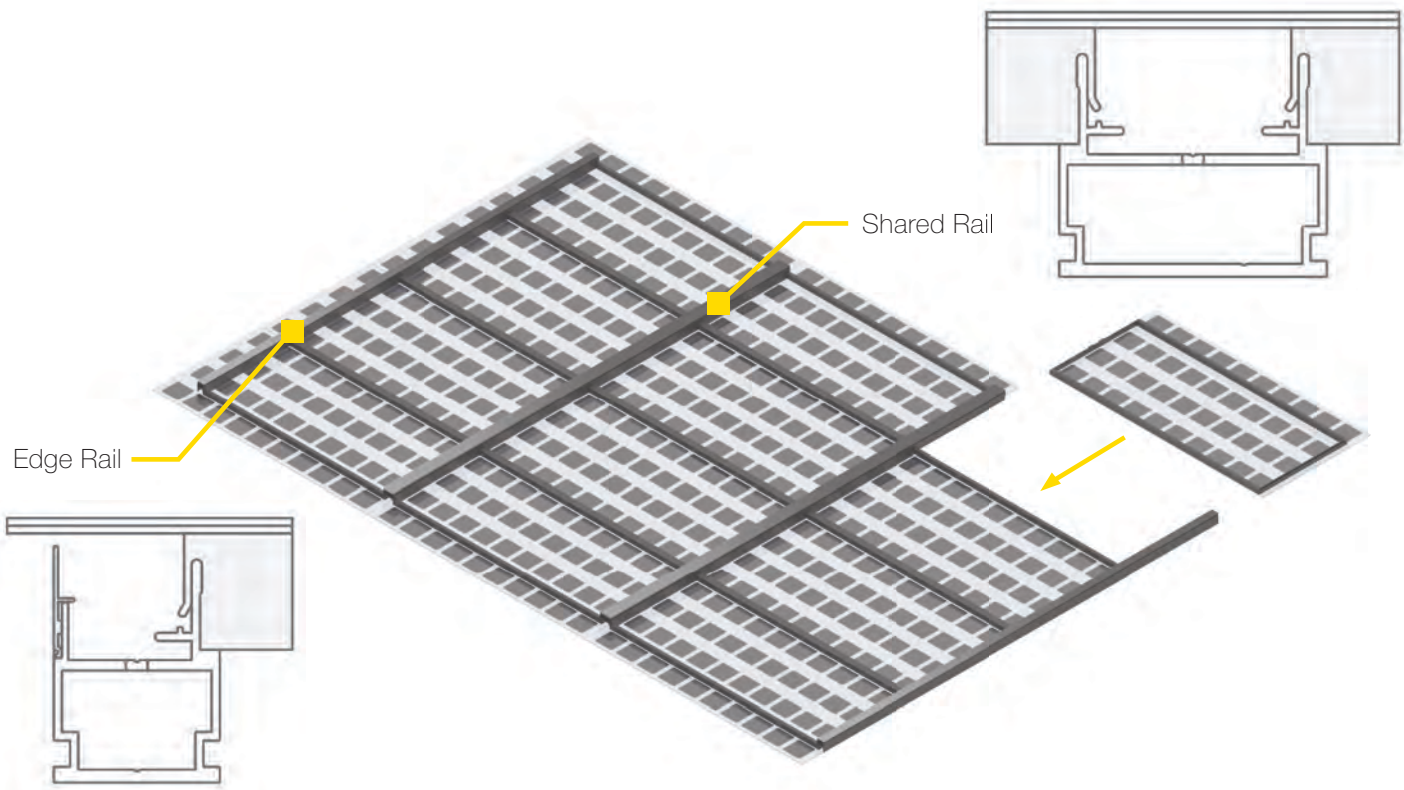
The Vision System features an easy to design and install mounting rail system. Mounting rails run in portrait mode, parallel with the short side of the glass and feature integrated wire ways that conceal all conductors and module junction boxes.

ASSEMBLY

Vision Module System features a 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.

