

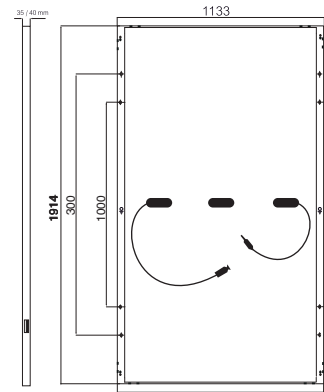
MECHANICAL SPECIFICATION

Solar cells	120 Monocrystalline Silicon (PERC), Multi BB
Encapsulation	Ultra - clear PID free EVA (Ethylene-Vinyl-Acetate)
Backside	UV protected reflective backsheets
Frame	Silver Anodized Aluminium Alloy
Front Glass	3.2mm, High Transmission, AR Coated Tempered Glass
Dimensions	(L)1914 mm X (W) 1133 mm X (H) 35 mm
Weight	~ 23 Kg
J-box	IP 68 certified, 3 diodes, Split junction box
Series Fuse Rating	25 A
Cable	Solar cable 400 mm length
Connectors	MC4 compatible connectors
Application Class	Class A
Electrical Safety	Class II
Fire Safety	Class C (Type 1)
Surface load	Snow load 5400 Pa, Wind load 2400 pa

OPERATING PARAMETERS

Operational Temperature: -40°C ~ +85°C
Power Output Tolerance: 0 ~ +5 W
Voc and Isc Tolerance: ±3%
Maximum System Voltage: DC1500V (IEC/UL)
Maximum Series Fuse Rating: 30A
Nominal Operating Cell Temperature: 45±2°C
Safety Protection Class: Class II
Fire Rating: UL type 3

DESIGN (MM)



Units: mm(inch)
Tolerance:
Length: ±2mm
Width: ±2mm
Height: ±1mm
Pitch-row: ±1mm

ELECTRICAL CHARACTERISTICS

TEST UNCERTAINTY FOR P_{MAX}: ± 3%

Model Number	Elite Pro - US 10 - B120 - (435 Wp -465 Wp)						
Maximum Power (P _{max} /W)	435	440	445	450	455	460	465
Open Circuit Voltage (V _{oc} /V)	41.12	41.22	41.32	41.42	41.52	41.62	41.72
Short Circuit Current (I _{sc} /A)	13.24	13.34	13.44	13.54	13.64	13.74	13.84
Voltage at Maximum Power (V _{mp} /V)	34.82	34.94	35.04	35.16	35.26	35.26	35.46
Current at Maximum Power (I _{mp} /A)	12.50	12.60	12.72	12.82	12.92	13.02	13.12
Module Efficiency (%)	20.07	20.30	20.55	20.79	21.01	21.23	21.45

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 C, Spectra at AM1.5⁺

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20 C, Spectra at AM1.5, Wind at 1m/s

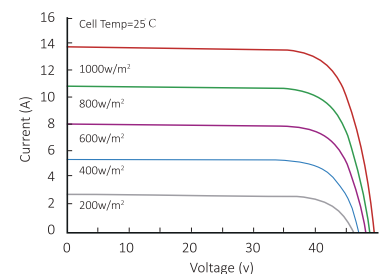
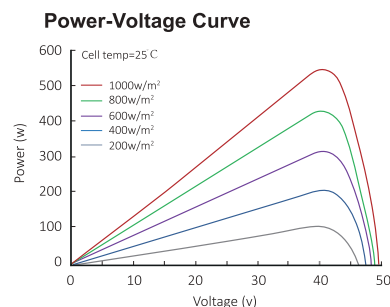
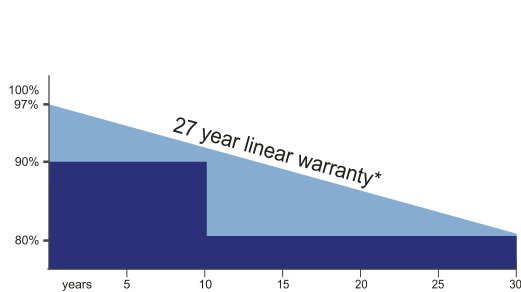
TEMPERATURE RATINGS (STC)

Temperature Coefficient of Isc	+0.050%/ C
Temperature Coefficient of Voc	-0.284%/ C
Temperature Coefficient of P _{max}	-0.350%/ C

MECHANICAL LOADING

Front Side Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Current-Voltage Curve



PRODUCT CERTIFICATIONS

IS 14286:2010/IES 61215:2005,
IS/IEC 61730-1 & 2: 2004

