



FILMBASE®



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Your Space We Care

INNOVATIVE · LOVE · SUSTAINABILITY



With the intensification of global climate change, extreme weather events, rising sea levels, the loss of biodiversity and environmental pollution have become increasingly severe, posing a huge threat to human society and the natural environment.

Against this backdrop, green innovation has become a key approach to addressing these challenges and achieving sustainable development.

Why FILMBASE established ?

FILMBASE is precisely based on the concern for this global issue and the pursuit of green innovation. The company is committed to developing new environmentally friendly building materials, display materials and energy materials to reduce dependence on natural resources and environmental pollution. One innovative product after another developed by the company not only helps save the earth's energy and reduce global carbon emissions, but also enhances the aesthetics and value of buildings. While improving the living standards of human beings, it also promotes ecological protection and environmental improvement.

FILMBASE is not limited to its products themselves, but also extends to its global business practices. The company has established eight joint production bases worldwide, providing technology transfer and production guidance to other international enterprises that wish to produce and manufacture this high-value green and environmentally friendly product. It has also established partnerships with many world-class brands, promoting green technology to the international market. Through these efforts, FILMBASE not only promotes the use of environmentally friendly materials but also enhances global awareness of green buildings and design.

In the future, FILMBASE will continue to take green innovation as its original aspiration. Through continuous technological research and development and market promotion, it will provide high-quality products and services to global customers and jointly build a smarter and greener world.

Why link to Filmbase



When you come here and see what Filmbase are doing, it means a beautiful and meaningful cooperation is about to begin.

A Grateful Encounter. we look forward to establishing deep links and cooperating with you to witness the infinite possibilities of innovation and exploration of horizons and Spaces.

On this journey, you and Filmbase will create a green future, bring more comfortable life to human, while lead the trend of low-carbon innovation, and inject vitality into the sustainable development of the planet.

- 01** You will witness how Filmbase **PDLC films** can subtly replace traditional curtains, reduce the need for fabric production, reduce cotton cultivation and land resource occupation, and bring them to people, get the privacy of simple and the beauty of space switching, and contribute to sustainable development.
- 02** You will witness how Filmbase **PDLC glass** replaces the heavy solid wall with a light attitude, saving sand resources and reducing the generation of construction waste; At the same time, it is thinner, lighter and easier to recycle, reducing transportation and installation costs and improving space benefits Use efficiency. Please Bring this wonderful product to your country.
- 03** You will witness how Filmbase **LED film, LED glass** is subverting the traditional LED display, through the innovative integration of "glass + display" new materials, becoming an ideal choice for low-carbon +value buildings, create additional value for owners such as advertising and landmarks.
- 04** You will also see how Filmbase **VC glass** significantly reduce building energy consumption with smart insulation technology, sound insulation technology, indoor cooling and heating, To achieve the perfect balance of energy saving and comfort.
- 05** You will see How Filmbase **Flying display** empowers low-altitude economy and low-altitude performance, making the activity more shocking and exciting, and making the business more valuable.
- 06** You will also see how Filmbase 0.2mm **Ultra thin transparent holographic display film** empowers space and vision, creating a holographic horizon that makes space and vision infinite.
- 07** You will also see the display or the film which can **self-electricity** or make the electricity.

Through technological innovation and product upgrading, Filmbase actively responds to the international energy saving and carbon reduction action plan under the premise of improving people's lives, and develops and produces energy-efficient building materials, display materials and energy materials. We invite you to join Filmbase to create a smarter, greener and comfort future In this journey, We are all not only a spectator, but also a participant and creator.



who we are

FILMBASE

New material technology leader
for vision and space

As an important partner of FILMBASE, we would like to keep you up to date with more information about our full range of products and our company.

FILMBASE is a high-tech enterprise ,a specialized, refined, distinctive and innovative enterprise that focuses on new materials for construction, display and energy. Which holds over 150 patents including invention patents and utility model patents. It is the only global innovative enterprise that integrates the three major industries and technologies of construction, display and energy. FILMBASE products have obtained authoritative certifications such as CCC, UL, PSE, CE, CB, RoHS and FCC. Currently, it has joint production bases in Germany, Brazil, South Korea, Dubai and other places. Since its establishment 8 years ago, We achieved rapid development. It began preparing for listing in March 2023, and CiTic Securities has been providing guidance for 2 years.

