## Black Slate - 320W

# **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 qualityfeaturing 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.





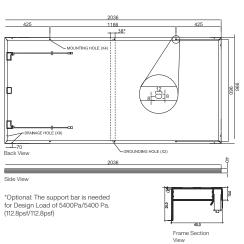




### Electrical Specifications

#### **Engineering Drawing**

Test Conditions	STC
Module Power (Pmax)	320W
Maximum Power Voltage (Vpmax)	41.7V
Maximum Power Current (Ipmax)	7.67A
Open Circuit Voltage (Voc)	48.2V
Short Circuit Current (Isc)	8.42A
Module Efficiency	15.8%
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/m² - AM 1.5 - Temperature 25°C	



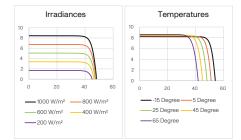
Mechanical Properties	Metric	Imperial			
Module Weight	22 kg	48.5 lbs			
Dimensions (H x L x D)	2036 × 996 × 40mm	80.2 × 39.2 × 1.6in			
Design Load	5400Pa front load / 5400Pa rear load o 5400Pa front load / 2400Pa rear load*	r 112.8psf front load / 112.8psf rear load or 112.8psf front load / 50.1psf rear load*			
Hail Impact Resistance	ø 25mm at 83 km/h	ø 1in at 51.6 mph			
Cells	72 [12×6] Mono-crystalline (158.75 × 158.7	75mm) 72 [12×6] Mono-crystalline (6.25 × 6.25in)			
Glass	3.2mm tempered glass, high transmittar anti-reflective coating	nce, 0.126in tempered glass, high transmittance anti-reflective coating			
Cables & Connectors (Refer to Installation Manual)	300mm, 1000mm, 1200mm - 4mm², 12 / MC4 from Staubli	AWG (UL) 11.8in, 39.4in, 47.2in - 0.16in², 12 AWG (UL) MC4 from Staubli			
Pattern Orientation	Landscape & Portrait				
Backsheet	High durability, UV resistant, PV backshe	eet			
Frame	Anodized aluminum alloy black frame	Anodized aluminum alloy black frame			
Bypass Diodes	3 diodes- 30SQ045T (45V max DC bloc	3 diodes- 30SQ045T (45V max DC blocking voltage, 30A max forward rectified current)			
Junction Box	IP68 rated, TUV and UL certified	IP68 rated, TUV and UL certified			
Fire Rating	Туре II				
	.,100				

#### **Temperature Ratings**

				+
Temperature Coefficient Isc	0.036% /°C	~	100% 97%	
Temperature Coefficient Voc	-0.27% /°C	Efficiency	90% 80%	
Temperature Coefficient Pmax	-0.36% /°C	Relative E		
Nominal Module Operating Temperature	45 ± 3°C	- č		
Operating Temperature	-40°C ~ +85°C		0%	1

Product Material Warranty: 25 years Perfomance Warranty: 25 years ≥ 97% end of 1st year

#### I-V Curves



Relative	
0,0	1 12 End of Year
	End of fear
Ship	ping
Modu	Iles Per Pallet
Pallet	s Per Truck
Modu	Iles Per Truck

Warranty

≥ 90% end of 12th year ≥ 80% end of 25th year

Certifications		

12 years - 90% 25 years - 80%

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

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Datasheet is subjected 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.

### Learn More: mitrex.com info@mitrex.com

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