

270-275-280-285W



Excellent low light performance on cloudy days, mornings and evenings

- Advanced surface texturing
- Back surface field
- Selective emitter



Maximize Limited Space

- 60-cell module power output up to 285 W
- Up to 174 W/m² power density



Highly reliable due to stringent quality control

- All modules have to pass electroluminescence (EL) inspection
- Over 30 in-house tests (UV, TC, HF, and many more)
- In-house testing goes well beyond certification requirements
- PID resistant
- 1000V UL/1000V IEC certified

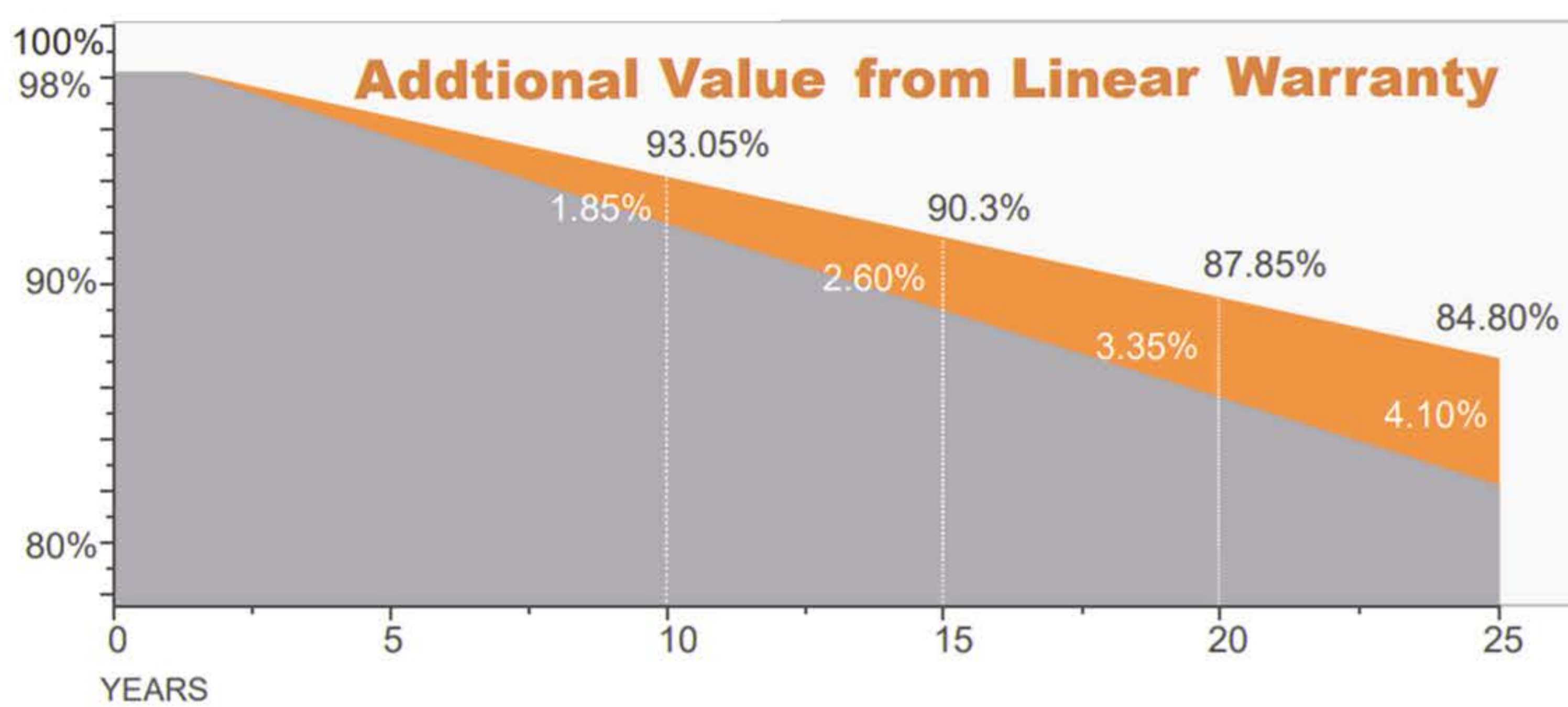


Certified to withstand challenging environmental conditions

- 130 km/h wind load (2400 Pa)
- 900 kg snow load per module (5400 Pa)
- 35 mm hail stones at 97 km/h
- Ammonia resistance
- Salt mist resistance
- Resistance to sand and dust abrasion



