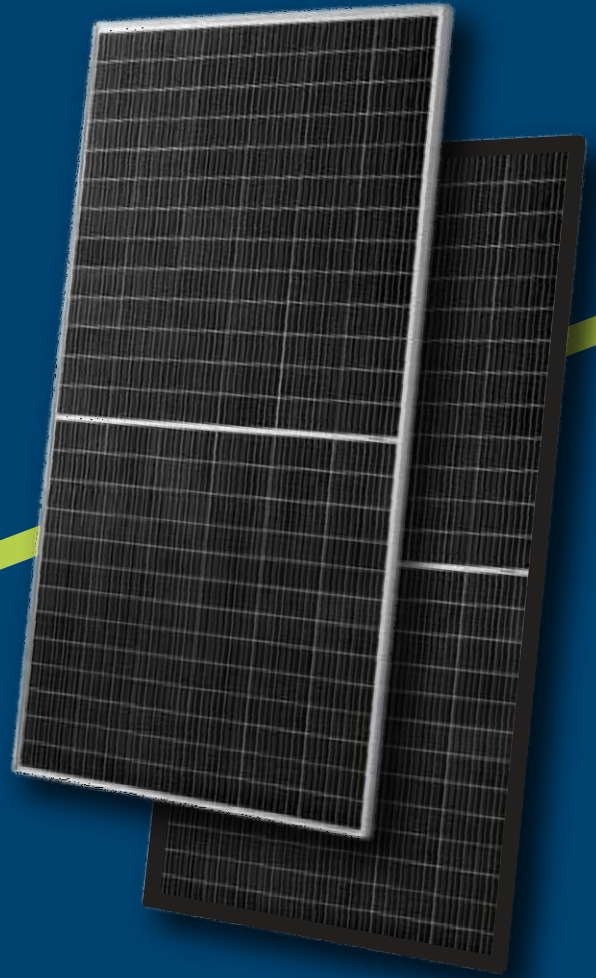


SERIES  
**MSEA**

435-455 WATT



True Source  
of **Energy**

AUSTRALIAN MADE

# Fully Automated & Largest Manufacturing Facility in Australia



Crystalline Silicon  
PV Modules  
Type Testing

- ▶ IEC 61215-1: 2016
- ▶ IEC 61215-1-1: 2016
- ▶ IEC 61215-2: 2016
- ▶ IEC 61730-1: 2016
- ▶ IEC 61730-2: 2016
- ▶ EN 61215-1: 2016
- ▶ EN 61215-1-1: 2016
- ▶ EN 61215-2: 2017
- ▶ EN IEC 61730-1: 2018
- ▶ EN IEC 61730-2: 2018
- ▶ Periodically Factory Inspection as per CIG 021-024

[www.dekra-seal.com](http://www.dekra-seal.com)



**Our Approach** We believe high quality solar power should be produced locally at globally competitive pricing.

Meticulous manufacturing, testing and quality assurance standards, DEKRA certified according to IEC standards and developed QMS system ensures consistent quality and traceability.

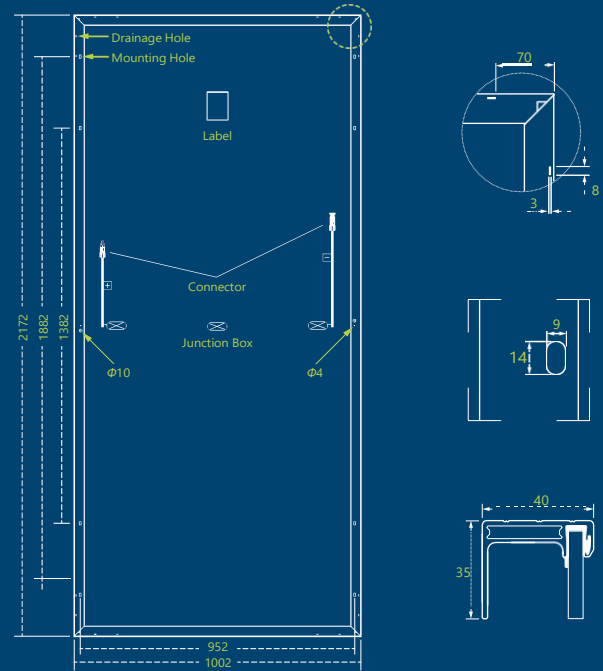
## Our Quality

- 2400 pa wind & 5400 pa mechanical loads
- High temperature operation
- Easy module replacement
- Quality control and traceability by stringent QMS system
- State of ART fully automatic facility
- Earth leakage tested to 3600V DC
- Double Electro-Luminescence (EL) tested
- Built to perform in low light condition
- Module pass fire class C performance per UL790



# Module Design

- Cells Type** Mono 158.75×79.375mm
- Weight** 24.8kg
- Dimension** 2172×1002×40mm
- Output Cables** 4.0mm<sup>2</sup>; Portrait: N 400mm/P 300mm, (Cable length can be customized)
- No. of Cells** 156(6×26)
- Glass** 3.2 mm High Transmission, Antireflection Coating
- Junction box** IP68, 3 Bypass Diodes
- Connector** QC Solar (Suzhou) Corporation(QC4.10-35)
- Packing** 27pcs/pallet, 270pcs/20GP, 580pcs/40HQ



Modules	MSEA-435W-MH78		MSEA-440W-MH78		MSEA-455W-MH78	
	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	435W	328W	440W	332W	455W	336W
Open-circuit Voltage (Voc)	52.9V	51.2V	53.1V	51.4V	53.7V	51.6V
Maximum Power Voltage (Vmp)	45.3V	42.9V	45.6V	43.1V	45.8V	43.3V
Short-circuit Current (Isc)	10.30A	8.21A	10.37A	8.24A	10.54A	8.29A
Maximum Power Current (Imp)	9.61A	7.65A	9.65A	7.70A	9.72A	7.76A
Module Efficiency (%)	20.35%		20.42%		20.60%	
Operating Temperature (°C)	-40 ~ +85°C					
Maximum System Voltage	1500V DC					
Maximum Series Fuse Rating	20A					
Tolerance of rating Pmax/Isc/Voc%	±3%/±3%/±3%					

NOCT : Irradiance 800w/m<sup>2</sup>, Cell temperature 20°C, Spectrum AM1.5, Wind speed 1m/s

STC : Irradiance 1000w/m<sup>2</sup>, Cell temperature 25°C, Spectrum AM1.5

Serial number having prefix: MSEA is Made in Australia

Serial number having prefix: MSEC is Made in China

## TEMPERATURE RATINGS

Nominal Operating Cell Temp	45°C ±2°C
Tempcoefficient of Pmax	-0.37%/°C
Tempcoefficient of Voc	-0.29%/°C
Tempcoefficient of Isc	0.05%/°C

## MAXIMUM RATINGS

Operational Temp	-40 to +85°C
Max system Voltage	1500V DC (IEC)
Max Series Fuse Rating	20A
Mechanical Load	5400pa

## PERFORMANCE WARRANTY

Max power degradation 0.5%/year  
 97.5% at the end of first year  
 93% at the end of 10th year  
 85.5% at the end of 25th year



**20.60%**  
Max Module Eff.

**0~+5W**  
Positive Tolerance




Made In Australia

## CONTACT US

# MSquare Energy Pty Ltd

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