



**STANDARD
5 BUSBAR**

TEA 300 / 305 / 310 - All Black

Monocrystalline Photovoltaic Module - 60 cells

Engineered
in Italy



CE

GENERAL FEATURES

- **Total black look for particular architectural requirements**
- **15-year product warranty**
- **High-efficiency PERC cells** optimized for low irradiance decrease ohmic losses and increase the yield
- **Tempered 3.2 mm glass** for optimal mechanical stability and transparency
- **High temperature resistance** (tested at 105° C for 200 hours)
- Maximum **resistance against hail** (83 km/h, 2.5 mm)
- Quality control with **electroluminescence (EL) tests** on each module

CERTIFICATIONS

- > **IEC 61215:2016 - IEC 61730:2016 & Factory Inspection**
- > **Fire Resistance - Class C**
- > **Salt Corrosion Resistance** IEC 61701
- > **Ammonia Corrosion** IEC 62716
- > **Dust and Sand Resistance** IEC 60068-2-68

NEW

GUARANTEES

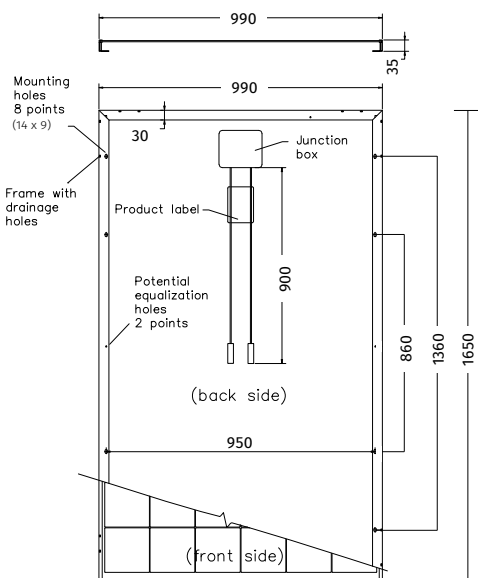
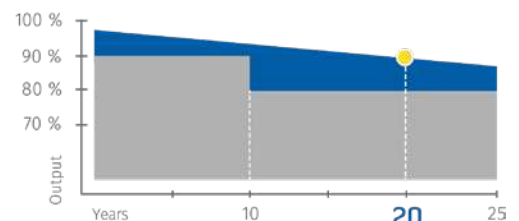
Performance guarantee

Max power decrease **0.5%/year**
 97% at the end of first year
90% at the end of 20th year
 87% at the end of **25th year**

Product guarantee

15 YEARS

Market standard performances
 Tesla Energy performances



Note: dimensions in mm
tolerance +/- 2 mm

ELECTRICAL DATA

MODULE		TEA 300M	TEA 305M	TEA 310M
<i>Standard Test Conditions STC: 1000 W/m² - AM 1.5 - 25 °C - tolerance: Pmax (±3%), Voc (±4%), Isc (±5%)</i>				
Module power (Pmax)	W	300	305	310
Open circuit voltage (Voc)	V	40,16	40,5	40,84
Short circuit current (Isc)	A	9,59	9,67	9,75
Maximum power voltage (Vmpp)	V	32,6	32,88	33,16
Maximum power current (Impp)	A	9,21	9,28	9,34
Module efficiency	%	18,37	18,60	18,98

<i>Nominal Module Operating Temperature NMOT: 800 W/m² - T=45 °C - AM 1.5</i>				
Module power (Pmax)	W	220,36	224	227,71
Open circuit voltage (Voc)	V	37,04	37,36	37,67
Short circuit current (Isc)	A	7,89	7,96	8,03
Maximum power voltage (Vmpp)	V	29,50	29,75	30
Maximum power current (Impp)	A	7,47	7,53	7,59

TEMPERATURE RATINGS

Temperature coefficient Isc	%/°C	0,0344
Temperature coefficient Voc	%/°C	-0,273
Temperature coefficient Pmax	%/°C	-0,389
NMOT *	°C	45
Operating temperature	°C	from -40 to +85

* Nominal Module Operating Temperature

MECHANICAL SPECIFICATIONS

Dimensions	1650 x 990 x 35 mm
Weight	17.7 kg
Glass	Tempered, ARC, Transparent, 3.2 mm
Cell encapsulation	EVA (Ethylene Vinyl Acetate)
Cells	60 monocrystalline PERC cells 156.75x156.75 mm
Backsheet	Composite multilayer film
Frame	Anodized aluminium frame with mounting and drainage holes
Junction box	Certified according to IEC 62790, IP 68 approved, 3 bypass diodes
Cables	Solar cable, length 900 mm assembled with MC4-combinable plugs
Maximum reverse current (Ir)	20 A
Mechanical load (snow)	Design load: 3600 Pa 5400 Pa (including safety factor 1.5)
Mechanical load (wind)	Design load: 3600 Pa 5400 Pa (including safety factor 1.5)
Protection Class	II - accordance to IEC 61730
Protection Class	II - accordance to IEC 61730

Authorized Dealer



Silo Road, Yak hchal Street, House No. 14
Police District #3, Kabul, Afghanistan
Tel + 44 7810806613 or +93 777762256
www.teslaenergyafghanistan.com