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# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**IREX Energy Joint Stock Company**

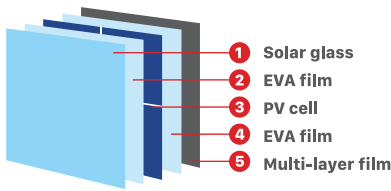
**IR230P-270P-54**

**IR240P-54**

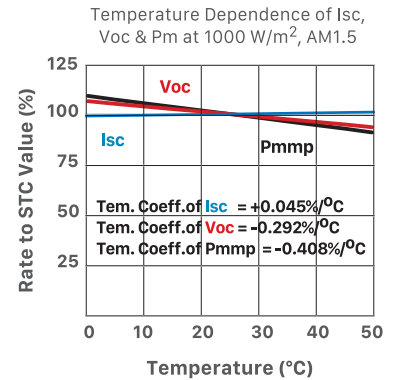
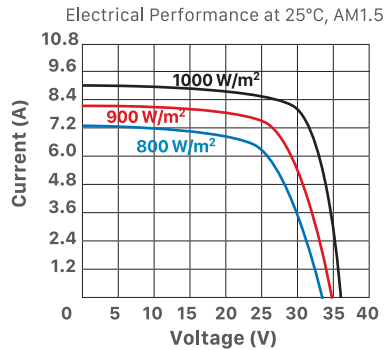
Also available on the web at  
[EnergyPal.com/irex-energy-joint-stock-company-solar-panels/ir240p-54](http://EnergyPal.com/irex-energy-joint-stock-company-solar-panels/ir240p-54)

# 156 SERIES POLYCRYSTALLINE

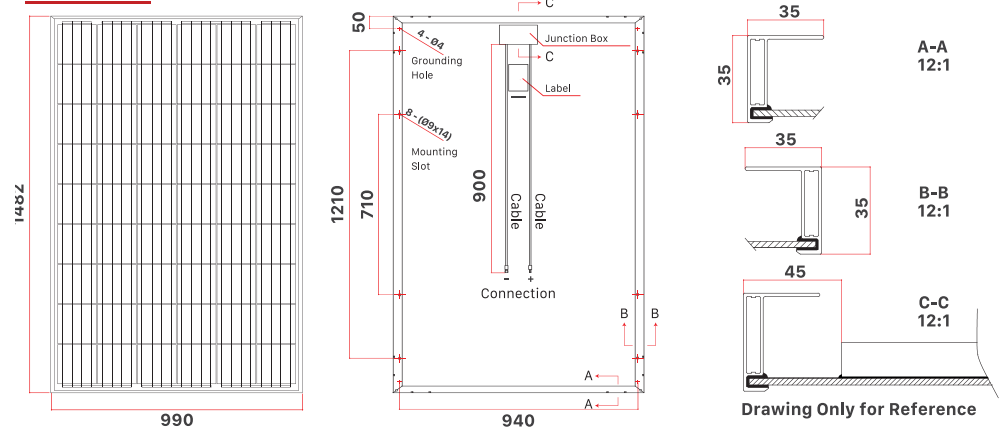
SOLAR MODULE: 230 W, 235 W, 240 W, 245 W, 250 W, 255 W, 260 W, 265 W, 270 W



## PERFORMANCE



## STRUCTURE



ELECTRICAL CHARACTERISTICS STC	IR230P-54	IR235P-54	IR240P-54	IR245P-54	IR250P-54	IR255P-54	IR260P-54	IR265P-54	IR270P-54
Maximum Power (Pmax)	230 W	235 W	240 W	245 W	250 W	255 W	260 W	265 W	270 W
Power Tolerance	0 ~ 3%	0 ~ 3%	0 ~ 3%	0 ~ 3%	0 ~ 3%	0 ~ 3%	0 ~ 3%	0 ~ 3%	0 ~ 3%
Module Efficiency	15.9%	16.0%	16.4%	16.7%	17.1%	17.4%	17.7%	18.1%	18.4%
Maximum Power Current (Imp)	8.28 A	8.36 A	8.42 A	8.51 A	8.60 A	8.67 A	8.75 A	8.85 A	8.96 A
Maximum Power Voltage (Vmp)	27.78 V	28.12 V	28.52 V	28.80 V	29.08 V	29.42 V	29.72 V	29.95 V	30.14 V
Short Circuit Current (Isc)	8.78 A	8.86 A	8.93 A	9.02 A	9.09 A	9.15 A	9.28 A	9.40 A	9.48 A
Open Circuit Voltage (Voc)	34.45 V	34.87 V	35.37 V	35.71 V	36.06 V	36.51 V	36.75 V	37.10 V	37.26 V

Values at Standard Test Conditions (STC: Air Mass AM 1.5, Irradiance 1000 W/m², Cell Temperature 25°C)

ELECTRICAL CHARACTERISTICS NOCT	IR230P-54	IR235P-54	IR240P-54	IR245P-54	IR250P-54	IR255P-54	IR260P-54	IR265P-54	IR270P-54
Maximum Power (Pmax)	166.00 W	169.00 W	173.00 W	179.00 W	181.00 W	185.00 W	190.00 W	194.00 W	197.00 W
Maximum Power Current (Imp)	6.57 A	6.61 A	6.67 A	6.76 A	6.80 A	6.86 A	6.92 A	7.02 A	7.10 A
Maximum Power Voltage (Vmp)	25.28 V	25.58 V	25.95 V	26.49 V	26.63 V	26.97 V	27.46 V	27.64 V	27.75 V
Short Circuit Current (Isc)	7.02 A	7.09 A	7.14 A	7.22 A	7.27 A	7.25 A	7.40 A	7.51 A	7.61 A
Open Circuit Voltage (Voc)	31.69 V	32.08 V	32.54 V	32.85 V	33.10 V	33.42 V	33.76 V	34.05 V	34.36 V

Values at Nominal Operating Cell Temperature  
(NOCT: Wind Speed 1m/s, Irradiance 800 W/m², Cell Temperature 45°C, Ambient Temperature 20°C)

## MECHANICAL CHARACTERISTICS

Cell Type	156.75 x 156.75 mm Polycrystalline, 54 (6x9) pcs in series
Solar Glass	High Transmission, Low Iron, Tempered Glass with Anti Reflecting Coating
Frame	Anodized Aluminum Alloy type 6063 - T5
Junction Box	Rated current ≥ 15 A, IP ≥ 67, TUV & UL, 3 diodes
Dimension	1482 x 990 x 35 mm
Output Cable	4 mm² (EU)/12 AWG (US), 900 mm
Weight	18 Kg
Installation hole Location	See Drawing Above

## PACKING INFORMATION

Container	20' GP	40' GP	40' HQ
Pallets per Container	14	30	30
Pieces per Container	420	900	960

## MAXIMUM RATINGS

Operating Temperature	-40°C to +85°C
Maximum System Voltage	1500 VDC (IEC) / 1500 VDC (UL)
Maximum Series Fuse Rating	20 A (IEC) / 20 A (UL)
Application Class	Class A