

## Brown Asphalt - 310W

### High Efficiency Mono Colored PV Module

- **North American Manufacturer**

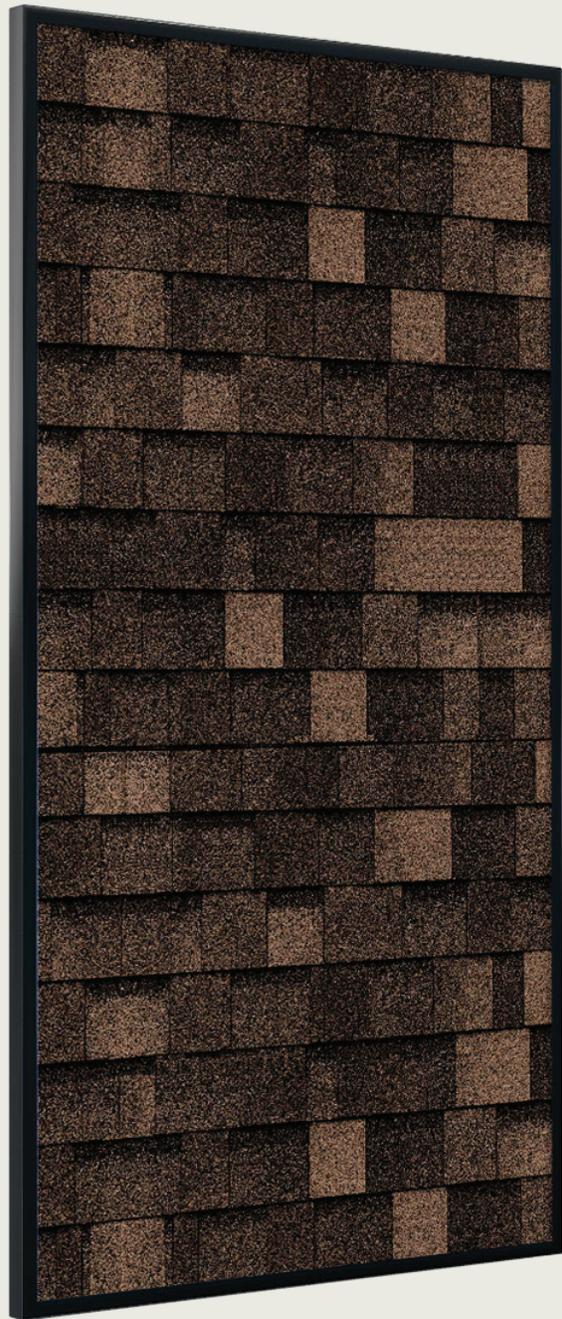
Mitrex is a world-leading manufacturer of standard solar and BIPV products based in Canada. With over 20 years of experience, Mitrex guarantees high-quality, fully-automated manufacturing and continuous innovation in solar technology.

- **Quality, Durability And Performance**

Mitrex panels are engineered with the highest quality- featuring wide-ranging compatibility with racking and electrical components, advanced cell technology, ability to withstand high snow/wind load conditions, and high performing modules.

- **25-Year Product And Performance Warranty**

Made in North America, all our products come with an industry leading 25-year warranty for products and performance, ensuring the quality of the hardware, energy generation, and aesthetics are maintained.

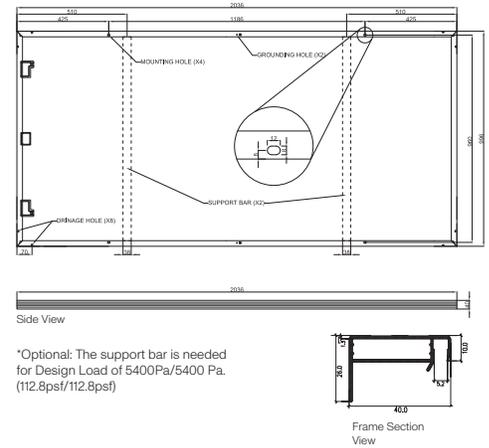


### Electrical Specifications

Test Conditions	STC
Module Power (Pmax)	310W
Maximum Power Voltage (Vpmax)	40.6V
Maximum Power Current (Ipmax)	7.64A
Open Circuit Voltage (Voc)	48.5V
Short Circuit Current (Isc)	8.03A
Module Efficiency	15.3%
Maximum System Voltage (VDC)	1000V (IEC/UL)
Series Fuse Rating	20A
Power & Other Electrical Specification Tolerance	5%
Application Classification	Class A