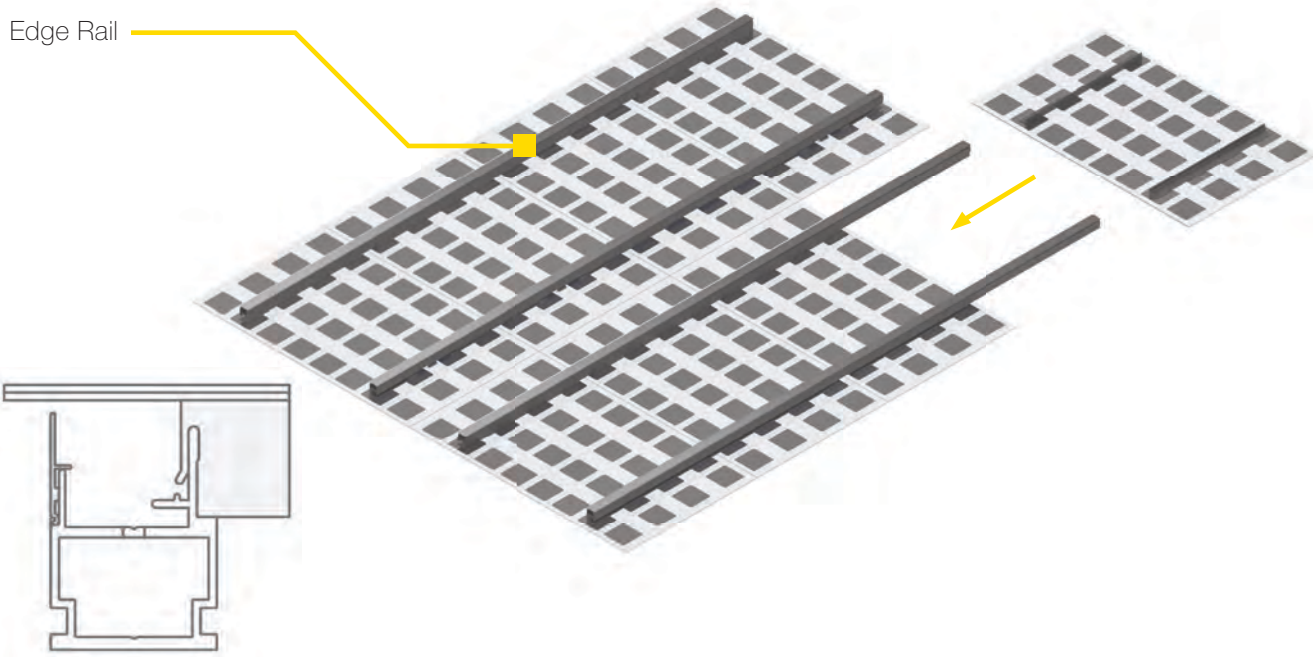


L TYPE



The L Type 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 Type also includes full perimeter mount options for the interior of the array.