FILMBASE strictly adheres to ISO9001, ISO14001 and ISO45001 standards, manufacturing world-leading LED Film ,3D display glass, PDLC film, Smart Glass , UTD , thermochromic materials, photochromic materials, low-altitude flying display films, and related components and products.

We provide the most advanced technologies and solutions for global city design, architectural design institutes, interior design, supermarkets, media advertising agencies, curtain wall displays, and space partitions.

Company: Shenzhen Filmbase Technology Co., Ltd

----- PROVIDE -----

Brand:

FILMBASE 

----- HAVE -----

Products:

**Media Glass | LED Film | Switchable Glass
Smart Film | UTD^{AR} Film | VC Glass | FLY Display
SELF-ELECTRIC Display | Smart Door and Window**

MILESTONES OF DEVELOPMENT

2017

Established revolutionized PDLC switchable Film formula, process, materials, equipment and manufacturing .

2019

Become one of Largest PDLC Film manufacturing center , produce widest and largest size, highest transmittance, more than 150 invention and utility model patents, Number 1 marketing share in China .

2018

Established Nano materials and LED glass R&D Center

2020

Established 3 subsidiaries
Yuguang Optoelectronics
Chongqing Yuguang Smart Glass
Chongqing Yuguang New Material Co., Ltd

2021

Established the Global brand (Filmbase), export to 104 countries and regions, Number 1 marketing share in the world.

2022

Established joint production bases in 20 countries, including the United States, Germany, Dubai, Brazil, Norway.

2023

Preparing IPO
Established YuGuang Energy (perovskite)

2024

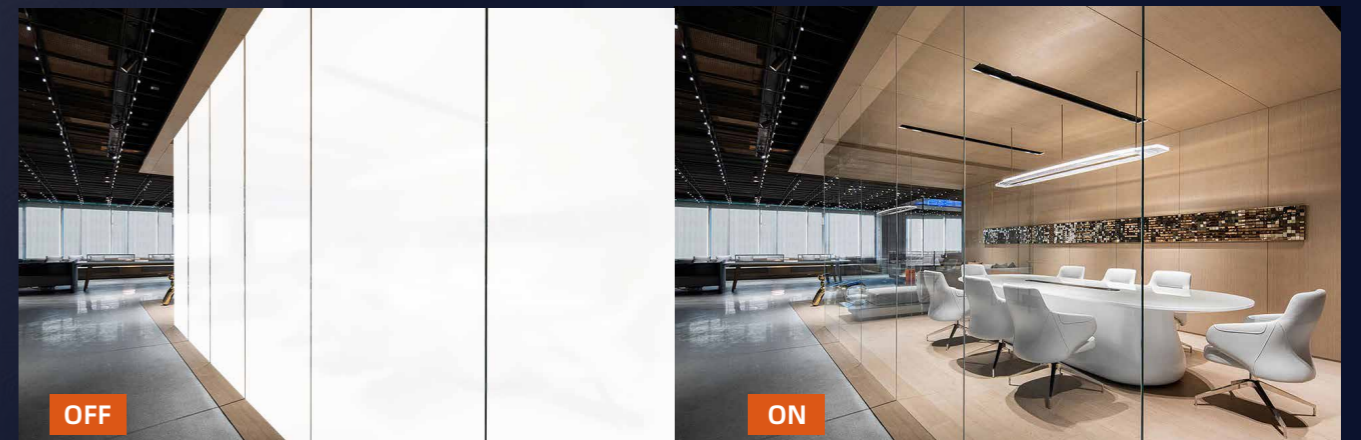
Expand HQ to Pingan international center ,developed fiying display , VC glass , Self-electric display tech.

2025

Continuously innovate and improve, and continue to provide partners with absolutely competitive advanced new material products and comprehensive solutions.

SMART FILM

Polymer Dispersed Liquid Crystal Smart films is commented the most advanced curtain today and future,designed new or retrofit an existing space for an instant upgrade, instantly switching from opaque to transparent for dynamic light control with a HD real projection function ,widely used in interior and architectural design, commercial center ,rail transportation, and even avant-garde industrial products.

