

# **+Ultra** *new range*

➔ Photovoltaic module  
**A-305P / A-310P / A-315P (TY 3.2)**



**+UltraPositive tolerance**  
Positive 0 / +5 Wp

**+UltraQuality Criteria**  
Anti Hot-Spot

**+UltraWarranty**  
10-year product warranty

**+UltraReliability**  
In the market since 1979

**+UltraResistance**  
3.2 mm tempered glass

**+UltraTES**  
Cell-to-cell electrical verification



A unique system  
in the market,  
patented by  
Atersa.





Electrical characteristics (STC: 1kW/m<sup>2</sup>, 25°C±2°C and AM 1,5)\*

	A-305P	A-310P	A-315P
Rated Power (0/+5 W)	305 W	310 W	315 W
Module efficiency	15,78%	15,94%	16,19%
Peak-Point Current of Maximum Power (Imp)	8,27 A	8,35 A	8,43 A
Peak-Point Voltage of Maximum Power (Vmp)	36,88 V	37,14 V	37,37 V
Short-circuit Current (Isc)	8,78 A	8,83 A	8,88 A
Open Current Voltage (Voc)	45,97 V	46,14 V	46,31 V

Thermal parameters

Isc (α) Temperature Coefficient	0,04% /°C
Voc (β) Temperature Coefficient	-0,32% /°C
P (γ) Temperature Coefficient	-0,43% /°C

Physical characteristics

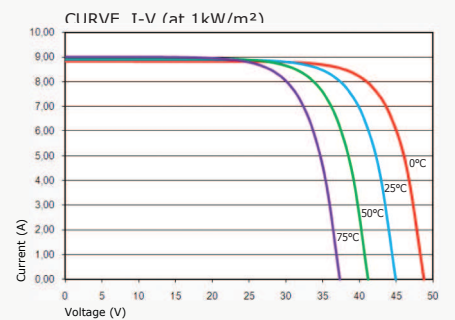
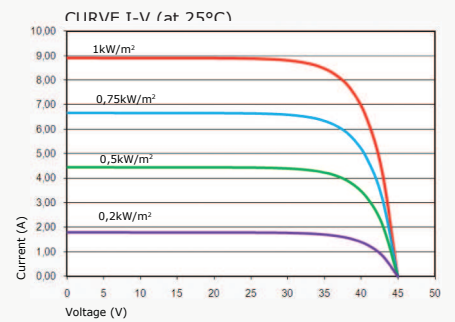
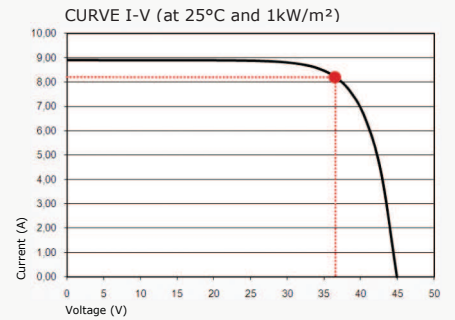
Dimensions (mm ± 2 mm)	1965x990x40
Weight (0,5 kg)	22,5
Surface area (m <sup>2</sup> )	1,95
Cell type (± 1 mm)	Polycrystalline 156x156 mm (6 inches)
Cells in series	72 (6x12)
Front glass	Ultra-clear 3.2 mm tempered glass
Frame	anodized aluminium alloy or Polyester-coated
Connection box / Optional	TYCO IP67
Cables	Solar Cable 4 mm <sup>2</sup> 1200 mm (TYCO)
Connectors	TYCO PV4

Operating range

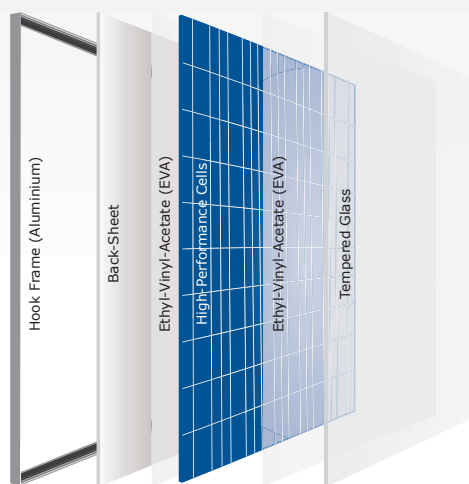
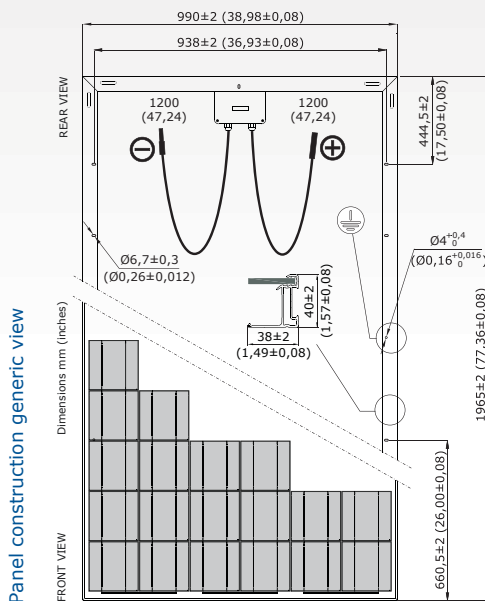
Temperature	-40°C to +85°C
Maximum System Voltage / Protection	1000 V (IEC)/ CLASS II
Maximum Load (Back)	2400 Pa (130 km/h)
Maximum Reverse Current (IR)	15,1 A

\*Electrical specifications measured in STC. NOCT: 47±2°C.  
Tolerance measures STC: ±3% (Pmp); ±10% (Isc, Voc, Imp, Vmp).

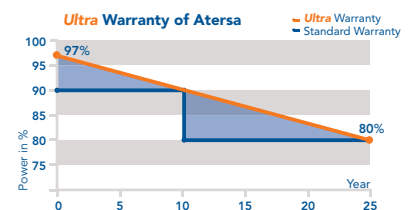
A-305P curves model



\* Max. Reverse Current (IR): 15,1A.  
\* Max. Series Fuses: 15A.



- Modules per box: **25 units**
- Weight per pallet: **595 kg**
- A 40-foot container can hold 21 boxes: **525 panels**
- A 40-foot HC container can hold 22 boxes: **550 panels**
- A 20-foot container can hold 9 boxes: **225 panels**
- A TAUTLINER truck can hold 26 boxes: **650 panels**



NB: The data contained in this documentation are subject to modification without prior notification.

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