

HIGH EFFICIENCY MONO COLOURED 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 &
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.



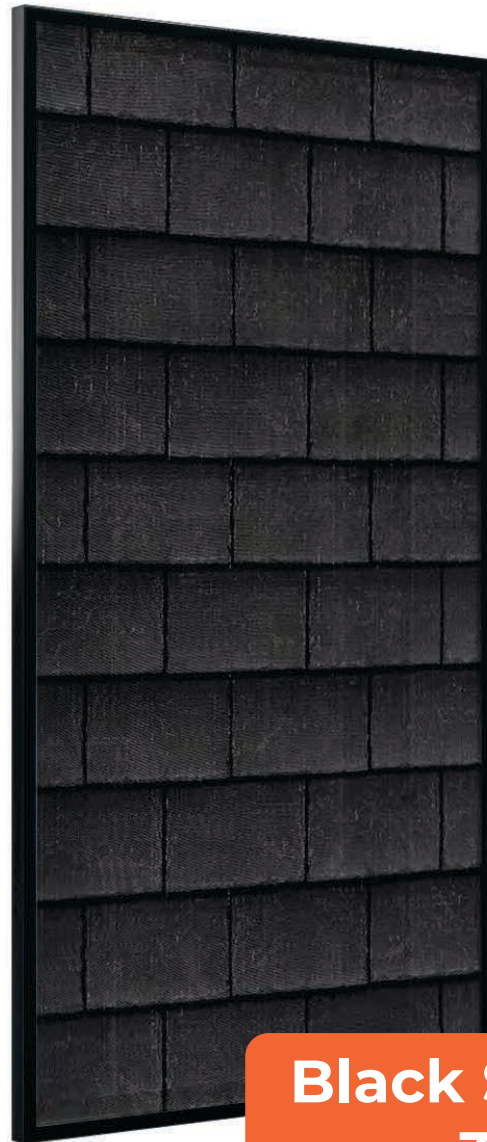
**25-YEAR PRODUCT &
PERFORMANCE WARRANTY**

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.

MITREX™

BUILDING-INTEGRATED SOLAR TECHNOLOGY

THE WORLD'S LARGEST BIPV MANUFACTURER



**Black Slate
320W**



ELECTRICAL SPECIFICATIONS	SOLAR ROOF BLACK SLATE	I-V CURVES
Test Conditions	STC	
Module Power (Pmax)	320W	<p>The I-V curves show the relationship between current (I) and power (P) for different irradiance and temperature conditions. The left graph shows curves for irradiances of 1000, 800, 600, 400, and 200 W/m². The right graph shows curves for temperatures of -15, 5, 25, 45, and 65 degrees Celsius. The y-axis represents power (0-10) and the x-axis represents current (0-60).</p>
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 x 996 x 40mm	80.2 x 39.2 x 1.6in
Mechanical Test Load (Snow/Wind)	5400Pa front load / 5400Pa rear load	112.8psf front load / 112.8psf rear load
Hail Impact Resistance	ø 25mm at 83 km/h	ø 1in at 51.6 mph
Cells	72 [12x6] Mono-crystalline (158.75 x 158.75mm)	72 [12x6] Mono-crystalline (6.25 x 6.25in)
Glass	3.2mm tempered glass, high transmittance, anti-reflective coating	0.126in tempered glass, high transmittance, anti-reflective coating
Cables & Connectors (Refer to Installation Manual)	300mm, 1000mm, 1200mm - 4mm², 12 AWG (UL) MC4 from Staubli	11.8in, 39.4in, 47.2in - 0.16in², 12 AWG (UL) MC4 from Staubli
Pattern Orientation	Landscape & Portrait	
Backsheet	High durability, UV resistant, PV backsheet	
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	SHIPPING
Temperature Coefficient Isc	0.036% /°C
Temperature Coefficient Voc	-0.27% /°C
Temperature Coefficient Pmax	-0.36% /°C
Nominal Module Operating Temperature	42 ± 3°C
Operating Temperature	-40°C ~ +85°C
	Modules Per Pallet
	25
	Pallets Per Truck
	28
	Modules Per Truck
	700

ENGINEERING DRAWING	WARRANTY
<p>The engineering drawing includes three views: a Frame Section View showing the module's profile with dimensions like 40.0mm height and 26.0mm width; a Back View showing the mounting holes (x4), grounding holes (x2), and drainage holes (x8) with overall dimensions of 2036mm length and 996mm width; and a Side View showing the 40mm thickness and 2036mm length.</p>	<p>Product Warranty: 25 years Performance Warranty:</p> <ul style="list-style-type: none"> ≥ 97% end of 1st year ≥ 90% end of 12th year ≥ 80% end of 25th year <p>The graph shows relative efficiency starting at 97% at year 1 and decreasing to 80% at year 25. A callout box highlights: 12 years - 90%, 25 years - 80%.</p>
	<p>CERTIFICATIONS</p> <p>UL 61730-1/-2, CSA C22.2 #61730-1/-2, IEC 61730-1/-2, CEC Listed</p> <p>- 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.</p>
	<p>Learn More:</p> <p>mitrex.com info@mitrex.com</p> <p>Headquarters: 41 Racine Rd., Toronto, ON M9W 2Z4, Canada +1 (855) 254 0214 (Toll Free)</p> <p>West USA Location: 10880 Wilshire Blvd Suite 1101, Los Angeles, CA 90024, USA +1 (323) 301 7978</p> <p>East USA Location: 1 Rockefeller Plaza Fl 11, New York, NY 10020, USA +1 (646) 583 4486</p>