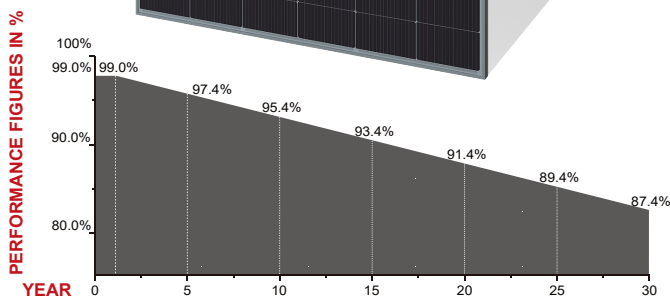
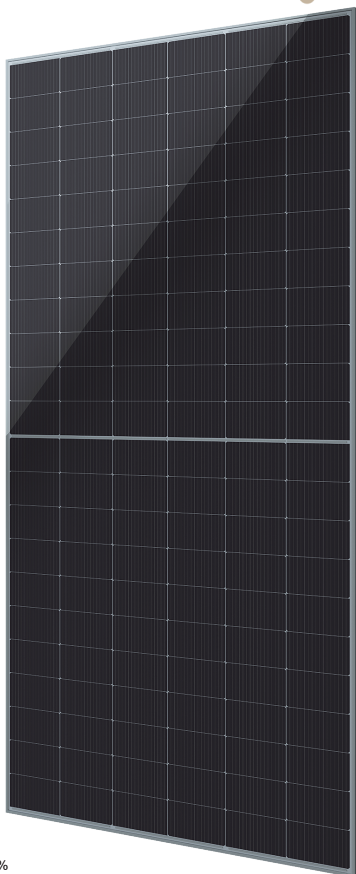


# SOLAR MODULE 625 - 650 W



**G12R - TOPCON  
HALF CUT PV MODULE  
HIGH EFFICIENCY  
DUAL GLASS**



**GUARANTEED MODULE PERFORMANCE FROM IREX ENERGY JSC**

## CERTIFICATES



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



### N-TYPE TOPCON CELL TECHNOLOGY

Based on G12R-182 x 210 mm wafer with multi-busbar N-Type wafer and TOPCon technology



### MODULE TECHNOLOGY

Double-sided power generation  
Low breakage rate; Annual power degradation 0.4%  
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 Front side 5400Pa/Rear side 2400Pa  
Ideal for PV rooftops, ground mount, floating



### THE #1 DOMESTIC PV MANUFACTURER IN VIETNAM

100% Automatic production line  
International quality PV technology



### IREX ENERGY JOINT STOCK COMPANY

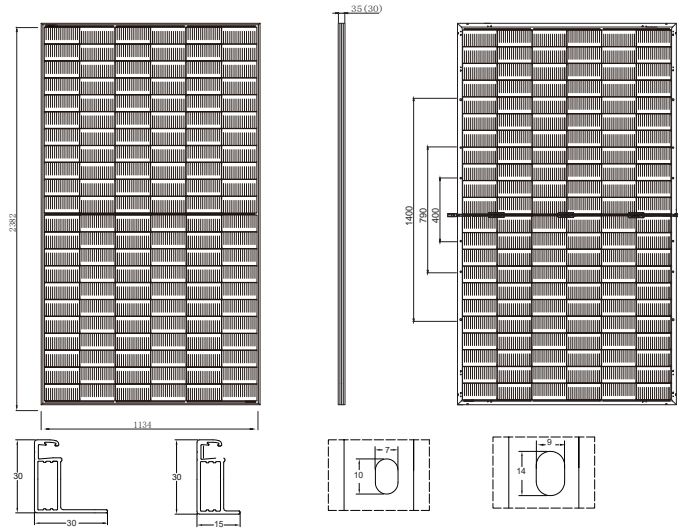
Head Office: No. 47, Le Van Thinh Street, Quarter 5, Binh Trung Ward, HCMC, Vietnam.  
Factory Address: Road No. 1A, Phu My 1 Industrial Zone, Tan Phuoc Ward, HCMC, Vietnam.  
Tel: +84 (0)28 7300 1559 | Email: info@irex.vn | Website: www.irex.vn



# SOLAR MODULE 625 - 650 W

## Mechanical Specifications

External Dimensions	2382 x 1134 x 35(30) mm
Weight	33.6 kg ± 3%
Solar Cells	N-type TOPCon Mono 105 x 182 mm (132 pcs)
Glass	Front: 2.0 mm, AR coating, semi-tempered
	Rear: 2.0 mm, semi-tempered
Frame	Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables	4.0 mm <sup>2</sup> , 300 mm(+)/ 200 mm(-) or Customized Length
Mechanical Load	Front Side Maximum Static Loading 5400Pa Rear Side Maximum Static Loading 2400Pa



\*Tolerance: Length: ±2mm Width: ±2mm Height: ±1mm Row Pitch: ±2mm

## Electrical Characteristics

Module Type	IRM66HTBD5-625		IRM66HTBD5-630		IRM66HTBD5-635		IRM66HTBD5-640		IRM66HTBD5-645		IRM66HTBD5-650	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax)	625	474	630	478	635	481	640	485	645	489	650	493
Open Circuit Voltage (Voc)	48.56	46.13	48.74	46.30	48.92	46.47	49.10	46.65	49.28	46.82	49.46	46.99
Short Circuit Current (Isc)	16.18	13.06	16.24	13.11	16.30	13.16	16.36	13.21	16.42	13.25	16.48	13.30
Maximum Power Voltage (Vmp)	40.70	38.88	40.88	39.05	41.06	39.21	41.24	39.38	41.42	39.54	41.60	39.70
Maximum Power Current (Imp)	15.38	12.18	15.44	12.23	15.50	12.27	15.56	12.32	15.62	12.36	15.68	12.41
Module Efficiency at STC(%)	23.1		23.3		23.5		23.7		23.9		24.0	
Power Tolerance	(0 ~ +5 W)											
Maximum System Voltage	1500 VDC											
Maximum Series Fuse Rating	30 A											

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

NMOT: Irradiance 800 W/m<sup>2</sup>, Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s

## Different Rearside Power Gain

	(Reference to 625 W)		
Rearside Power Gain	5%	10%	20%
Maximum Power at STC (Pmax)	656	687	749
Open-circuit Voltage (Voc/V)	48.56	48.56	48.56
Short-circuit Current (Isc/A)	16.99	17.80	19.41
Maximum Power Voltage (Vmp/V)	40.70	40.70	40.70
Maximum Power Current (Imp/A)	16.59	17.38	18.96
Module Efficiency (%)	24.2	25.4	27.7

\*The above data is for reference only. When signing a contract, the latest version of the product specification shall prevail.

## Temperature Characteristics

Pmax Temperature Coefficient	-0.290 %/°C
Voc Temperature Coefficient	-0.250 %/°C
Isc Temperature Coefficient	+0.045 %/°C
Operating Temperature	-40 ~ +85 °C
Nominal Module Operating Temperature (NMOT)	45 ± 2 °C

## Packing Configuration

	2382 x 1134 x 35 mm		2382 x 1134 x 30 mm	
Container	20'GP	40'HQ	20'GP	40'HQ
Pieces per Pallet	31	31	37	37
Pallets per Container	4	20	4	20
Pieces per Container	124	620	148	740