

Welcome

To the World of Smart View

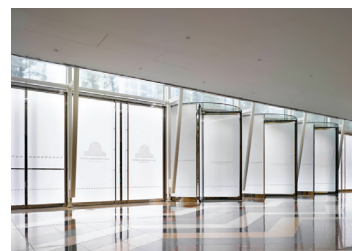
Do not Dream
Live with Smart View

www.iransmartview.com



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About us

Smart View Group has begun his activity in smart home and smart office from 2011.

With our two decades' valuable experience in production and commerce we do our best to be at edge of technology. To offer best solution to our clients our technical team gets updated time to time.

The company goal is to offer updated solutions as well as expert team work and after sales service.

We are honest to our clients and proud to have many satisfied clients.

Expert technical team and satisfied clients are treated as our main capital and the key to our ever increasing success.

We try to maintain our goals and improve day by day.

Technology

Now a day around 30% of energy consumed in buildings is wasted through the windows.

Glass is one of the most important materials used in construction. And have a great impact on new architecture also interior designing.

In this technology smart windows acts as blind in summer and let all sunlight through in winter.

That is main idea to reflective windows that are able to reflect invisible lights (ultra violet & infrared) but allow visible light through.

In addition, these windows can be switched on or off.

Note that electrical power used is too small.

To make these type of glass smart glass, smart film will be laminated between two crystal type glass plates.

In those windows the liquid crystals respond to an electrical charge by aligning parallel and letting light through.

When electrical charge is absent the liquid crystals in the window are randomly oriented.

So this means in on mode the smart window will be transparent and in off mode it will opaque or matt.

Transforming a smart glass from clear to opaque mode takes very little time around 200 milliseconds. Liquid crystal smart glass works with relatively little voltage. It is converted to 60 volts with a 220 v transmission. So the power consumption of this kind of smart glass is very low. For more convenience and choosing the right solution for occasions and for installation of smart glass, both mechanical key and remote control are used.

Technical Specifications Table

Item	Status	Parameters	Unit
Max Width	-	1.8	m
Transmittance (parallel light)	on	78	%
Transmittance (parallel light)	off	5	%
Transmittance (visible light)	on	84	%
Transmittance (visible light)	off	52	%
Ultraviolet (UV) Resistance	-	98	%
Haze	on	6	%
Haze	off	92	%
Viewing Angle	on	120	°
Response Time	on	10	ms
Response Time	off	200	ms
Operating Voltage	on	48-60	V
Working Temperature	-	-10-60	°C
Life Time	on	>50000	h



Non adhesive smart film

The non-adhesive smart film is laminated between two glasses to prevent any blow and scratches, has a much higher lifetime and durability than adhesive smart films. Maintenance and cleaning of this type of smart glass is much more convenient than other products.



Adhesive smart film

This special product is used for smartization of windows or glasses that there is no interest for replacing them. By actually sticking it on one side of the glass, the glass becomes opaque and transparent. In the structure of this product, a gluey layer is placed directly on one side of the layer of smart film.

Installing this product is faster than laminated smart glasses and the total cost is relatively cheaper.





Smart Glass Applications

- **Hospital:** Labs, Emergency Room, Care Room, Clinics...
- **Office environments:** partitioning, interior decoration, educational environments, private offices, companies and organizations
- **Hotels:** rooms, lobby, master bed, executive room and...
Sport Facilities: pools, state and private sports club and...
- **Buildings:** administrative, commercial, residential and villas
- **Popular places:** restaurant, café, pool, conference hall, airport, public and private vehicles, jewelry, currency exchange, car expo, store, holy places, museums and...