● LINEAR PERFORMANCE WARRANTY



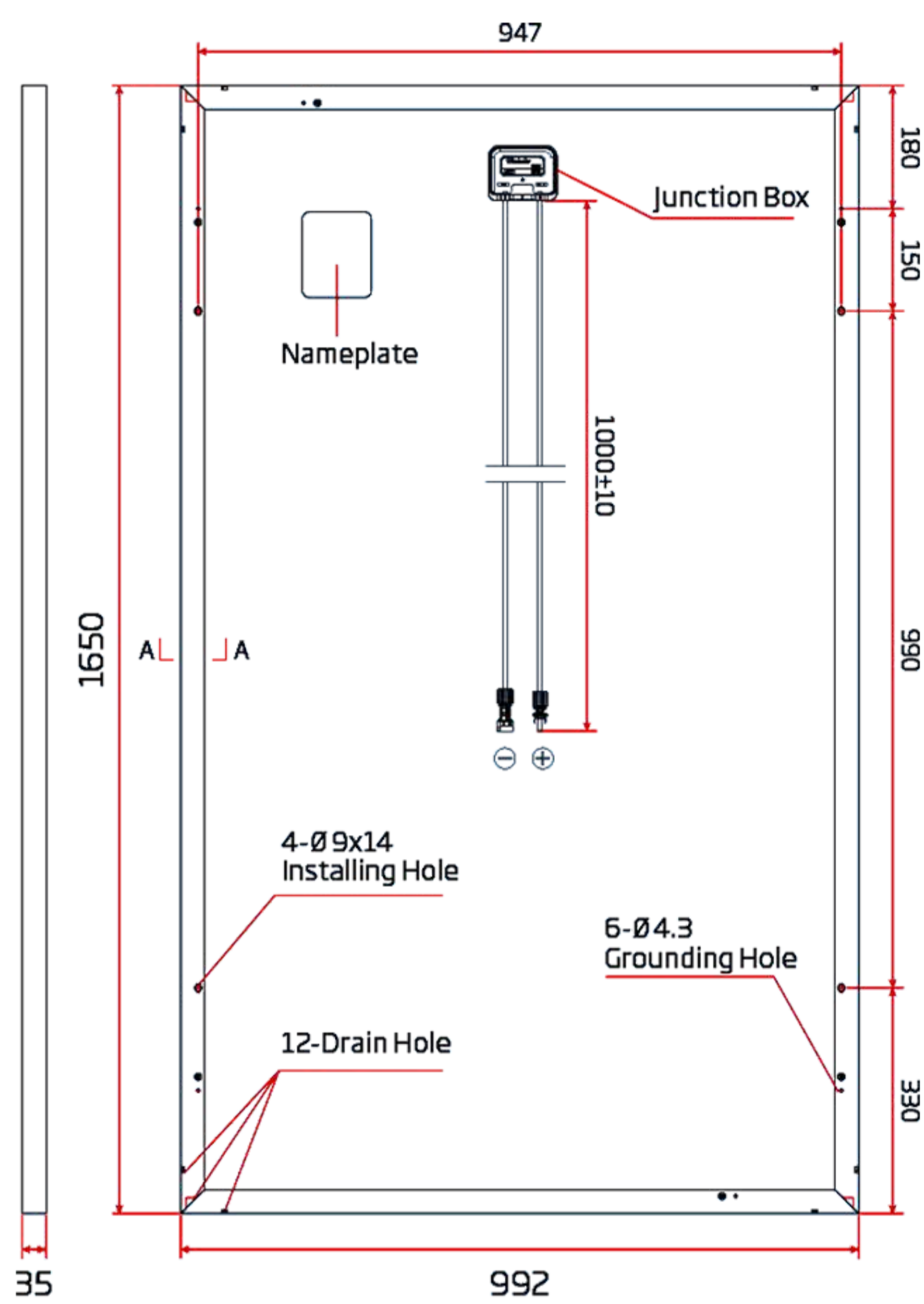
Guarantee on product material and workmanship



