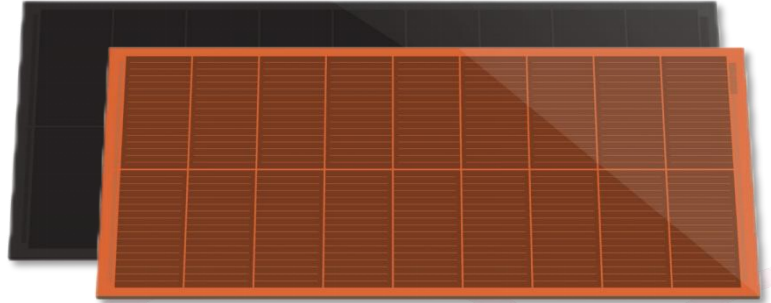# EINNOVA
SOLARLINE

Solar Roof Tile
ESM-70/68W

● **Lightweight**
Suitable for low-bearing capacity roofs;
Easy for transportation and installation.

● **Excellent Performance**
High energy conversion rate;Waterproof and noise reduction; Good ventilation and heat dissipation.
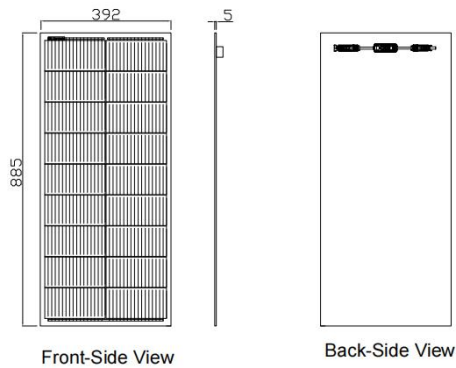
● **Safe and Reliable**
Fire-resistance Class A;Long lifespan as the buildings.

● **Aesthetic and Stylish**
Seamlessly blend in with the buildings;Multiple colors available for customization.

TÜV SUD · PV CYCLE · CE · ISO · MCS

Mechanical Diagrams
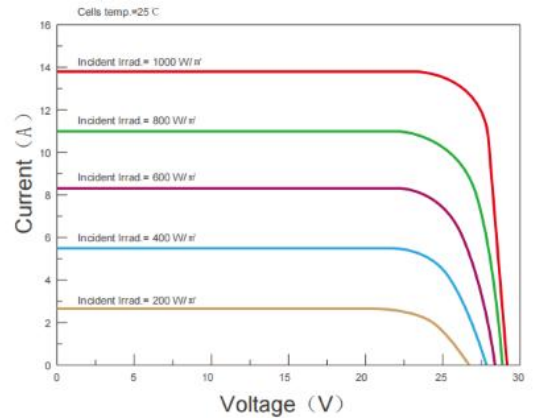

Front-Side View

Back-Side View

All Dimensions in mm.
The above drawing is a graphical representation of the product.
For engineering quality drawings please contact EINNOVA.

Curve

Characteritics(STC)

Model	ESM-70 Tile		ESM-68 Tile	
Color	Black	Terra Cotta	Black	Terra Cotta
Maximum Power（Pmax）	70	56	68	54
Open Circuit Voltage（Voc）	12.95	12.82	12.72	12.59
Short Circuit Current（Isc）	6.56	5.25	6.51	5.21
MaximumPowerVoltage（Vmp）	11.25	11.14	11.02	10.92
MaximumPowerCurrent（Imp）	6.22	5.03	6.17	4.95
Module Efficiency - ηm（%）	20.17	16.14	19.60	15.56
Operational Temperature	-40℃~+85℃			
Maximum System Voltage	1500VDC			
Maximum Series Fuse Rating	15A			
Power Tolerance	0~+5w			
Temperature Coefficient of Pmax	-0.310%/℃			
Temperature Coefficient of Voc	-0.260%/℃			
Temperature Coefficient of Isc	+0.046%/℃			
Nominal Operating Cell Temperature	45±2℃			
Safety Class	Class II			
Max Load（Front/back）	5400pa/2400pa			

STC ： Irradiance 1000W/m 2 ， Cell Temperature 25℃, Air Mass 1.5

Mechanical Specifications

Dimensions	885*392*5mm
Weight	3.0kgs±3%
Cell type	N type mono crystalline 16/18BB
Front Glass	3.2mm, Tempered
Half-cell quantity	18（2×9）
Junction Box	IP68
Cable	4.0mm²;500mm(length can be customized)
Connector	MC4 Compatible

Packing Details

68pcs/pallet; Pallet size:990*1130*590mm

40HQ:96pallets, 5568pcs.

20HQ: 30pallets, 1740pcs.