S TYPE

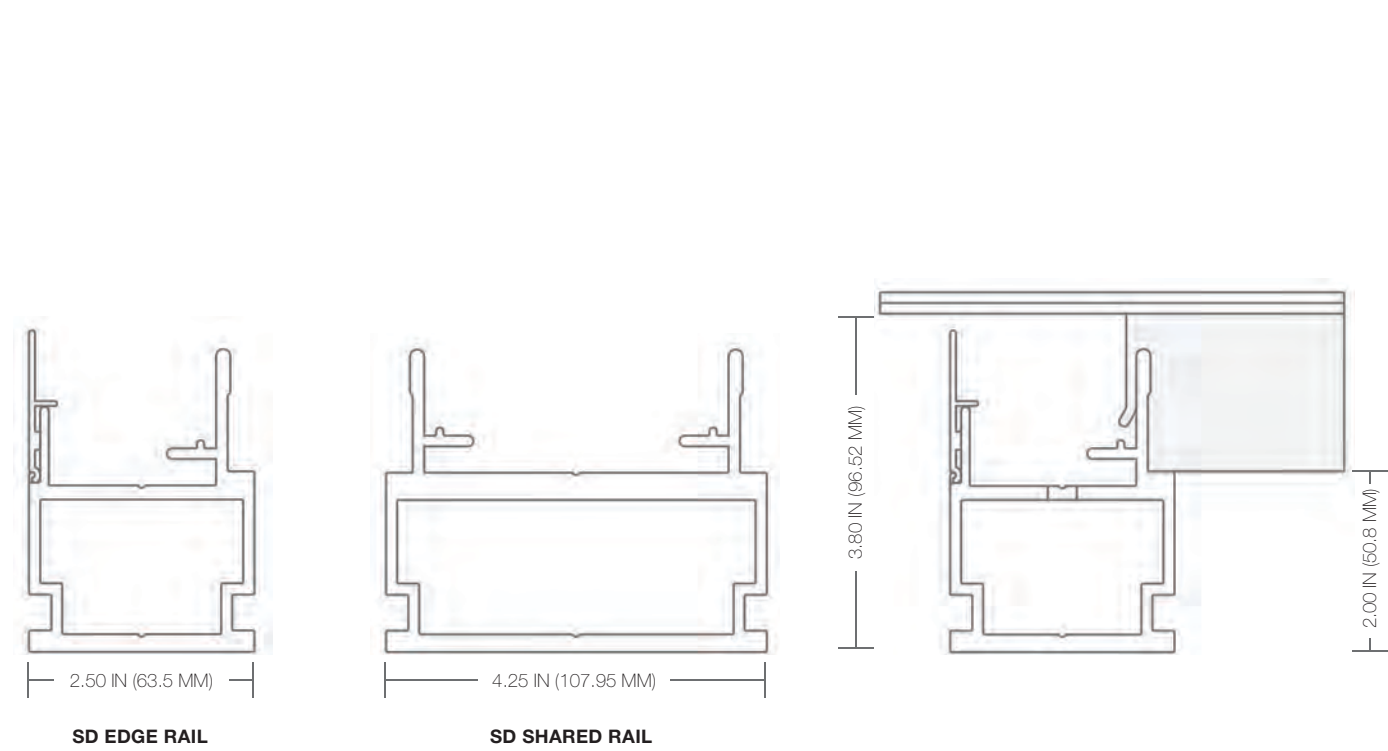


The S Type modules feature interior mounts that provide floating glass edge visible on all sides of the module. The modules are all mounted using Edge Rail meaning there are no shared rails. The S Type modules are ideal for unique installations and mounting configurations.

