



LEDOLAS

Lighting | Energy | Decontamination



Solar Transparent Windows

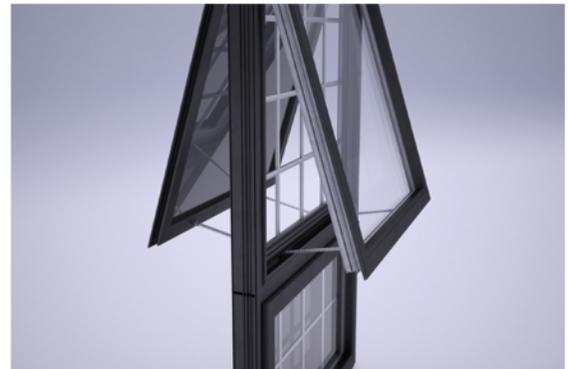
Solar Transparent Windows are now in production for the benefit of everyone. Our OEM has been developing a complete line of windows of all sizes and shapes for homes, commercial buildings and office towers. Using premium European designs with turn and tilt in casement windows to store front windows. Frames in all types available in all wood, aluminum exterior clad, aluminum with thermal break or all copper. Interior and exterior trim in solid maple, oak, cherry, teak, walnut, pine, etc. in style to match your building. With our 20%, 30%, or 40% transparent safety glass modules expect to significantly reduce your dependency on the grid, and eliminate glare from the sun and blinds/shades that are needed to block the sun but blind your view outside.

Window Actuators for solar tracking - Our solar transparent windows feature inner double glazing and outer thin film solar panel, with 80% transparency. Depending on the window type, inner window can be opened in regular and/or tilt position, while the solar panel screen can be also opened, with an actuator option for sun tracking.

Multiple Window Configurations – You can choose from horizontal double and triple window configurations, vertical configuration sets, to combined vertical and horizontal sets. The window opening positions are optional in these configurations.

Window Types and Finishes – The product line includes turn-tilt and casement windows, in variety of different wood and aluminum finishes.

Commercial / Industrial – As a separate category of our product line, we designed a special type of window for use as curtain walls in institutional, commercial industrial, and public buildings.

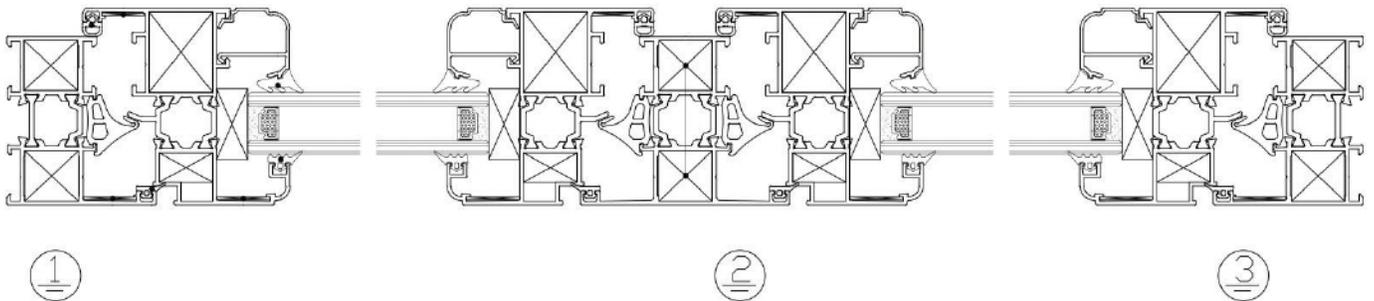
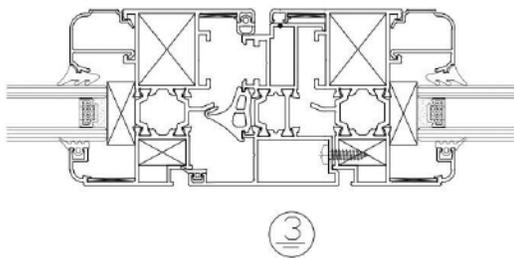
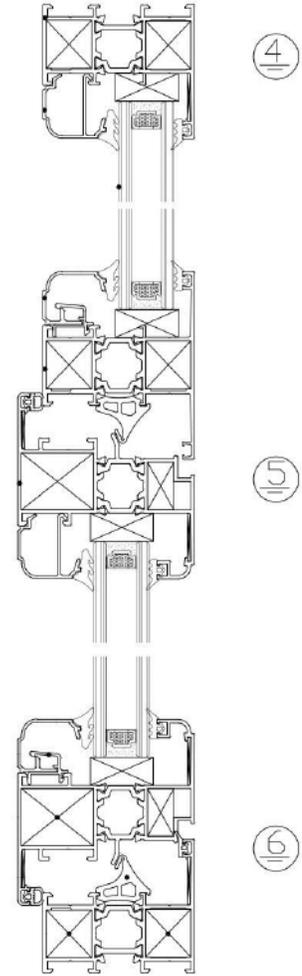
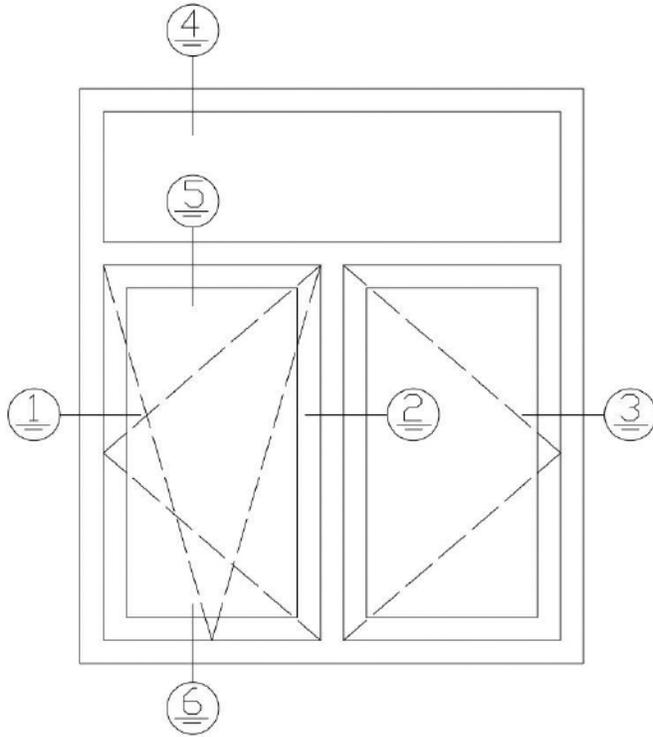


