

HERO[®]PV 440TBT-108



Glass Coating

Double-layer anti-reflective film effectively improves light transmittance and provides a consistently black appearance.



Better Low-Light Performance

High output even under diffuse light, such as on cloudy days.



Double Electroluminescence (EL) Test

Each module is tested twice to ensure the highest possible quality.



Stäubli MC4 Connector

Stäubli MC4 for secure plug connections from the original manufacturer.



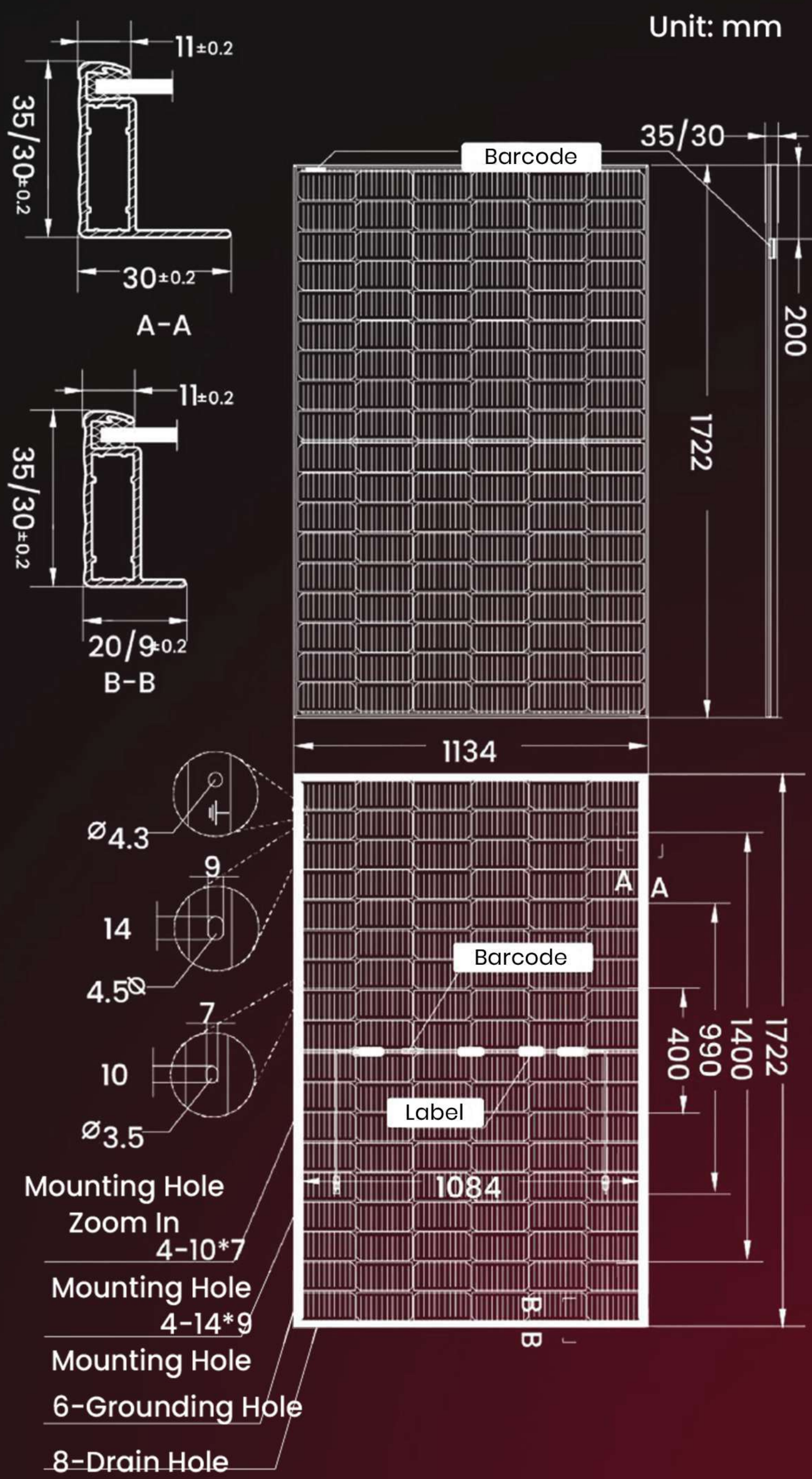
N-Type TOPCon Cells

N-type solar cells offer a higher efficiency rate than P-type cells. This means more sunlight is converted into electrical energy.



Laser Welding Technology

Unlike other modules, our diodes are laser welded. This ensures higher quality, safety, and reliability.