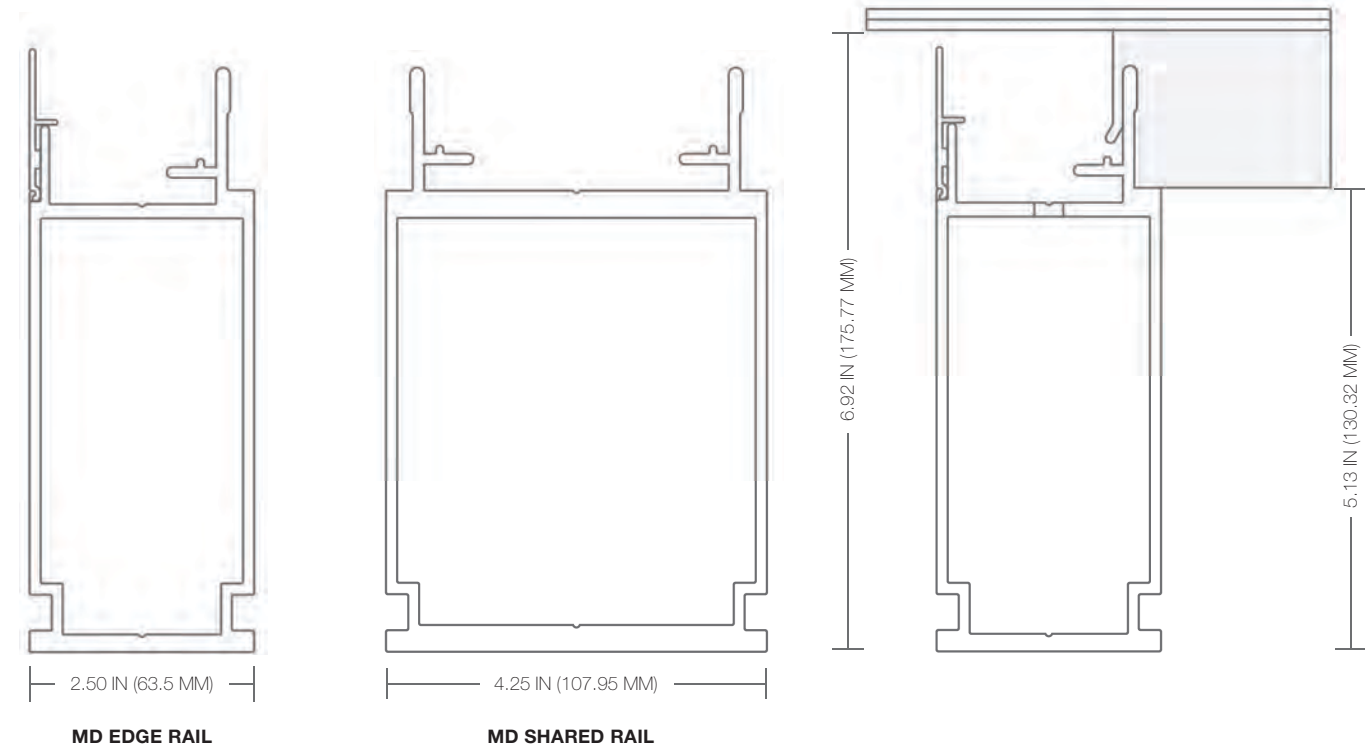
Vision Mounting Rail

The Vision Module System is based on the streamlined integration of the module and mounting rail which result in super clean and durable installation.

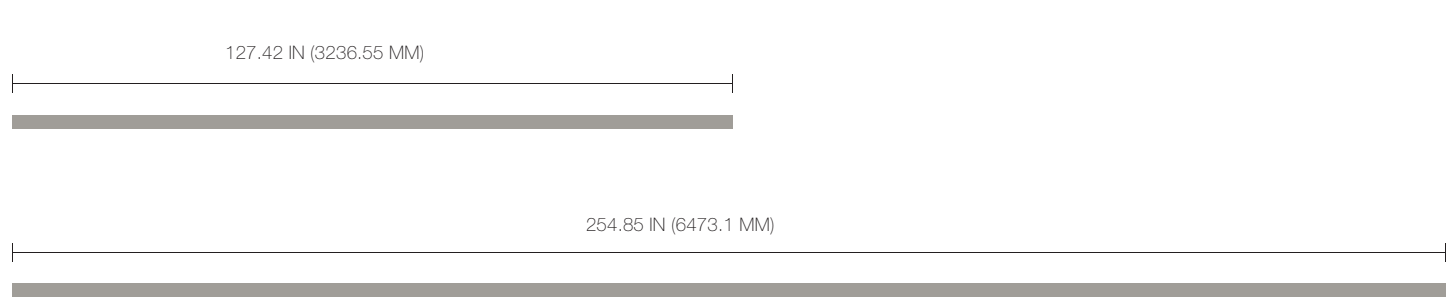
STANDARD DUTY RAIL (SD)



MEDIUM DUTY RAIL (MD)



STANDARD RAIL LENGTHS



TYPICAL 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"

*Refer to engineering letter for project specific rail spans and cantilevers

You Dream It, We Built It

We understand that not every system is a perfect rectangle. The Vision Module System helps solve real world problems with functional solutions. Think outside the box.

WEATHERPROOFING

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.