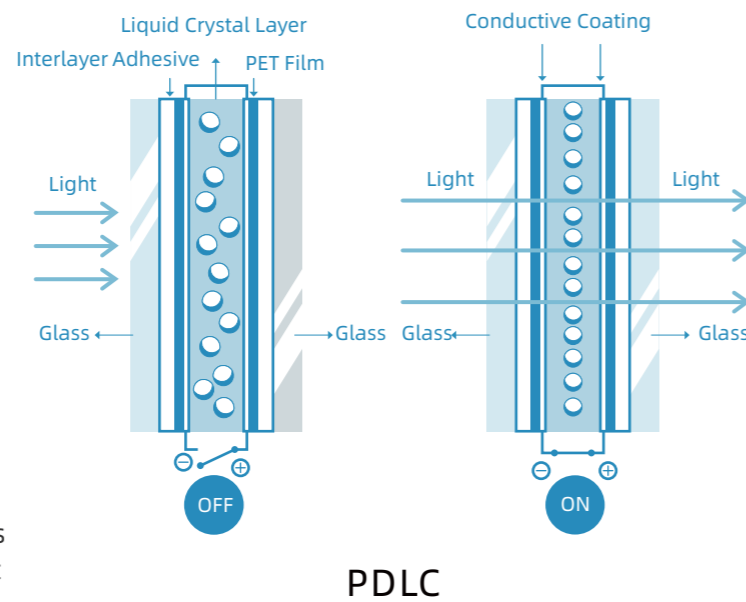


About Smart Film

Smart film is a new type of electronic light control product. The electronically controlled smart film is a liquid crystal/polymer hybrid material injected in the middle of two transparent conductive films.

PDLC film in the absence of an electric field, the electronically controlled smart film is in an opaque state.

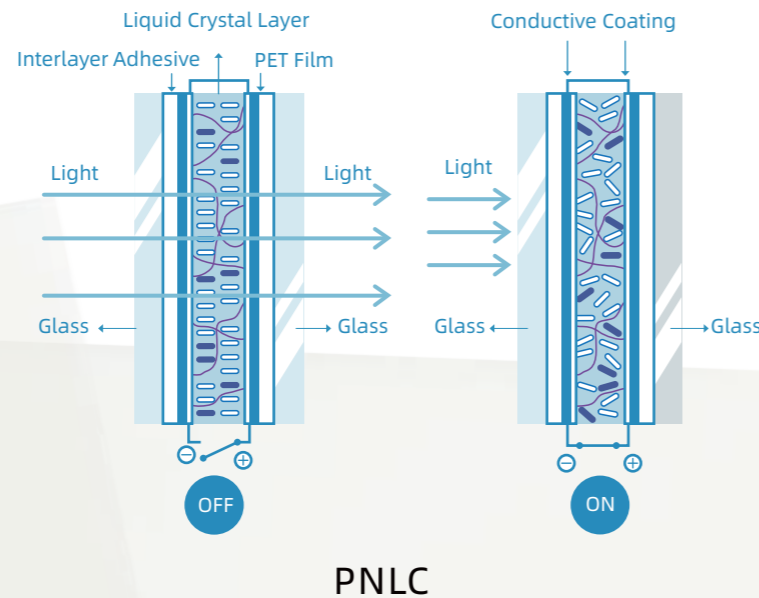
When an alternating current is applied, the liquid crystal molecules are arranged in an orderly manner, at which point the electrically controlled dimming film changes from an opaque state (OFF) to a transparent state (ON).



PNLC film different from normal PDLC smart film, the working principle of PNLC film is opaque-power on, clear power off.

