

Picture shown may not reflect actual configuration

PVC380 MP03 H Monocrystalline Halfcut Photovoltaic Module

The monocrystalline halfcut photovoltaic modules feature high efficiency low light induced degradation (LID) Mono PERC (Passivated Emitter Rear Cell) technology and provide excellent performance under low temperature or low light environment. The modules provide high power output at high levels of reliability.

Features

Proven Energy Yield
- 19.0% efficiency
- -0/+5W positive power tolerance

Excellent Performance in Low Irradiance
- Outstanding power output in low irradiance conditions such as dawn, dusk, and cloudy days.

Anti-PID
- Anti-PID (Potential-induced degradation) techniques for processing solar cells and encapsulation of modules applied.

Adaptability to Harsh Environments
- Excellent anti-salt mist and anti-ammonia capability; adaptable to harsh environments such as seaside and farms.

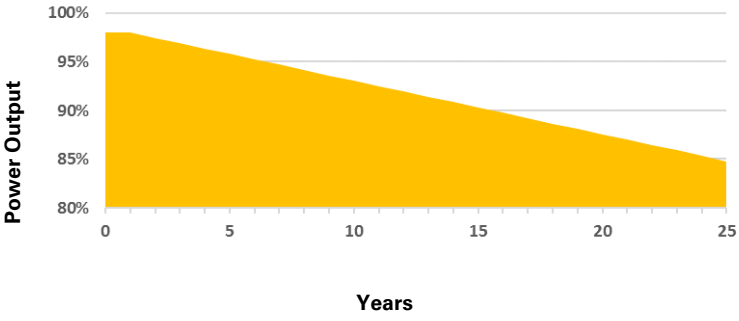
Robust Frame
- Robust module construction enables installed module to withstand 5400 Pa front side static loading and 25mm hail impact at 23m/s.

Tests
- IEC 61215, IEC61730 Class II and UL1703 Type 4 fire rating
- ISO 9001:2008: ISO Quality Management System
- ISO 14001:2004: ISO Environment Management System
- TS62941: Guideline for module design qualification and type approval
- OHSAS 18001: 2007 Occupational Health and Safety

Certifications (pending receipt of certificate)
- Available listing: TUV SUD, CSA, CE

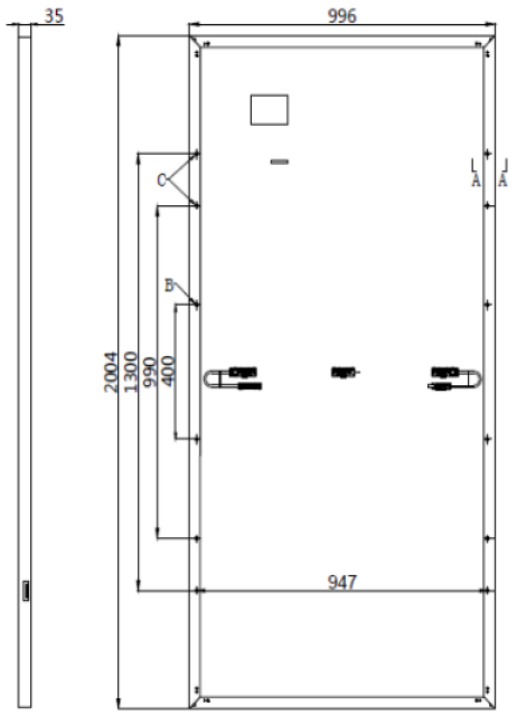
Worldwide Product Support
- Cat® dealers have over 1,800 dealer branch stores operating in over 200 countries
- Your local Cat dealer provides extensive pre-sale and post-sale support, including design consultation, service contracts, and all maintenance agreement.

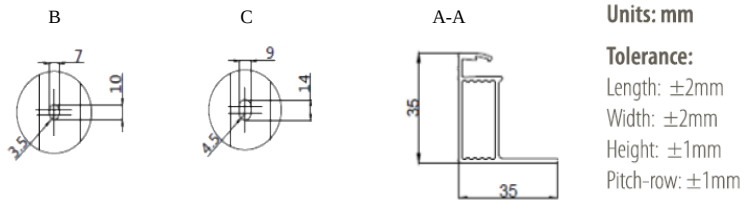
Module Warranty
- 10-year warranty for materials and processing
- 25-year warranty for linear power output. Produces more than 98% power in the first year, then declining by 0.55% per year, ending at 84.8% power after 25 years.



Module Rating at Standard Test Conditions (STC) 1000W/m², AM 1.5, 25°C		PVC380 MP03 H
Nominal Power (-0/+5W)	P_{MPP} (W)	380
Voltage at P_{MAX}	V_{MPP} (V)	40.6
Current at P_{MAX}	I_{MPP} (A)	9.36
Open Circuit Voltage	V_{OC} (V)	49.0
Short Circuit Current	I_{SC} (A)	9.96
Module Efficiency	%	19.0
Maximum System Voltage	V_{SYS} (V)	1500
Maximum Series Fuse	I_{CF} (A)	20A
Rating at Nominal Operating Cell Temperature 800W/m², 20°C air temperature, AM 1.5, 1m/s wind speed		
Nominal Power	P_{MPP} (W)	281.5
Voltage at P_{MAX}	V_{MPP} (V)	37.5
Current at P_{MAX}	I_{MPP} (A)	7.50
Open Circuit Voltage	V_{OC} (V)	45.7
Short Circuit Current	I_{SC} (A)	8.02
TEMPERATURE CHARACTERISTICS		
Module Operating Temperature Range	(°C)	-40 to +85
Temperature Coefficient of P_{MPP}	$T_K(P_{MPP})$	-0.370%/°C
Temperature Coefficient of V_{OC}	$T_K(V_{OC})$	-0.286%/°C
Temperature Coefficient of I_{SC}	$T_K(I_{SC})$	+0.057%/°C

MECHANICAL DETAILS	
Length	2004 mm (78.9 in)
Width	996 mm (39.2 in)
Thickness	35 mm (1.4 in)
Weight	23 kg (50.7 lbs.)
Leadwire	4 mm², 300 mm
Connectors	MC4
Cell Type	Monocrystaline, 144 cells per panel
Safety Class	Class II
Frame Material	Aluminum
Front Side Max Static Load	5400 Pa
Rear Side Max Static Load	2400 Pa
Hailstone Test	25mm hailstone at 23 m/s





Units: mm

Tolerance:
Length: ±2mm
Width: ±2mm
Height: ±1mm
Pitch-row: ±1mm

Materials and specifications are subject to change without notice.
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