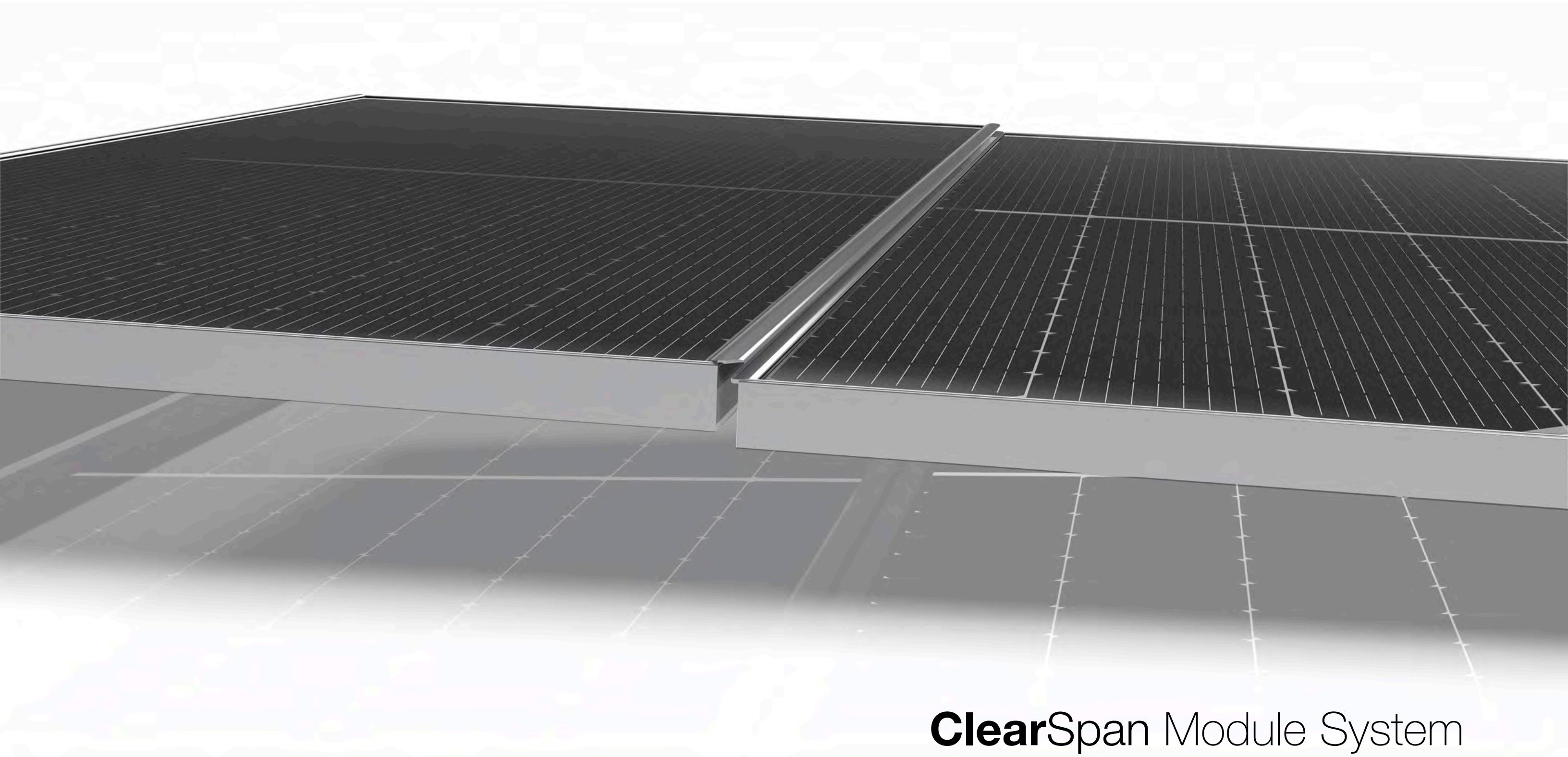
SYSTEM	COLOR	COST	DURABILITY	WARRANTY
3M 7070UV	TRANSPARENT	LOW	GOOD	NA
3M EXTREME SEALING TAPE	OPAQUE	MEDIUM	BETTER	NA
GLAZING	OPAQUE	HIGH	BEST	PROVIDED BY INSTALLER



CUSTOMIZATION

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. Infill panels can be made from polycarbonate, clear glass, frit treatment, or with faux pv cells. Custom infill modules can be used to create “wedges” in curved arrays, provide infill in shaded areas, integrate graphics or logos, create curved edges.