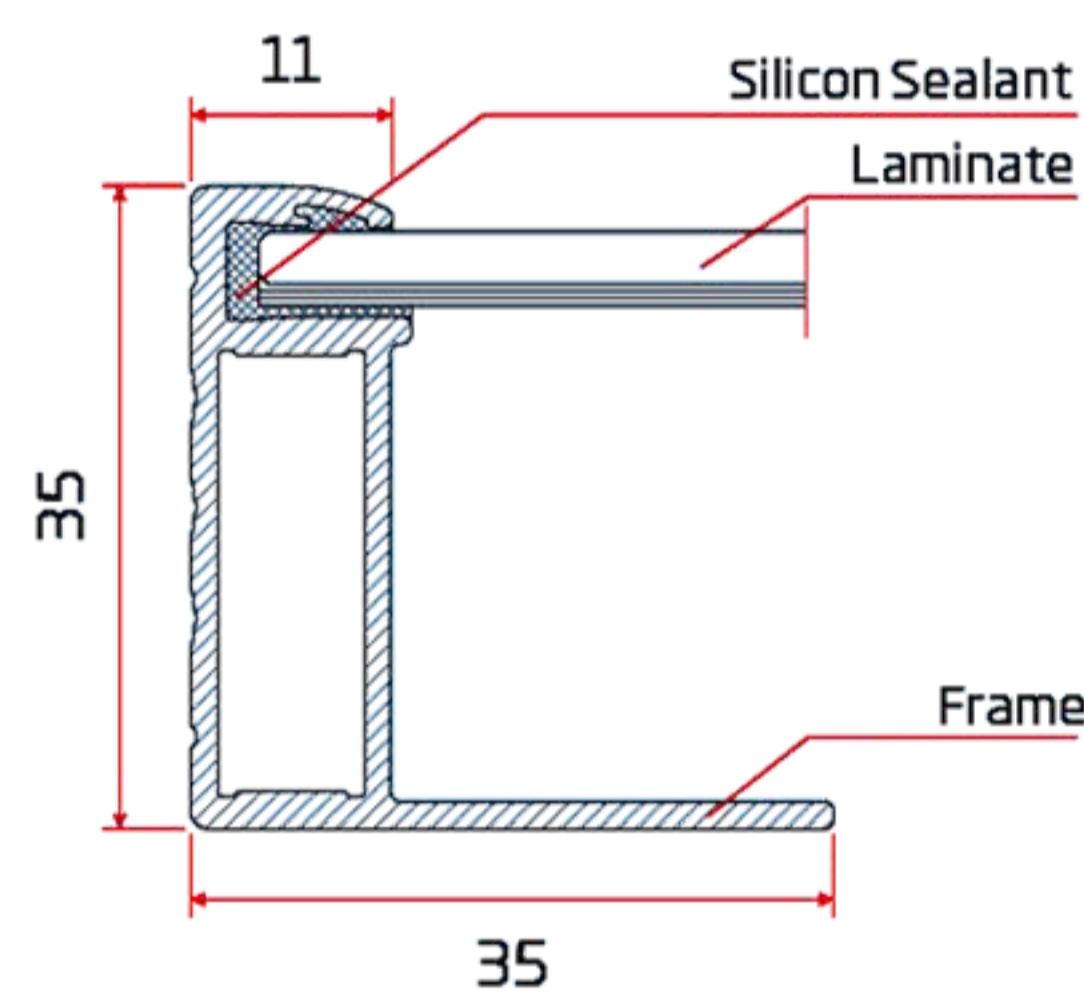
linear power output warranty

DIMENSIONS OF PV MODULE

(unit: mm)