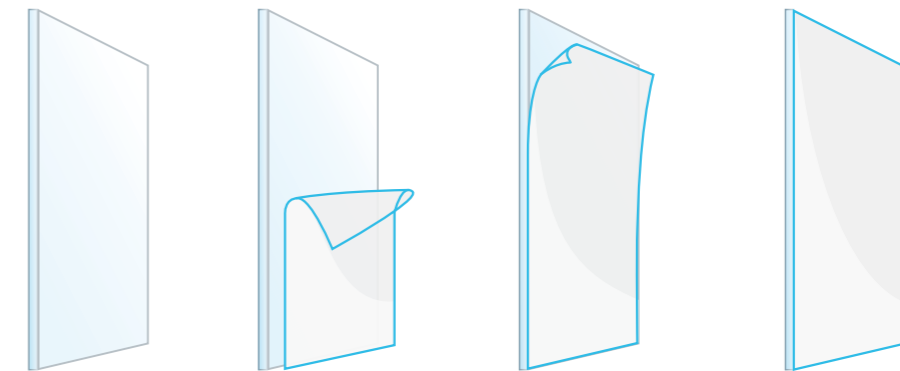
The electric field enables a rapid transition from the ON state to the OFF state and from the OFF state to the ON state.

Smart film is usually applied to the surface of the glass or laminated between the glass layers, making the otherwise transparent glass, more possible.

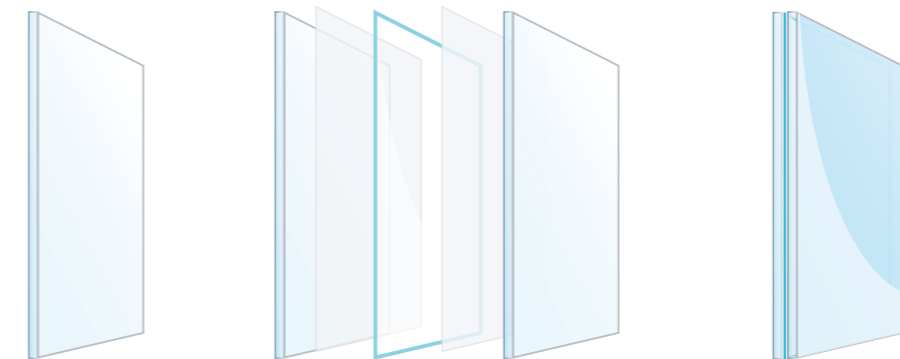


Two types Smart Film

There are two types of Smart films, Self-adhesive Smart film and Laminated Smart film.