ClearSpan Module System

Waterproof module system optimized for parking deck and carport applications



System Overview

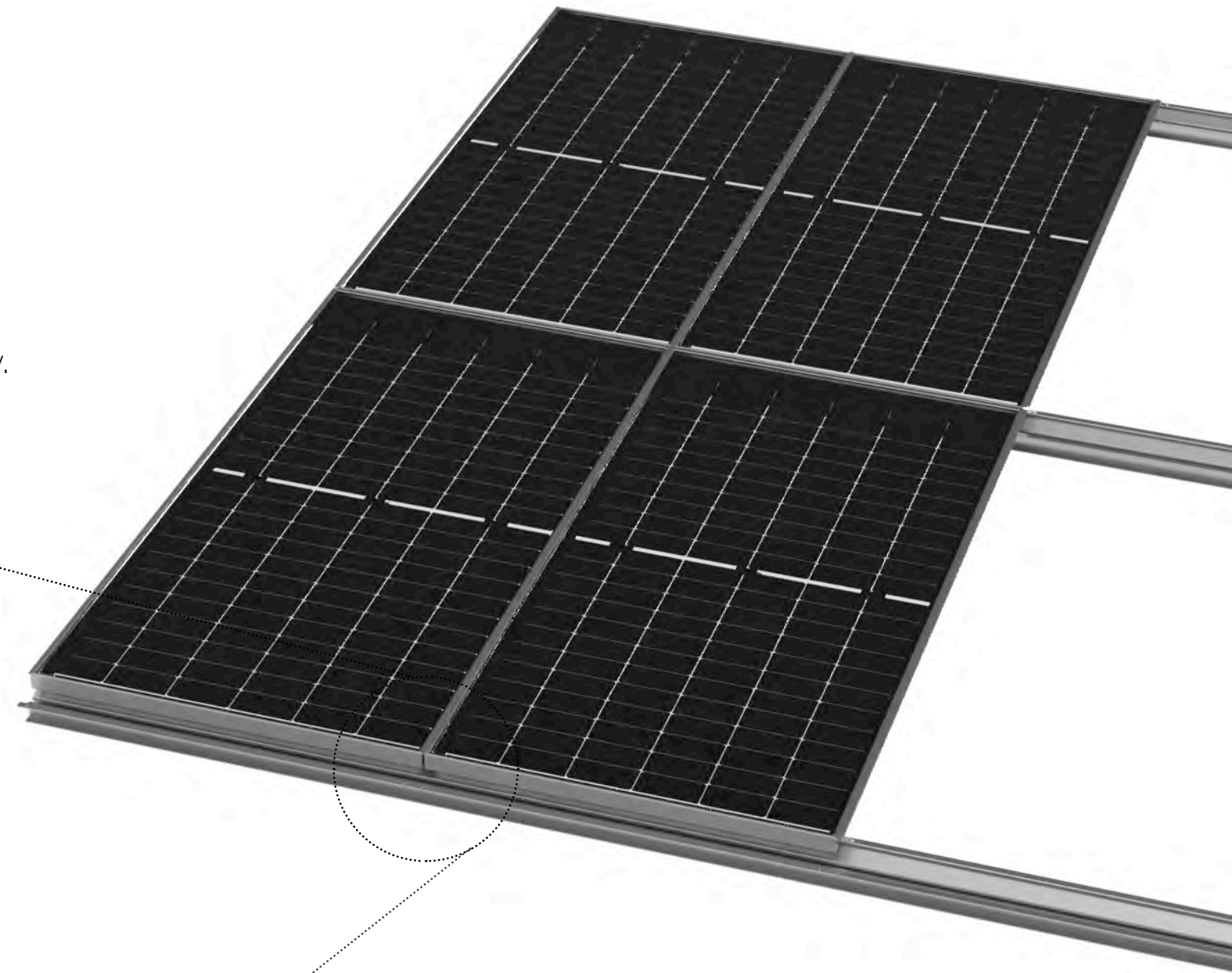
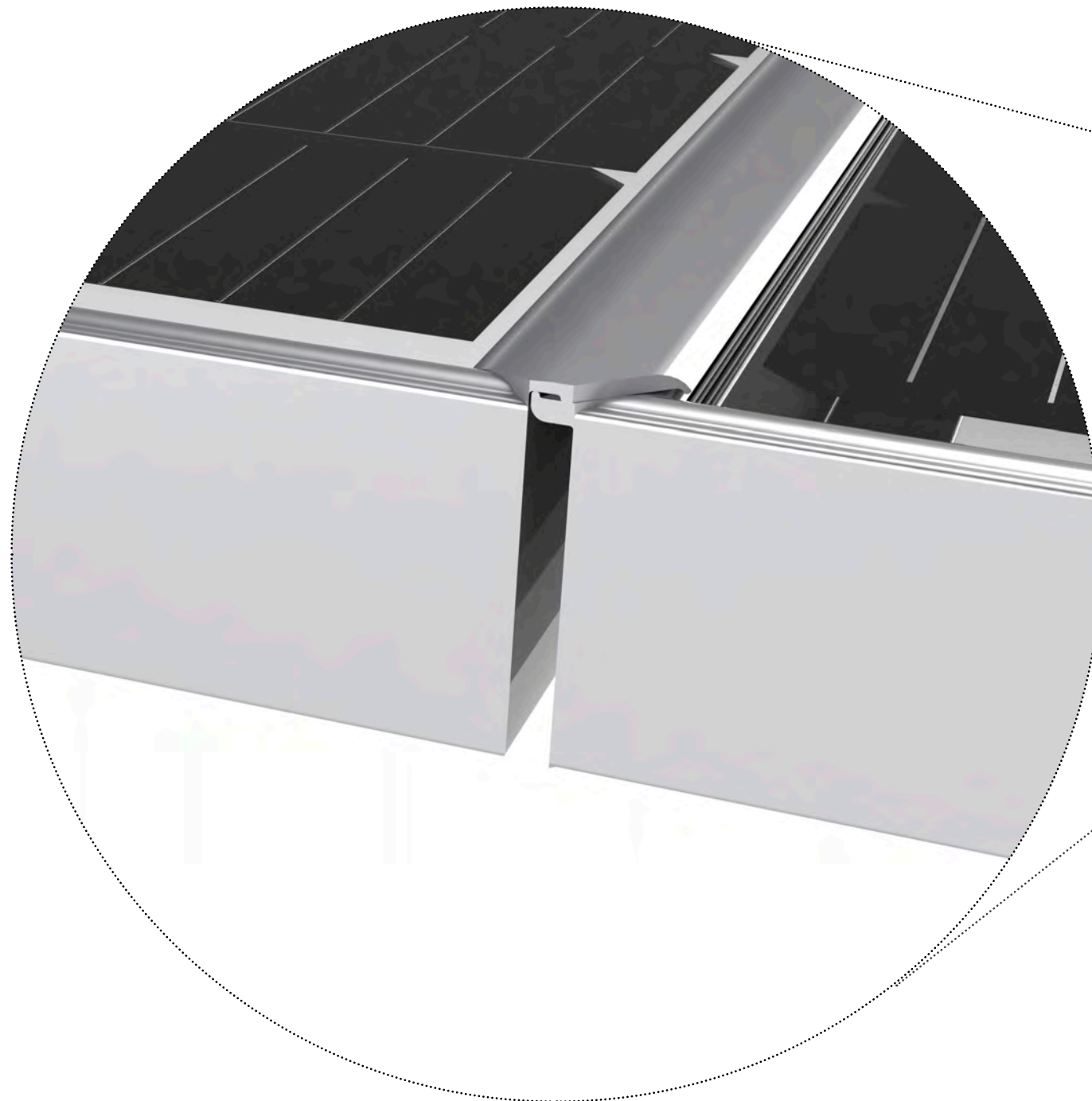
The **Clear**Span Module System was designed from the ground up to be the best solar module solution for parking deck and carport applications. The unique shingled frames of our **CSX** modules with the **Clear**Span Rail create an ultra durable waterproof array that is built to last.