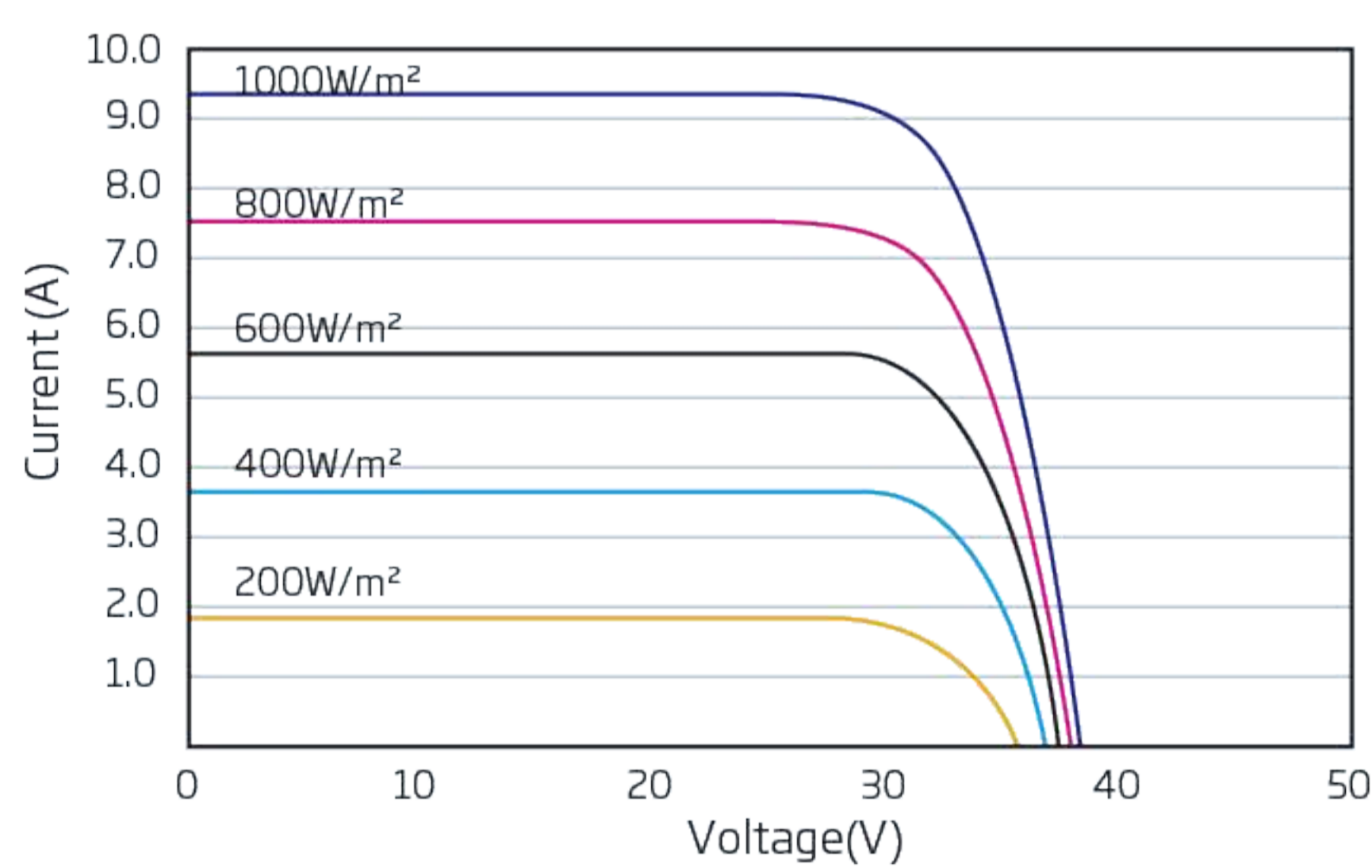


Back View

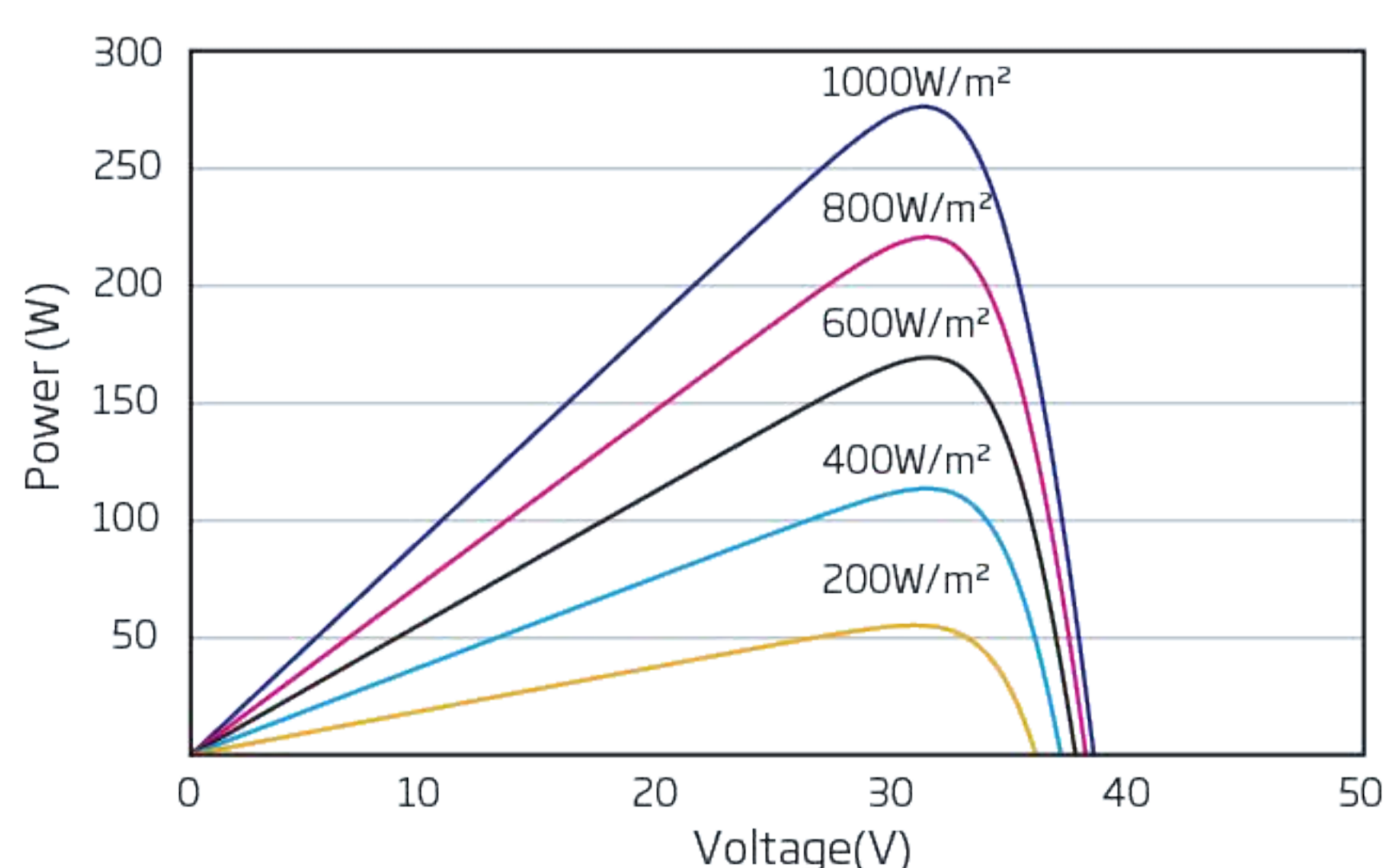


(A-A)

I-V CURVES OF PV MODULE(280)



P-V CURVES OF PV MODULE(280W)



ELECTRICAL DATA(STC)

Part Number	OP270P60	OP275P60	OP280P60	OP285P60
Peak Power Watts- $P_{MAX}(Wp)^*$	270	275	280	285
Power Output Tolerance- $P_{MAX}(W)$	0/+5			
Maximum Power Voltage- $V_{MPP}(V)$	30.9	31.1	31.4	31.6
Maximum Power Current- $I_{MPP}(A)$	8.73	8.84	8.92	9.02
Open Circuit Voltage- $V_{OC}(V)$	37.9	38.1	38.2	38.3
Short Circuit Current- $I_{SC}(A)$	9.22	9.32	9.40	9.49
Module Efficiency $\eta m(\%)$	16.5	16.8	17.1	17.4

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5

* Measuring tolerance: $\pm 3\%$

ELECTRICAL DATA(NOCT)

Maximum Power- $P_{MAX}(Wp)$	200	204	208	211
Maximum Power Voltage- $U_{MPP}(V)$	28.6	28.8	29.0	29.2
Maximum Power Current- $I_{MPP}(A)$	7.00	7.09	7.15	7.23
Open Circuit Voltage- $V_{OC}(V)$	35.1	35.3	35.4	35.5
Short Circuit Current- $I_{SC}(A)$	7.44	7.52	7.59	7.66

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Multicrystalline 156.75 × 156.75 mm
Cell Orientation	60 cells (6 × 10)
Module Dimensions	1650 × 992 × 35 mm
Weight	18.6 kg
Glass	3.2 mm, high transparency, AR coated and heat tempered solar glass
Backsheet	White
Frame	Silver Anodized Aluminium Alloy
J-Box	IP 67 or IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² , 1000 mm
Connector	EU Countries: 28 MC4 / UTX / TS4, Non-EU Countries: 28 QC4 / TS4

TEMPERATURE RATINGS

Nominal Operating Cell Temperature(NOCT)	44°C ($\pm 2K$)
Temperature Coefficient of P_{MAX}	-0.41%/K
Temperature Coefficient of V_{OC}	-0.32%/K
Temperature Coefficient of I_{SC}	0.05%/K

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

MAXIMUM RATINGS

Operational Temperature	-40 to +85°C
Maximum System Voltage	1000V DC (IEC) 1000V DC (UL)
Max Series Fuse Rating*	15A
Mechanical Load	5400 Pa
Wind Load	2400 Pa

WARRANTY

- 10 year Product Workmanship Warranty
- 25 year Power Warranty

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

- Modules per box: 30 pieces
- Modules per 40' container: 840 pieces