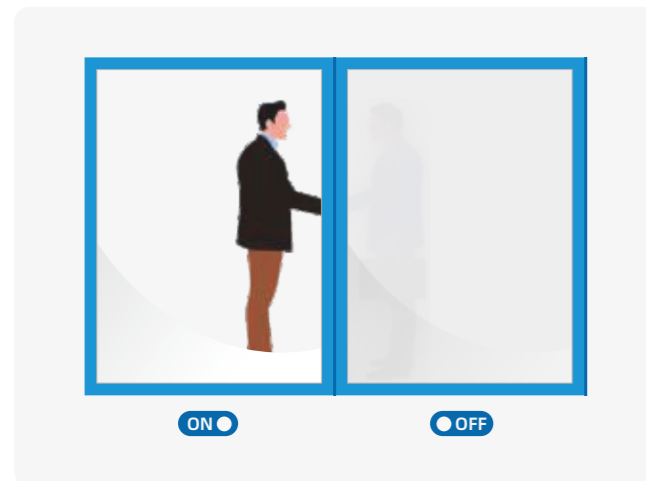
Self-adhesive Smart film



Laminated Smart film

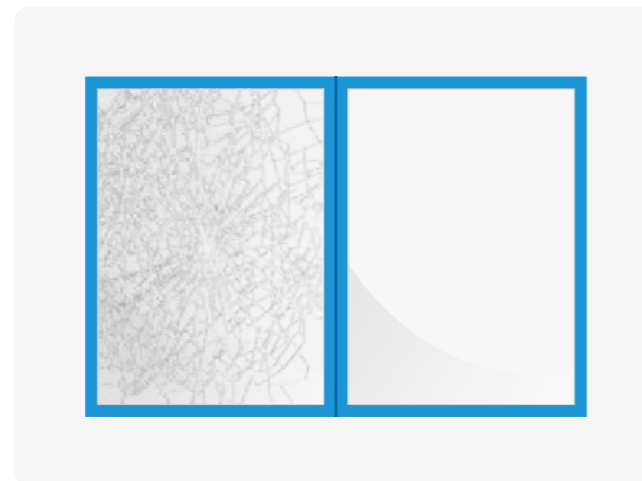
Characteristics

Smart Film



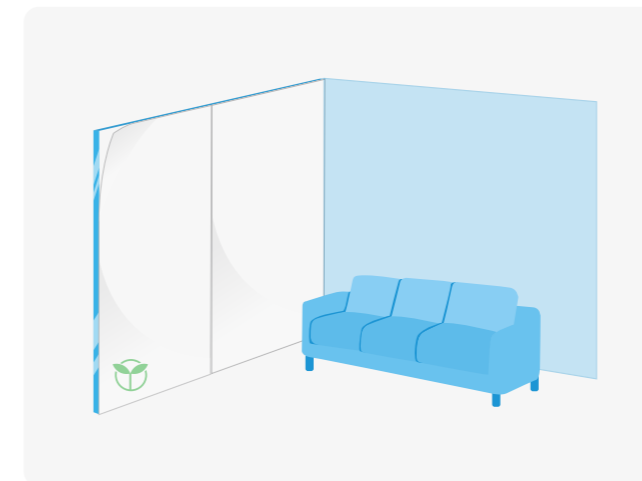
Privacy protection

To protect your privacy and security, you can control it to be transparent or opaque at any time. Make your space more malleable, choose open or private at will.



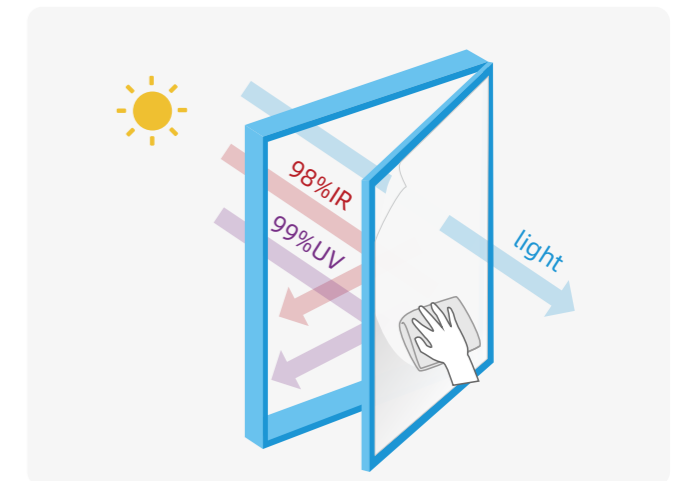
Security

Even if the glass is broken, the fragments can still be adsorbed on the PDLC film, which can avoid personal injury caused by broken glass.



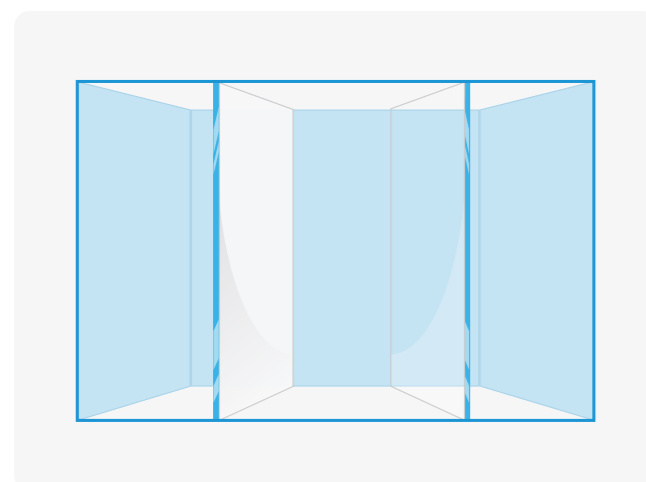
Environmental protection

The installation of PDLC film can effectively reduce the loss of decoration, which can better reduce pollution and protect the environment.



