

# PORFYRIOS

## POWER GLASS



### Product features



#### High power generation

Compared with other photovoltaic technologies, it has outstanding advantages in power generation performance in hot and humid environments, and performs best



#### Low temperature coefficient

Little affected by temperature, with the increase of temperature, the power attenuation is small



#### Small occlusion loss

Being shielded has little impact on power generation, small hot spot effect, low power generation loss, and guarantees product life and safe used



#### Adapt to harsh environments

It can be installed and used in mountains, deserts, and coastal defenses. It is a marble building material that can generate electricity



#### Perfect integration with architecture

The color pattern can be customized, the style is diverse, beautiful and generous, the price is affordable, and it can be used in the farm house at a low price



#### Environmental protection and safety

Energy saving and emission reduction, the only building material that can create value for the owner

### Product certification

- IEC/EN61215 IEC/EN61730
- GB/T29551
- JGJ102
- Fire rating: Class A



Cadmium Telluride (CdTe) photovoltaic technology is a thin film technology that uses cadmium telluride in a thin semiconductor layer designed to absorb and convert sunlight into electricity.

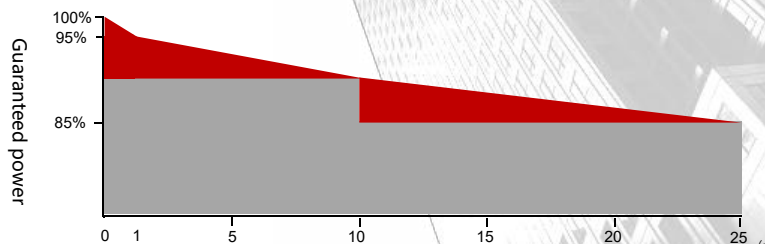
The CdTe PV panels have been market available since 2002 and some of the world's largest solar farms have been using this technology, notably the Topaz Solar Farm in California finished construction in 2014 and was the worlds' largest solar farm at the time.

With CdTe technology produces films of greater uniformity and allows for deposition on any configuration of the substrate. This allowed the advancement in this technology towards perforated/transparent PV panels.

### Product Warranty

10-year product warranty

25-year linear power output guarantee

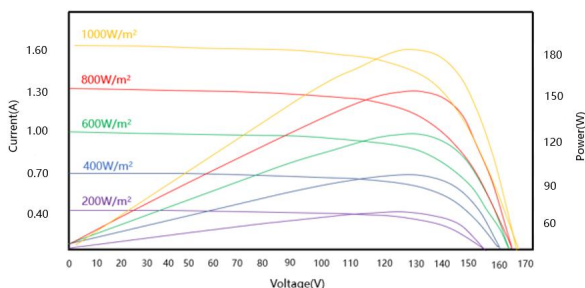


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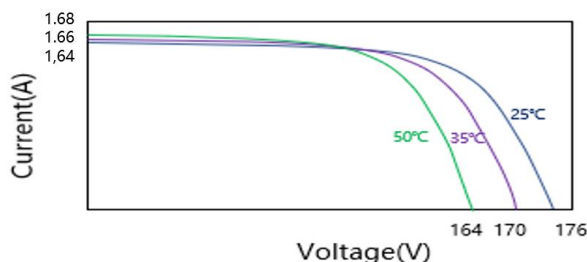
## POWER GLASS

### IV CURVES

IV curves of COM-T30 under different irradiance



IV curves of COM-T30 at different temperatures



### Electrical parameters (STC)

		POR-T20	POR-T30	POR-T40	POR-T50	POR-T60
Film removal rate	%	20	30	40	50	60
Maximum power	W	200	175	150	125	100
Power tolerance	%	±3	±3	±3	±3	±3
Vmpp	V	140	140	140	140	140
Imp	A	1.43	1.25	1.07	0.89	0.71
Voc	V	175	175	175	175	175
Isc	A	1.65	1.45	1.24	1.03	0.83

STC (standard test conditions): irradiance 1000W/m<sup>2</sup>, battery temperature 25°C, air quality AM1.5

### TEMPERATURE CHARACTERISTICS

NOCT (nominal operating cell temperature)	42.3±2°C
Temperature Coefficient of Pmax	-0.189%/°C
Temperature Coefficient of Voc	-0.396%/°C
Temperature Coefficient of Isc	+0.061%/°C

### OPERATING CONDITION

Maximum System Voltage	1000V
Limiting Reverse Current	T20-2.48A/T30-2.18A/T40-1.86A/T50-1.55A/T60-1.25A
Operating Temperature Range	-40°C~+85°C
Load Rating	5400Pa
Hail Test	Passed
Waterproof Rating	IP67

### Mechanical data

Module Dimension	1600*1200mm*17.48mm
Thickness	17.48mm
Thickness with Junction Box	37.48mm
Area	1.92m <sup>2</sup>
Weight	75kg
Cable cross section	2.5mm <sup>2</sup> , 900mm
Front Glass	6LOW IRON TP
Middle layer glass	3.2mm ultra white float glass
Back Glass	6LOW IRON TP
Encapsulation	PVB
Power tolerance	20%-60%
Number of Cells	210*4

### ENGINEERING DRAWING

