

# **KASKI®**



## **SWITCHABLE SMART FILM & GLASS**



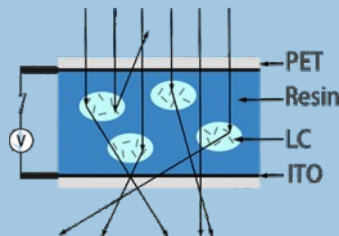
- SMART FILM FOR LAMINATION •**
- SELF-ADHESIVE SMART FILM •**
- LAMINATED SMART GLASS •**
- TRANSFORMER •**

**Manufacturing • Wholesale • Commercial • Industrial • Residential buildings**

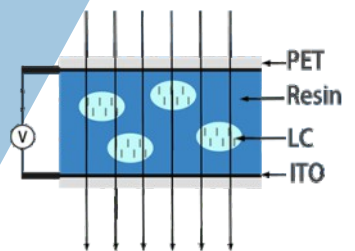
## What Is Smart Film?

The base of smart film is PDLC (Polymer Dispersed Liquid Crystal). The liquid crystal molecules line up and the incident light passes through when power is on, the smart film becomes transparent from an opaque state. On the other hand, when the power is off, the liquid crystal molecules are randomly oriented so that light is scattered, results in opaque state.

The smart film provides a next generation alternative to blinds or privacy in daily life. It is the ideal choice for commercial or residential installations.



OPAQUE STATE



TRANSPARENT STATE

## Benefits



### Privacy

Offers an instantly swift from transparent to opaque



### Quick response

Change in 0.1 second between two states



### Daylight control

Helps control room temperature & reduce energy costs



### Sound insulating

Reduce noise and create a more peaceful ambience



### Safety & Security

Prevents scattering of glass fragments in case of breakage



### Multi control modes

Switch, remote control, mobil APP, etc.

## Smart Film for Lamination



We supplies massive rolls smart film and costumed size ones with bus-bars to the companies which is looking to produce your own switchable smart glass.

## Specification

Type			CLEAR80	ULTRACLEAR85	AUTO85
Testing Parameters		States	Result		
Optical	VLT	ON	≥80%	≥82%	≥82%
		OFF	<70%	<70%	<75%
	HAZE	ON	≤4%	≤3%	≤3%
		OFF	≥95%	≥98%	≥95%
Electrical	Working Voltage	ON	48~65V AC	48~65V AC	48V AC
	Response Time	ON	<10ms	<10ms	<10ms
		OFF	<200ms	<200ms	<200ms
	Power Consumption	ON	≤5W/m <sup>2</sup>	≤5W/m <sup>2</sup>	≤2W/m <sup>2</sup>
Environmental	Operating Temperature	ON/OFF	-10°C to 70°C	-10°C to 70°C	-30°C to 95°C
Size	Thickness		≤400μm	≤400μm	≤400μm
	Maximum Width		2000mm	2000mm	2000mm
	Maximum Length		50m	50m	50m
Color		Off	Regular color is White, other color can be ordered.		
Recommended Application			Buildings	Buildings	Auto



## Self-adhesive Smart Film



To users who are looking for switchable privacy glass film on a budget, the self-adhesive switchable film is a more cost effective option compared to alternative technology. It can be easily installed onto existing glass without extra need for water or any additional mounting adhesives. You can simply install the film and wire it back to the transformer. Custom sizes of our film can be supplied to fit on existing glass surfaces like glass partitions or external windows or multiple pieces can be joined to cover large partitioned areas.

## Specification

Type			CLEAR80PS	ULTRACLEAR85PS	AUTO85PS
Testing Parameters		States	Result		
Optical	VLT	ON	≥80%	≥82%	≥82%
		OFF	<75%	<75%	<75%
	HAZE	ON	≤4.5%	≤3.5%	≤3.5%
		OFF	≥95%	≥98%	≥95%
Electrical	Working Voltage	ON	48~65V AC	48~65V AC	48V AC
	Response Time	ON	<10ms	<10ms	<10ms
		OFF	<200ms	<200ms	<200ms
	Power Consumption	ON	≤5W/m <sup>2</sup>	≤5W/m <sup>2</sup>	≤2W/m <sup>2</sup>
Environmental	Operating Temperature	ON/OFF	-10°C to 70°C	-10°C to 70°C	-30°C to 95°C
Size	Thickness		≤400μm	≤400μm	≤400μm
	Maximum Width		2000mm	2000mm	2000mm
	Maximum Length		50m	50m	50m
Color		Off	Regular color is White, other color can be ordered.		
Recommended Application			Buildings	Buildings	Auto

## Laminated Smart Glass



The structure of smart glass is laminated safety glass. The PDLC film is sealed between two panes of glass by interlayers (PVB or EVA). It prevents broken glass from scattering after a severe impact, keeping the window intact. It meets safety glass standards and can be used in security and hurricane-resistant window applications. It can be positioned easily side by side (glass to glass) without the need for any vertical frames which makes it ideal solutions for glass walls and partitions, creating a minimal and contemporary look with elegance.

## Specification




Type			CLEAR80G	ULTRACLEAR85G	AUTO85G
Testing Parameters		States	Result		
Optical	VLT	ON	Depends on thickness and color of glass.		
		OFF	Depends on thickness and color of glass.		
	HAZE	ON	≤4%	≤3%	≤3%
		OFF	≥95%	≥98%	≥95%
Electrical	Working Voltage	ON	48~65VAC	48~65VAC	48VAC
	Response Time	ON	<10ms	<10ms	<10ms
		OFF	<200ms	<200ms	<200ms
	Power Consumption	ON	≤5W/m <sup>2</sup>	≤5W/m <sup>2</sup>	≤2W/m <sup>2</sup>
Environmental	Operating Temperature	ON/OFF	-10°C to 70°C	-10°C to 70°C	-30°C to 95°C
Size	Thickness		Depends on thickness of glass.		
	Maximum Width		2000mm	2000mm	-
	Maximum Length		6m	6m	-
Color		Off	Regular color is White, other color can be ordered.		
Recommended Application			Buildings	Buildings	Auto

## Transformer



For Switchable Glass & Electric Window Film, the power control unit is electrical equipment for electrical privacy glass and PDLC film application. It changes the higher voltage (110-220V) to lower work voltage (48-65V). We provide different type of power supply, which will fully meet your different requirement for control the products.

## Specification

			
Type	KT-M15	KT-M60	KT-C1
Input Voltage	110/220VAC	110/220VAC	110/220VAC
Output Voltage	48/60VAC	45V/48V/60VAC	48/50/60/70VAC
Frequency:	50/60Hz	50/60Hz	50/60Hz
Control Mode	Switch/Remote controller/App	Switch/ Remote controller / App	Switch/ Remote controller / App
Multi-level Control	Yes	Yes	No
Switch Time	<1s	<1s	<1s
Power	10W	50w	30-1000w
Qty of Smart Glass/Film Applied	2m <sup>2</sup>	10 m <sup>2</sup>	6-200m <sup>2</sup>

# KASKI®



*SWITCH SMART GLASS  
SWITCH TO NEW WORLD*

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