ELECTRICAL CHARACTERISTICS (STC*)

Model Number	440TBT-108
Rated Power in Watts-Pmax(Wp)	440
Open Circuit Voltage-Voc(V)	40.64
Short Circuit Current-Isc(A)	13.65
Max. Power Voltage-Vmpp(V)	33.50
Max. Power Current-Impp(A)	13.14
Module Efficiency(%)	22.53
Maximum system voltage	1500V DC
Fuse Rating(A)	25
Temperature coefficient Pmax	-0.30%/°C
Temperature coefficient Isc	0.046%/°C
Temperature coefficient Voc	-0.25%/°C
Refer. Bifacial Factor	80±5%

*STC: Irradiance 1000W/m², module temperature 25°C, AM=1.5

*NOCT: Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s Electrical characteristics with different rear side power gain

WORKING CHARACTERISTICS (NOCT*)

Model Number	440TBT-108
Rated Power in Watts-Pmax(Wp)	323
Open Circuit Voltage-Voc(V)	37.20
Short Circuit Current-Isc(A)	11.02
Max. Power Voltage-Vmpp(V)	30.30
Max. Power Current-Impp(A)	10.66
Power tolerance	0~+5W
NOCT	45°C ±2°C
Operating Temperature	-40°C~85°C

ELECTRICAL CHARACTERISTICS

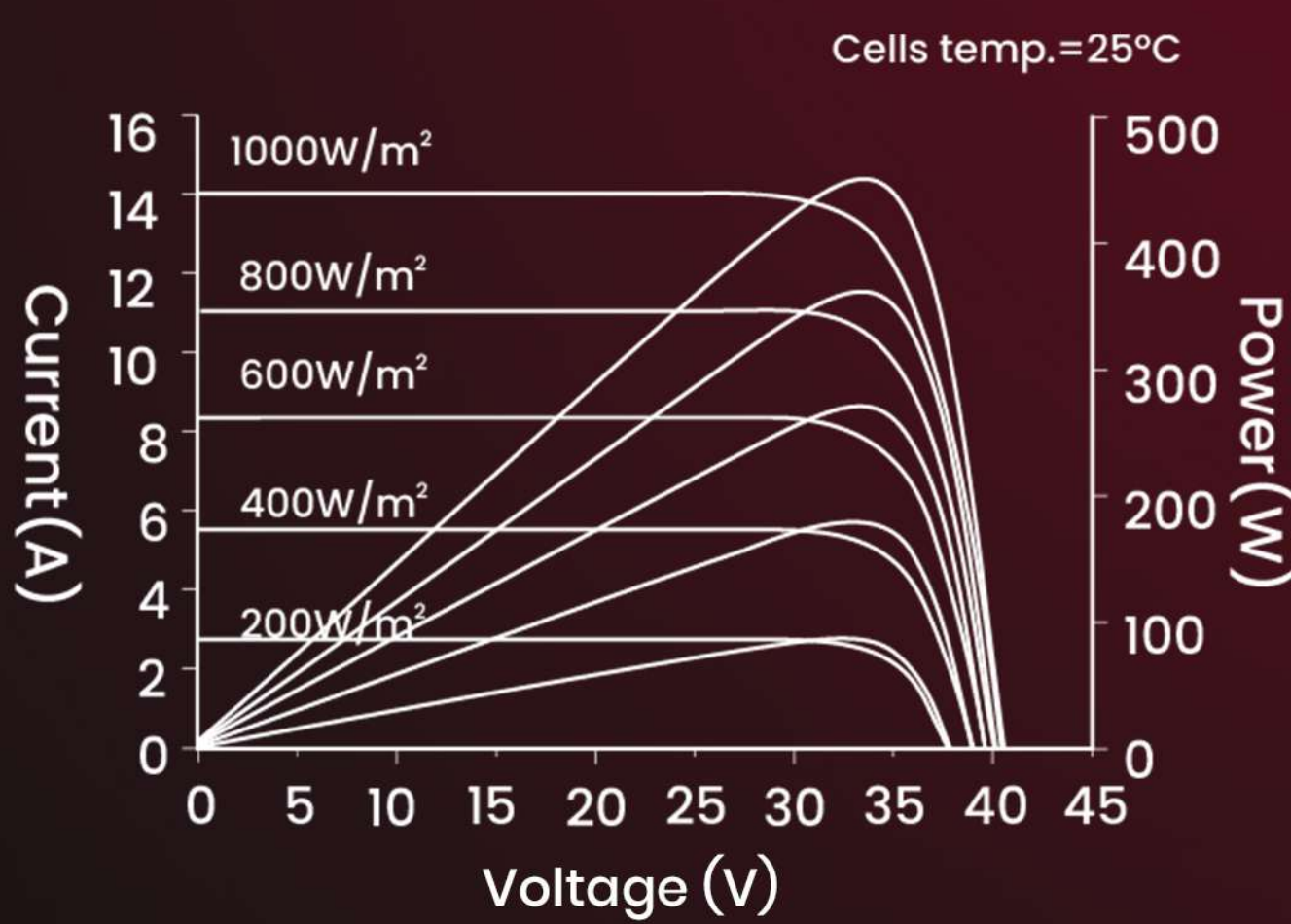
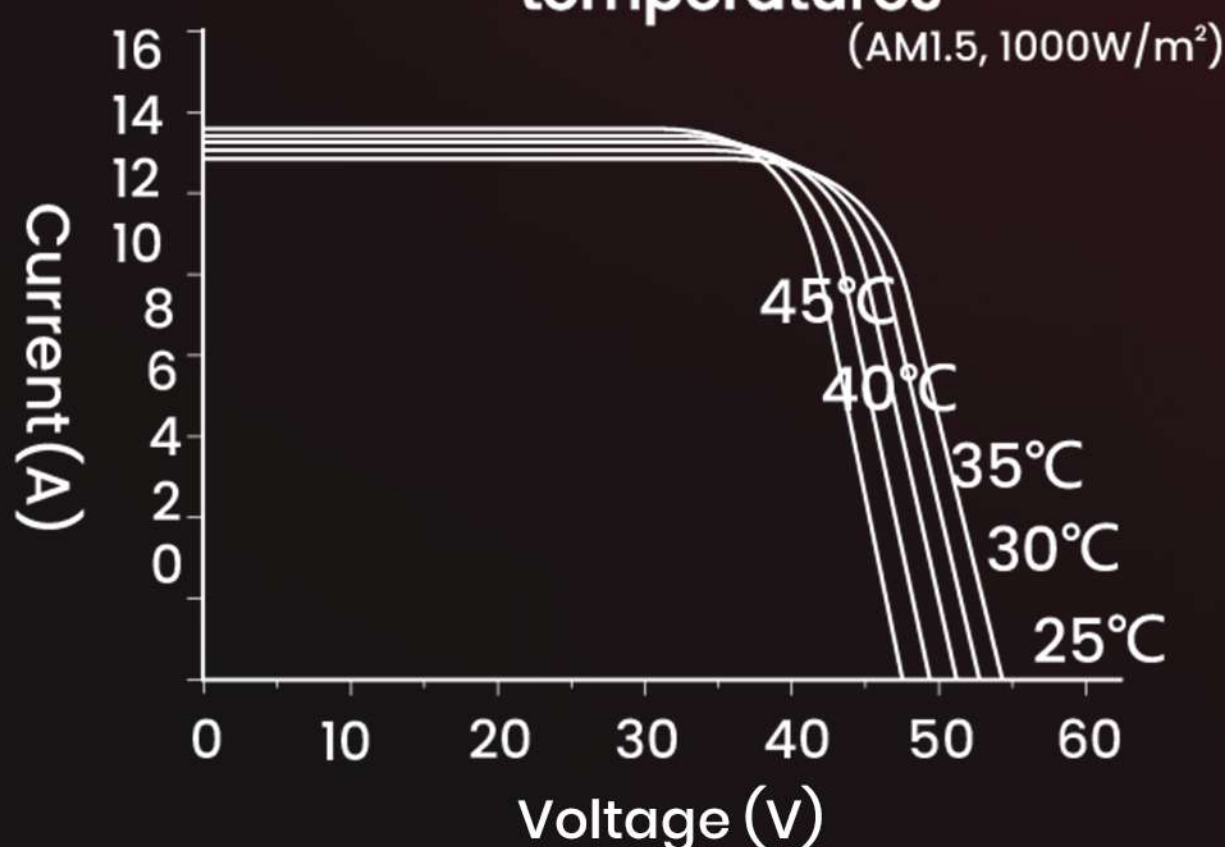
with varying rear-side power gain

	Pmax/W	Voc/V	Isc/A	Vmpp/V	Impp/A
5%	462	40.64	14.33	33.50	13.80
10%	484	40.64	15.02	33.50	14.45