- Waterproof
- Integrated gutter
- Integrated wireway
- Concealed conductors
- Bifacial modules
- Ultra durable glass glass construction

Module Overview

The backbone of the **ClearSpan** Module system is the unique shingled frames of the **CSX** Modules and the **ClearSpan** Rail which is a gutter, wireway and mounting rail in one super clean aluminum profile. The entire system is fastened using flange nuts and bolts through predrilled holes in all components for super fast and secure installation.

ClearSpan was designed, engineered, and manufactured to perform all day, every day.





Parking Deck

Parking decks are the low hanging fruit for overhead solar applications. They are ideal locations for solar since they make the most out of valuable real estate, do not require costly foundations and convert the top level of a parking deck into an energy producing asset and with the **ClearSpan** Module System provide users waterproof, covered parking.

- Integrated gutters
- Surface mounted LED lighting
- Galvanized steel finish



Carport

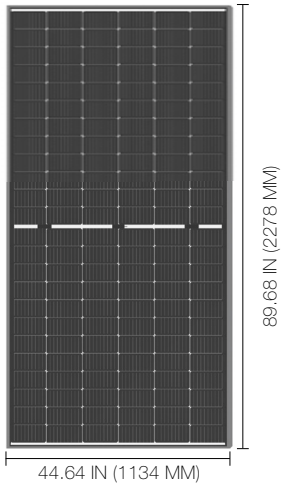
The **Clear**Span Module System is the perfect solution to create super clean, shady, waterproof solar carports. If you are looking for a streamlined solution that is built to stand the test of time.

- Integrated gutters
- Surface mounted LED lighting
- Galvanized steel finish

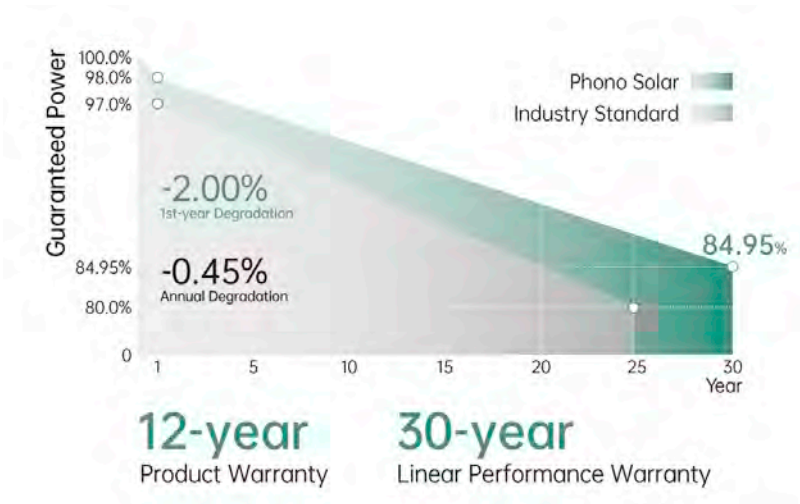
Module Specifications



TEMPERATURE COEFFICIENTS	
NOMINAL OPERATING CELL TEMPERATURE (NOCT)	45±2°C
POWER TEMPERATURE COEFFICIENT (PMPP)	- 0.38% / °C
VOLTAGE TEMPERATURE COEFFICIENT (VOC)	- 0.30% / °C
CURRENT TEMPERATURE COEFFICIENT (ISC)	- 0.05% / °C



CELLS	144
POWER	545W
PEAK POWER VOLTAGE (VMP)	41.67 V
MAXIMUM POWER CURRENT (IMP)	13.32 A
OPEN CIRCUIT VOLTAGE (VOC)	49.89 V
SHORT CIRCUIT CURRENT (ISC)	14.03 A
MODULE EFFICIENCY	21.48%
OPERATING TEMPERATURE	- 40°C TO 85°C
MAXIMUM SYSTEM VOLTAGE	DC 1000V/1500V
MAXIMUM TYPE FUSE RATING	20 A
POWER TOLERANCE	- 0/+5W
SOLAR CELL	MONOCRYSTALLINE BIFACIAL 7.1" X 3.5" (182 MM X 91 MM)
CELL LAYOUT	6 X 24
MODULE DIMENSIONS	89.68 IN X 44.64 IN X 1.99 IN (2134 MM X 1078.85 MM X 50.546 MM)
MODULE AREA	27.8 FT² (2.5M²)
FRONT / BACK GLASS	2.0MM/2.00MM TOUGHENED GLASS
MODULE WEIGHT	70.54 LBS (32.0 KG)
FRAME	ANODIZED ALUMINIUM ALLOY
STATIC LOAD	MAX FRONT SIDE 5400PA, MAX REAR SIDE 2400PA
OUTPUT CABLES	LEAD LENGTH 450MM STAUBLI MC4 CONNECTORS
FIRE RATING	C (IEC61730)
CERTIFICATIONS	IEC 61215, IEC 61730
WARRANTY	12 YEAR PRODUCT WARRANTY / 30 YEAR LINEAR PERFORMANCE WARRANTY





LUMOS

Contact

Lumos Solar
555 Aspen Ridge Drive
Lafayette, Colorado 80466
+1 (303) 449 2394
info@lumossolar.com
www.lumossolar.com