Measurement Conditions: STC 1000 W/m<sup>2</sup> - AM 1.5 - Temperature 25°C

### Engineering Drawing



### Mechanical Properties

Module Weight	22 kg
Dimensions (H x L x D)	2036 x 996 x 40mm
Maximum Surface Load (Wind / Snow)	5400Pa front load / 2400Pa rear load or 8000Pa front load / 8000Pa rear load*
Design Load	3600Pa front load / 1600Pa rear load or 5400Pa front load / 5400Pa rear load*
Hail Impact Resistance	ø 25mm at 83 km/h
Cells	72 [12x6] Mono-crystalline (158.75 x 158.75mm)
Glass	3.2mm tempered glass, high transmittance, anti-reflective coating
Cables & Connectors (Refer to Installation Manual)	300mm, 1000mm, 1200mm - 4mm <sup>2</sup> , 12 AWG (UL) MC4 from Staubli
Backsheet	High durability, UV resistant, PV backsheet
Pattern Orientation	Landscape & Portrait
Frame	Anodized aluminum alloy black frame
Bypass Diodes	3 diodes- 30SQ045T (45V max DC blocking voltage, 30A max forward rectified current)
Junction Box	IP68 rated, TUV and UL certified
Fire Rating	Type II

### Metric

Module Weight	22 kg
Dimensions (H x L x D)	2036 x 996 x 40mm
Maximum Surface Load (Wind / Snow)	5400Pa front load / 2400Pa rear load or 8000Pa front load / 8000Pa rear load*
Design Load	3600Pa front load / 1600Pa rear load or 5400Pa front load / 5400Pa rear load*
Hail Impact Resistance	ø 25mm at 83 km/h
Cells	72 [12x6] Mono-crystalline (158.75 x 158.75mm)
Glass	3.2mm tempered glass, high transmittance, anti-reflective coating
Cables & Connectors (Refer to Installation Manual)	300mm, 1000mm, 1200mm - 4mm <sup>2</sup> , 12 AWG (UL) MC4 from Staubli
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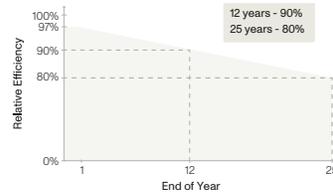
### Imperial

Module Weight	48.5 lbs
Dimensions (H x L x D)	80.2 x 39.2 x 1.6in
Maximum Surface Load (Wind / Snow)	112.8psf front load / 50.1psf rear load or 167psf front load / 167psf rear load*
Design Load	75.1psf front load / 33.4psf rear load or 112.8psf front load / 112.8psf rear load*
Hail Impact Resistance	ø 1in at 51.6 mph
Cells	72 [12x6] Mono-crystalline (6.25 x 6.25in)
Glass	0.126in tempered glass, high transmittance, anti-reflective coating
Cables & Connectors (Refer to Installation Manual)	11.8in, 39.4in, 47.2in - 0.16in <sup>2</sup> , 12 AWG (UL) MC4 from Staubli
Backsheet	High durability, UV resistant, PV backsheet
Pattern Orientation	Landscape & Portrait
Frame	Anodized aluminum alloy black frame
Bypass Diodes	3 diodes- 30SQ045T (45V max DC blocking voltage, 30A max forward rectified current)
Junction Box	IP68 rated, TUV and UL certified
Fire Rating	Type II

### Temperature Ratings

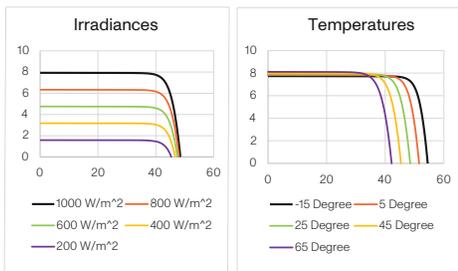
Temperature Coefficient Isc	0.029% /°C
Temperature Coefficient Voc	-0.27% /°C
Temperature Coefficient Pmax	-0.36% /°C
Nominal Module Operating Temperature	45 ± 3°C
Operating Temperature	-40°C ~ +85°C

### Warranty



Product Material Warranty: 25 years  
 Performance Warranty: 25 years  
 ≥ 97% end of 1st year  
 ≥ 90% end of 12th year  
 ≥ 80% end of 25th year

### I-V Curves



### Shipping

Modules Per Pallet	25
Pallets Per Truck	28
Modules Per Truck	700

### Certifications

- UL 61730-1/-2, CSA C22.2 #61730-1/-2, IEC 61730-1/-2, UL 61215-1/-2, IEC 61215-1/-2, CSA 61215-1/-2, CEC Listed

Datasheet is subject to change without prior notice, always obtain the most recent version of the datasheet. **Caution:** For professional use only, the installation, handling, and cleaning of PV modules should only be performed by qualified professionals. Read the Installation Manual for mounting specifications before handling, installing and operating modules.