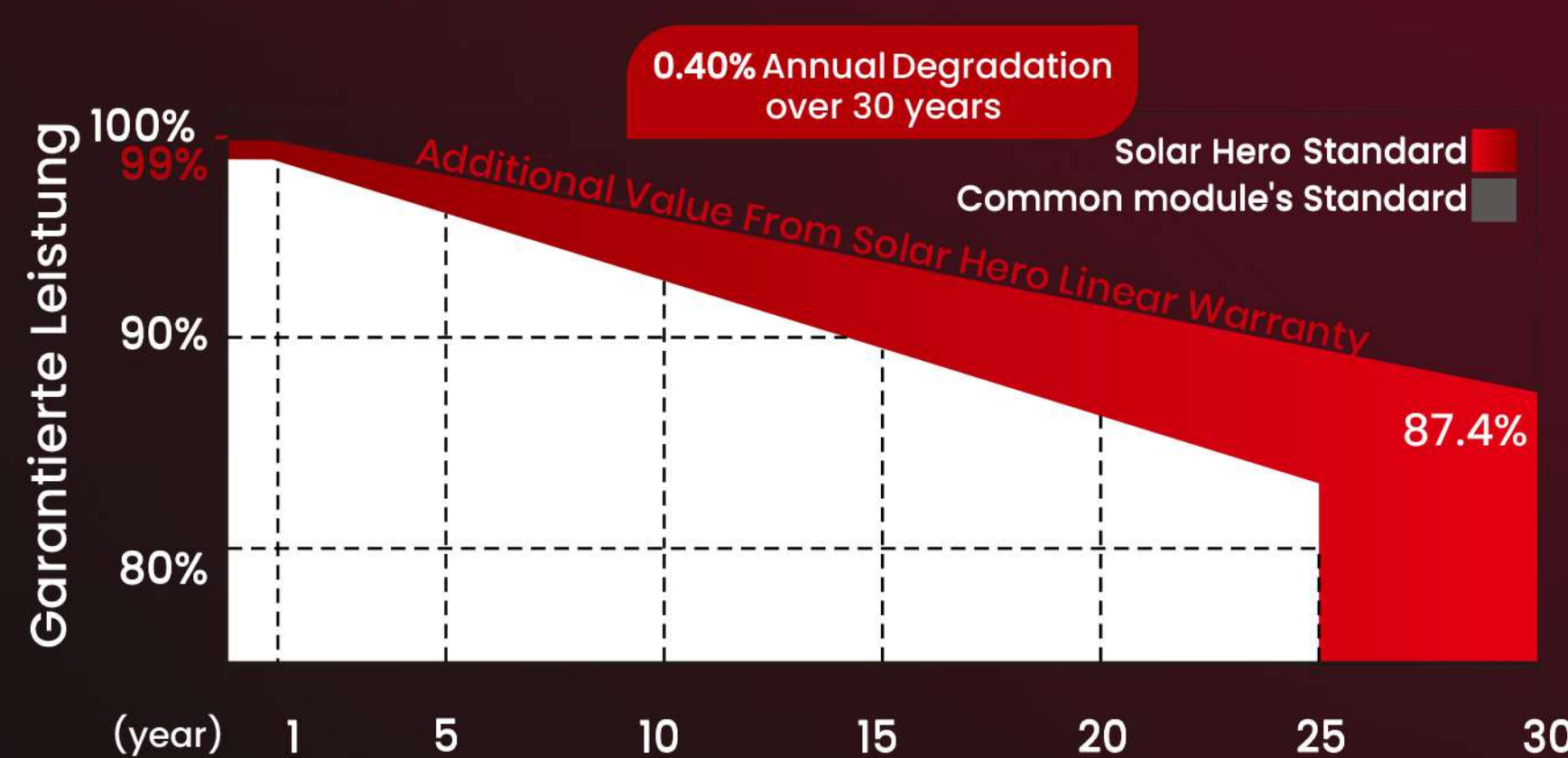
The additional gain from the rear side compared to the front-side output under standard test conditions depends on the mounting (structure, height, tilt angle, etc.) and the albedo of the ground.

MECHANICAL CHARACTERISTICS

Number of cells	108pcs	Type of frame	Anodized Aluminum Alloy
Size of cell(mm)	182×91	Size of module(mm)	1722×1134×35/30
Type of cell	N-TOPCon Mono	Weight(kg)	25.5
Thickness of glass(mm)	2.0	Cables/connectors	4.0mm², Stäubli MC4-EVO2
Junction box	IP68	Length of Cabel	1200mm (can be customized)

440TBT-108
I-V characteristics at different irradiances

I-V characteristics at different temperatures

PACKAGING CONFIGURATION

Height of Modules (mm)	35	30
Number of Modules Per Pallet	31	36
Packaging Box Dimensions (l×w×h) (mm)	1750×1120×1260	1750×1120×1260
Box Gross Weight (kg)	808	936
Number of Modules Per 40ft (HQ) Container	806	936
Number of Pallets Per 40ft (HQ) Container	26	26

ANNUAL DEGRADATION

LINEAR PERFORMANCE WARRANTY

30-year product warranty / 30-year linear power warranty

Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IEC62716