SOLAR TRANSPARENT WINDOWS/DOORS SPECIFICATION

WINDOWS/DOORS STYLES	
• Casement windows & doors	• Sliding windows & doors
• Folding windows & doors	• French doors
• Tilt & Turn windows & doors	• Lift Sliding doors
GLASS	
THK-10600-20-T Thin Film Solar Panel (for reference only)	
WOOD	
Color:	White/Champagne/Grey/Wood Grain/Silver
Profile:	IV68 system/Hemlock solid wood/Finger jointed/3 layer laminated
Paint:	Water based outdoor paint, environmental friendly, prevention of UV
ALUMINUM PROFILE	
Aluminum alloy:	6063-T5, thermal- break
Thickness:	1.4mm -2.0mm, customized
Surface treatment:	Customized (Powder coated, Electrophoresis, Anodizing etc.)
SURFACE TREATMENT	
Powder coating, Anodizing, Over laminate, Electrophoresis	
SIZE	
Customized	
COLOR	
Customized	
SEALING	
Ternary ethylene propylene rubber sealing strip	
OPTIONAL PARTS	
Grid/Mosquito net/Stainless Steel screen/Inside blinds	
GUARANTEE	
10 years	
WINDOW STRENGTH	
Wind Pressure Performance	≥ 5.0 kpa
Air Permability	≤ 0.5 m ³ /(m.h)
Rain Water Permability	≥ 700 pa
Air Noise Performance	45 dB
Good Insulation Performance	≤ 1.0w/(m ² .k)
Shading Performance of SC	≤ 0.2



SOLAR TRANSPARENT WINDOWS – CASEMENT WINDOW TYPE

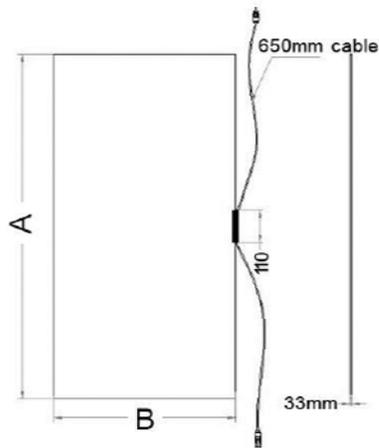




LEDOLAS

Lighting | Energy | Decontamination

THIN FILM SOLAR PANEL SPECIFICATION RANGE



WARRANTY:

-10 years materials and workmanship

-25 years power output guarantee for 90% of nominal output during first 10 years and 80% over 25 years

-View our website for detailed specs on different panel options for the windows and doors

Electrical Specifications (performance at STC: 1000W/m², 25°C, AM1.5)

Nominal Power(P _m)	64W-225W
Open Circuit Voltage(V _{oc})	60.2V-116V
Short Circuit Current (I _{sc})	0.59A-3.75A
Voltage at max. Power(V _m)	42.6V-87V
Current at max. Power(I _m)	0.55A-3.73A

System Properties (at STC)

Maximum System Voltage	V _{sys} (V)	1000(600UL)
Limiting Reverse Current	I _R (A)	2-3.5
Maximum Series Fuse	I _{cr} (A)	2-3.5

Temperature Coefficients (at STC)

Temperature Coefficients of I _{sc}	α=0.060%/°C
Temperature Coefficients of V _{oc}	β=-0.321%/°C
Temperature Coefficients of P _m	γ=-0.214%/°C

Mechanical Specifications

Length	1200mm-3000mm
Width	600mm-1200mm
Thickness	6.8mm
Area	0.72m ² -3.6 m ²
Weight	11.8kg-78kg
Frame	Designed to application
Lead Cable	2.5mm ² 650mm
Connectors	MC4