

# 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



**Spanish Clay  
310W**



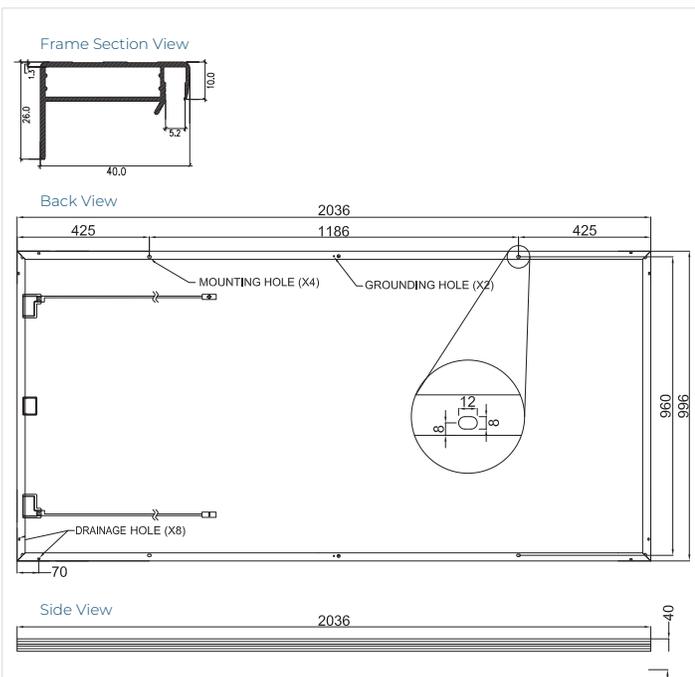
| ELECTRICAL SPECIFICATIONS                        | SOLAR ROOF SPANISH CLAY | I-V CURVES  |
|--|-------------------------|---|
| <b>Test Conditions</b>                           | <b>STC</b>              |   |
| Module Power (Pmax)                              | 310W                    | <p>The I-V curves show the relationship between current (0 to 60 A) and power (0 to 10 W) for different irradiance levels (200, 400, 600, 800, 1000 W/m²) and temperatures (-15, 5, 25, 45, 65 °C). Power increases with irradiance and decreases with temperature.</p> |
| 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

| 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 / 2400Pa rear load  | 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 [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 - 4mm <sup>2</sup> , 12 AWG (UL) MC4 from Staubli             | 11.8in, 39.4in, 47.2in - 0.16in <sup>2</sup> , 12 AWG (UL) MC4 from Staubli |
| 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    | Modules Per Pallet | 25  |
| Temperature Coefficient Voc          | -0.27% /°C    | Pallets Per Truck  | 28  |
| Temperature Coefficient Pmax         | -0.36% /°C    | Modules Per Truck  | 700 |
| Nominal Module Operating Temperature | 42 ± 3°C      |                    |     |
| Operating Temperature                | -40°C ~ +85°C |                    |     |

### ENGINEERING DRAWING

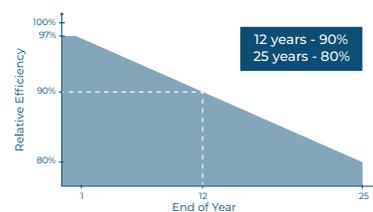


### WARRANTY

Product Warranty: 25 years

Performance Warranty:

- ~ 97% end of 1st year
- ~ 90% end of 12th year
- ~ 80% end of 25th year



### 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

- 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.

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