Product Specifications
PDLC Smart Films

Specifications:

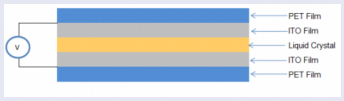
Item		Mode	Parameter				
			White Super Clear	White Super Clear High Temp	White Ultra Clear	Grey	Black
Optical Characteristics	Visible Light Transmission	ON	89%		91%	39%	32%
		OFF	65%			15%	13%
	Parallel Light Transmission	ON	84%			34%	28%
		OFF	6%			4%	5%
	Haze	ON	2.6%		1.75%	3.5%	3.62%
		OFF	89%		91%	95%	98%
	View Angle of Screen	ON	165°			145°	140°
	UV Blocking	OFF	> 98%			> 98%	> 99%
Electrical Characteristics	Operating Voltage	ON	48/60V AC				
	Response Time	OFF-ON	< 5ms			< 10ms	
		ON-OFF	< 45ms				
	Power Consumption	ON	< 5W/m²			< 6W/m²	
Dimension Characteristics	Thickness		0.4mm				
	Width	Max.	1800mm	1200mm	1500mm		
Life Time		ON	≥ 85,000hrs				
Switching Times			≥ 1.5 million Times				
Operating Temperature			-15°C~60°C	-15°C~90°C	-15°C~60°C	-15°C~90°C	

Features:

- >98% UV reduction in both ON and OFF states.
- Self-adhesive, static application. Suitable for DIY or Professional Installation.
- Fast Switching speed: On-Off <10ms; Off-On <45ms.
- Viewing Angle: >165° (White), >140° (Grey + Black).
- Excellent optical properties: High Visible light Transmittance. Haze rate(on) <2% (White film).
- Designed for tiling for wide width windows.

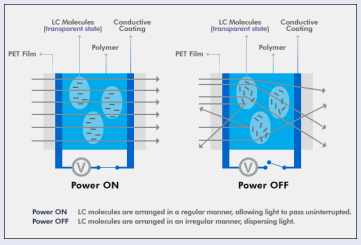
Structure and Principles:

Non-Adhesive Smart Film is made of 2 layers of transparent conductive ITO films with polymer dispersed liquid crystal in between. It's also called PDLC film, smart window film or glass film.



When power on: LC molecules inside smart films was driven by electricity which conducted by ITO film. Now LC molecules are parallel arrangement, so light can pass through, now films are clear.

On the contrary, when power off: LC molecules are arranged in an irregular manner, now light dispersed, films turn opaque.

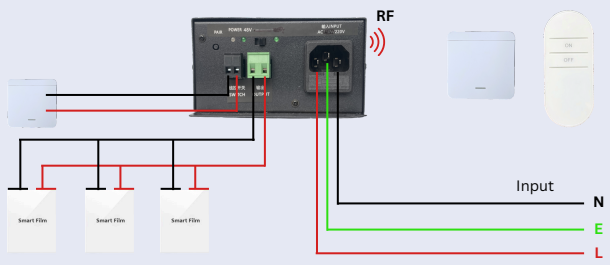


Control Options:

1. RF Handheld Remote control -
Changes from Opaque to Clear with the press of a button on a remote.

2. RF or Dry Contact Avail. -
Simply toggle the switch to adjust your windows.

3. Home Automation (dry contact) -
It can integrate into your facility's existing automation infrastructure.



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