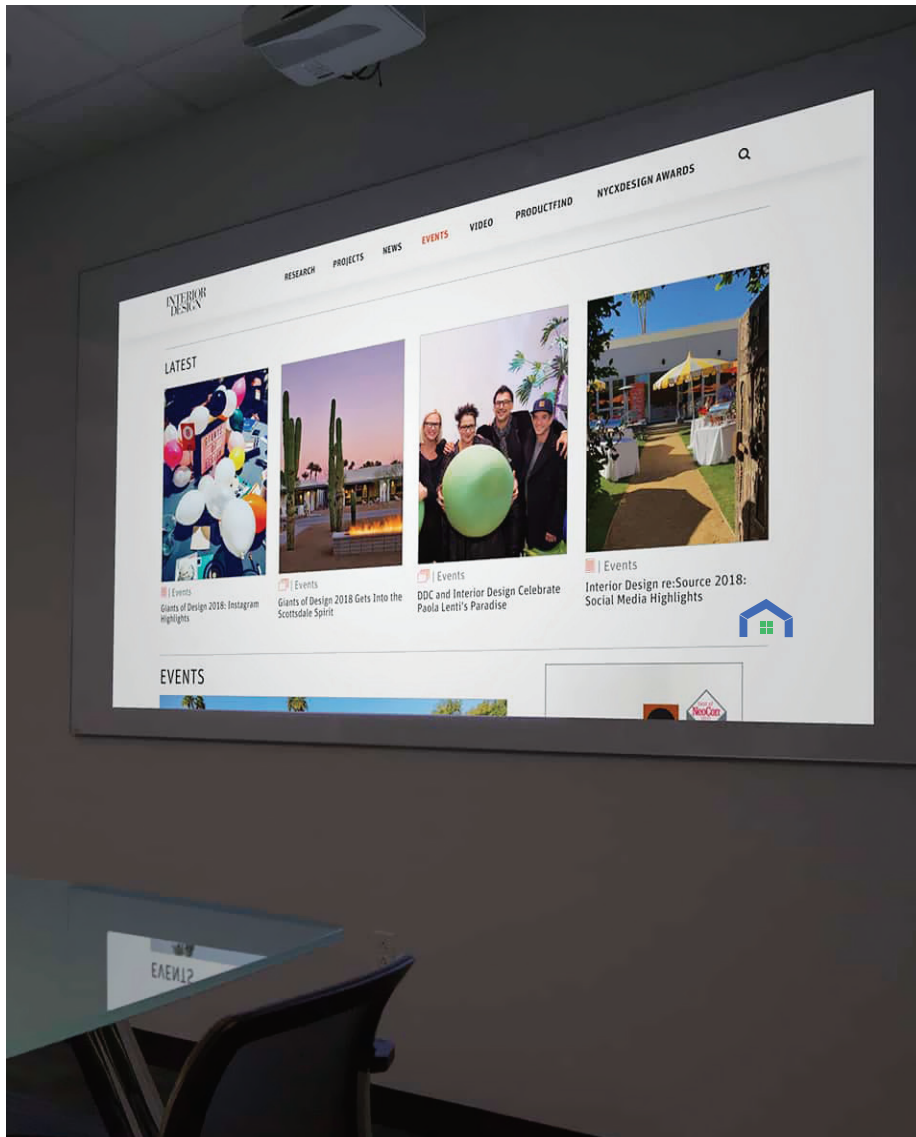


Video Projector Useability

Using the video projector, you can use smart windows as a smart display to play images in opaque mode, if necessary.

With these features, these glasses can be used as advertising billboards in sales and exhibitions, as well as the appropriate display in the conference room and conference rooms, tutorials and management rooms.





Smartization of Training Centers

Using smart video projector, smart glasses can be used if necessary as a smart display to play images in the opaque mode. With these features, these glasses can be used as billboards for promotional items and facades as well as for display in the conference halls and rooms and management rooms.



Advantages of Smart Glass

■ **Privacy Creation:** Smart Glass lets you create privacy in management, commercial and residential areas.

■ **Light Permeability in Opaque mode:** even if the smart glass is not transparent (in off mode), the light transmission of the glass is excellent. Smart windows allow the light to pass through in off mode as transparent glass.

■ **Immediate Deformation in less than a hundredth of a second:** when the switch voltage switches between on and off mode, in less than a hundredth of a second, the glass changes from opaque to transparent and vice versa without any delays. When this feature of smart glass is used in military or aerospace industries, it can be considered as one of the key factors.

■ **Temperature Control:** Smart Glasses with the feature of reflecting infrared and ultraviolet rays result in decreasing the internal temperature of the installation site of these glasses in hot seasons and when the weather is cold with changing the mode, it is possible to transmit the ultraviolet ray that is the heating element inside the building.

■ **Ultraviolet Ray Control:** smart windows absorb ultraviolet rays up to 98% and prevent it from being transmitted to the inside. Sound Insulation: another feature of smart windows is their sound insulation feature, which to some extent, limits the passage of sound.

■ **Resistance to Penetration:** if smart glass shatters accidentally or some cavity

appear in it, due to the properties of these glasses, the cavity is restored to a limited extent, this results in freedom of action at the time replacing or repairing the glass and it is not necessary to replace glass as traditional glass.

■ **Low Maintenance Cost:** Smart glasses have very low power consumption.

■ **Avoid Sprinkling and breaking the Glass in incidents:** in the case of breaking the smart glasses, glass pieces do not diffuse and do not cause problem or incident. The smart glass with its structure holds glass pieces together.

■ **Safety and Security:** when using smart glasses in manufacturing of laminated

bulletproof glass, in terms of security, the glass is enabled to be matte and have strong structure if necessary. These types of glass can be used in embassies, banks, or in stores that require high security.

■ **Comfort in the apartment:** unlike curtains and window shades that darken the environment when closed, smart glass allows the use of natural light in off mode.

■ **Easy Usage:** smart glasses are very easy to use and can be turned on or off with regular power switches and remote control.

■ **High lifespan:** smart glasses are never impaired and their maintenance is like ordinary glasses. Your only cost is glass cleaning



