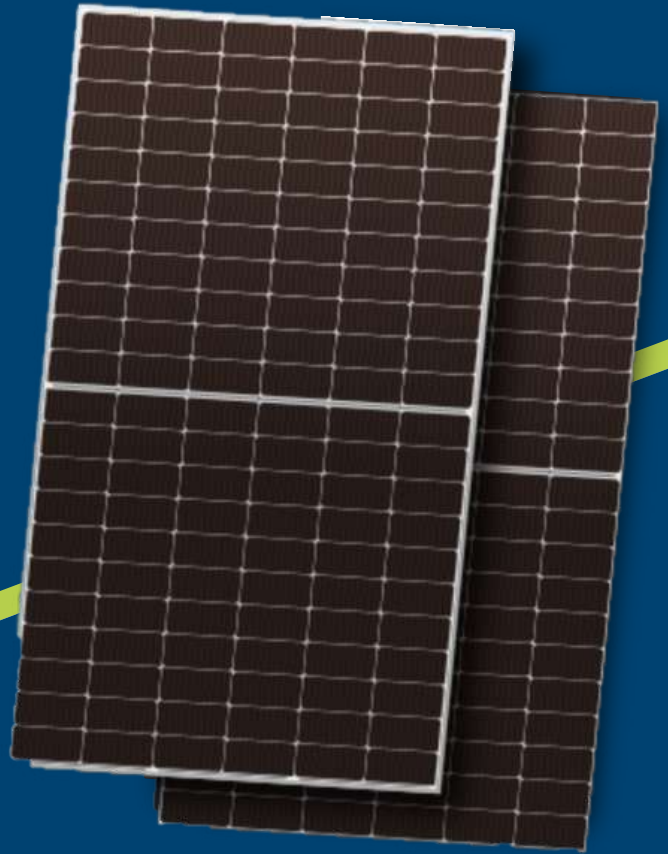


SERIES  
**MSEA**  
**60M10**  
430-460 WATT



**True Source**  
**of Energy**

AUSTRALIAN MADE

# FULLY AUTOMATED & LARGEST MANUFACTURING FACILITY IN AUSTRALIA



**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.

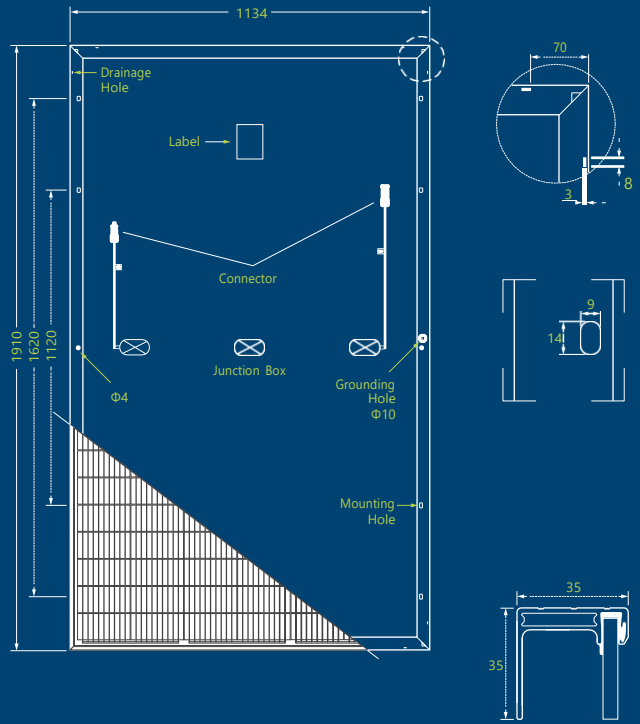
## Our Quality

- 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 182×91mm
Weight	24kg
Dimension	1910×1134×35mm(L×W×T)
Cables	4.0mm <sup>2</sup> , Portrait: 300mm(+)/400mm(-) Landscape: 1400mm(+)/1400mm(-)
No. of Cells	120 (6×20)
Glass	3.2mm High Transmission, Antireflection Coating
Junction box	IP68, 3 Bypass Diodes
Connector	QC Solar (Suzhou) Corporation(QC4.10-35) OR Staubli Electrical Connector AG(PV -KST4-EVO2/xy_U R; PV-KBT4-EVO2/xy_UR)
Packing	31pcs/pallet, 744pcs/40HQ



**AUSTRALIAN  
QUALITY THAT  
YOU CAN TRUST**

## Modules

	MSEA60M10-430W		MSEA60M10-435W		MSEA60M10-440W		MSEA60M10-445W		MSEA60M10-450W		MSEA60M10-455W		MSEA60M10-460W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	430W	320W	435W	324W	440W	327W	445W	331W	450W	335W	455W	339W	460W	342W
Open-circuit Voltage (Voc)	40.8V	38.3V	41.0V	38.5V	41.2V	38.6V	41.4V	38.8V	41.6V	39.0V	41.8V	39.2V	42.0V	39.4V
Maximum Power Voltage (Vmp)	34.1V	32.0V	34.3V	32.2V	34.5V	32.4V	34.8V	32.6V	35.0V	32.8V	35.2V	33.0V	35.5V	33.3V
Short-circuit Current (Isc)	13.42A	10.84A	13.48A	10.89A	13.54A	10.94A	13.60A	10.99A	13.66A	11.04A	13.72A	11.09A	13.78A	11.13A
Maximum Power Current (Imp)	12.62A	10.01A	12.68A	10.06A	12.74A	10.11A	12.80A	10.15A	12.86A	10.20A	12.91A	10.24A	12.97A	10.29A
Module Efficiency (%)	19.85%		20.08%		20.31%		20.55%		20.78%		21.01%		21.24%	
Operating Temperature (°C)	-40°C ~ +85°C													
Maximum System Voltage	1500VDC													
Maximum Series Fuse Rating	20A													
Power Tolerance	0~+5W													
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

## 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	1500VDC (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	
92.5% at the end of 10th year	
83.5% at the end of 25th year	

25  
YEAR

**PRODUCT WARRANTY**

25  
YEAR

**PERFORMANCE WARRANTY**



**21.24%**  
Max Module Eff.

**0~+5W**  
Positive Tolerance




MADE IN AUSTRALIA

## CONTACT US

# MSquare Energy Pty Ltd

For any enquiries, mail us at  
[support@msquareenergy.com.au](mailto:support@msquareenergy.com.au)

---

 1800 336 786 | +61 286073354

---

 96-100 Toongabbie Rd  
Girraween NSW Australia 2145

---

For more details, visit [msquareenergy.com.au](http://msquareenergy.com.au)