

SOLAR MODULE 440 - 455 W



M10 - HALF CUT PV MODULE HIGH EFFICIENCY



ADVANCED PERC CELL TECHNOLOGY

Based on M10-182mm wafer with multi-busbar
Best choice for ultra-large power plants



MODULE TECHNOLOGY

Half-cut cell technology; High module efficiency
Low breakage rate; Annual power degradation 0.55%
Less power loss by minimizing the shading impact



HOT SPOT LOSS

Optimized electrical design and lower operating current
Reduced hot spot loss and better temperature coefficient.



FAST & SAFE

Easy installation and handling
Environmentally friendly



MODULE DURABILITY

Mechanical load test (withstand wind, snow, static ice)
up to 5400Pa
Ideal for PV rooftops, ground mount, floating



THE #1 DOMESTIC PV MANUFACTURER IN VIETNAM

100% Automatic production line
International quality PV technology

0 ~ +5W

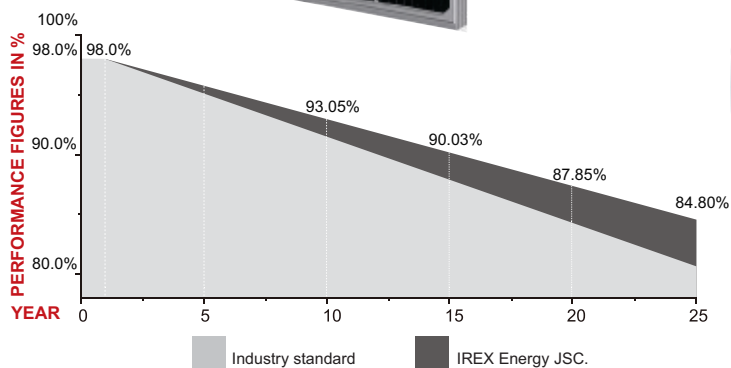
Power Tolerance

12 - years

Material & workmanship

25 - years

Linear power Output



ADDITIONAL LINEAR WARRANTY VALUE FROM IREX ENERGY JSC

CERTIFICATES



ID 44 100 21 94 0003



ISO 14001: 2015
Environmental Management System
qms.com.au

AN: S1410994MA



ID 44 780 22 406749 - 080

ISO 9001:2015: Quality Management System
ISO 14001:2015: Environmental Management System
IEC 61215: Terrestrial Photovoltaic (PV) Modules – Design Qualification and Type Approval
IEC 61730: Photovoltaic (PV) Module Safety Qualification

HIGH QUALITY FOR PROSPERITY

IREX Energy Joint Stock Company produces the #1 Vietnamese-Made Photovoltaic (PV) modules, internationally certified with excellent performance and flexible in customization per demand.

Going solar requires a long-term commitment. You can sit back, relax and enjoy the sunshine; as our company will **always be with you in 25 years!**

With the **finest price and customer service** can only be found at IREX Joint Stock Company, we look forward to working with you soon!

IREX ENERGY JOINT STOCK COMPANY

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Electrical Characteristics

Module Type	IRM60H3-440		IRM60H3-445		IRM60H3-450		IRM60H3-455	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power at STC (Pmp)	440	331.5	445	335.2	450	339.0	455	342.8
Open Circuit Voltage (Voc)	40.95	38.81	41.10	38.45	41.25	38.59	41.40	38.73
Short Circuit Current (Isc)	13.41	10.82	13.52	10.91	13.62	10.99	13.72	11.07
Maximum Power Voltage (Vmp)	33.91	32.30	34.06	32.41	34.21	32.53	34.36	32.65
Maximum Power Current (Imp)	12.98	10.26	13.07	10.34	13.16	10.42	13.25	10.50
Module Efficiency at STC(η_m)	20.33		20.56		20.79		21.02	
Power Tolerance	(0 ~ +5 W)							
Maximum System Voltage	1500 VDC							
Maximum Series Fuse Rating	25 A							

STC: Irradiance 1000 W/m², cell temperature 25°C, spectrum AM1.5

NMOT: Irradiance 800 W/m², ambient temperature 20°C, spectrum AM1.5, wind speed 1m/s

Temperature Characteristics

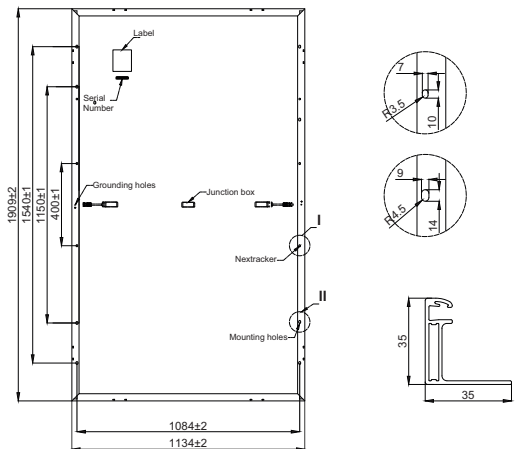
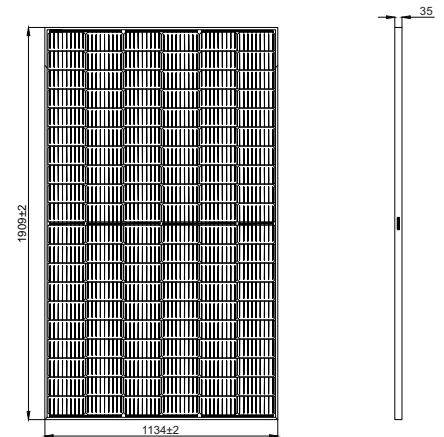
Pmax Temperature Coefficient	-0.350 %/°C
Voc Temperature Coefficient	-0.275 %/°C
Isc Temperature Coefficient	+0.045 %/°C
Operating Temperature	-40 ~ +85 °C
Nominal Module Operating Temperature (NMOT)	45 ± 2 °C

Mechanical Specifications

External Dimensions	1909 x 1134 x 35 mm
Weight	24.0 kg
Solar Cells	PERC Mono 91 x 182 mm (120 pcs)
Front Glass	3.2mm AR coating tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables	4.0mm ² , 250mm(+)/350mm(-) or Customized Length
Mechanical Load	Front side 5400Pa/ Rear side 2400Pa

Packing Configuration

	1909 x 1134 x 35 mm	
Container	20'GP	40'HQ
Pieces per Pallet	31	31
Pallets per Container	6	24
Pieces per Container	186	744



Performance