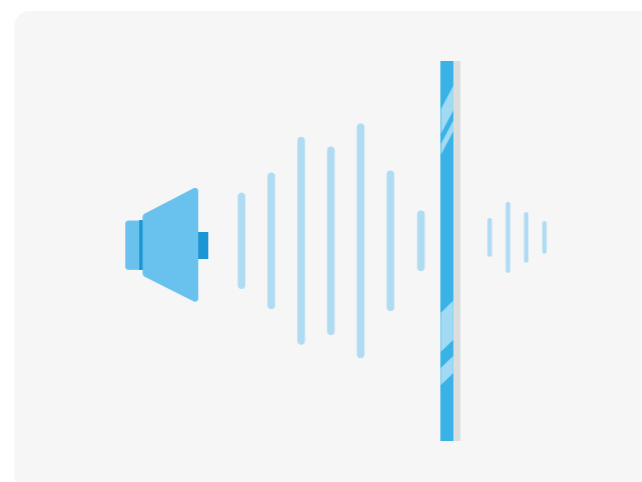
Heat-resistant and anti-scratch

The maximum operating temperature is 105°C, which allows the product to continue to operate at higher temperatures. The anti-scratch layer protects the surface of the product from daily scratches and does not affect the clarity of the product itself.



Space partition

With the use of PDLC film, glass partitions can easily differentiate between different spaces, making your three-dimensional space more malleable and versatile.



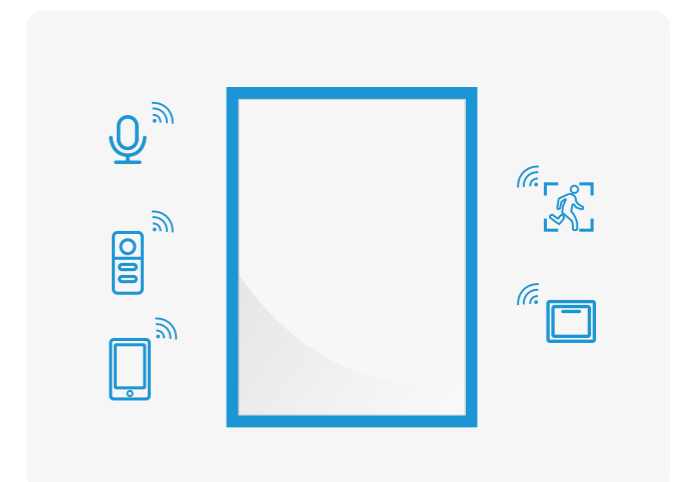
Anti-noise

Compared with ordinary glass, the anti-noise ability of glass using Filmbase PDLC film is increased by 20%.



Touch screen and projection

Using a high-definition projector, it is easy to realize the viewing scene, with a viewing angle of 180°, 4K picture quality display effect, and with the radar can be multi-touch, video interaction.



Various control methods

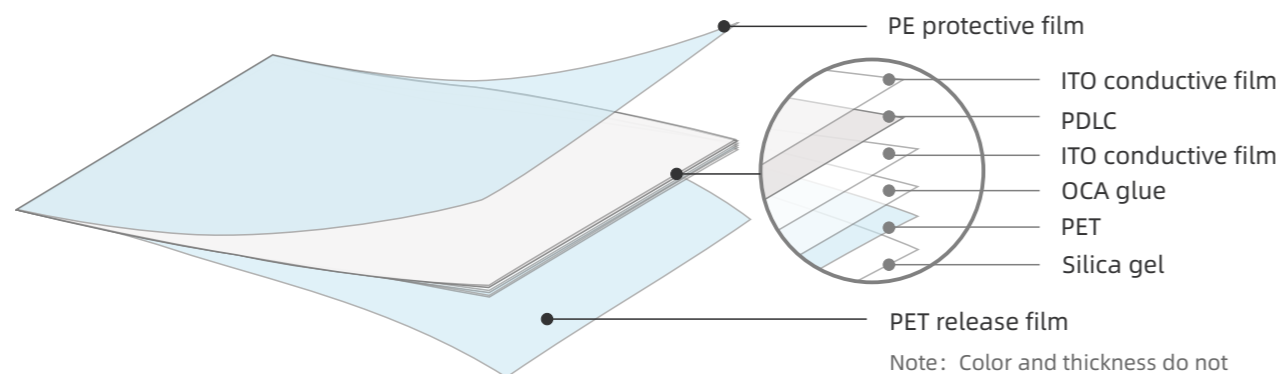
In order to meet your various needs, you can choose your preferred control method: remote control, wired control, infrared induction, voice control, mobile application, etc. In addition, an FM transformer can be selected to gradually change the film.



FILMBASE 091

FILMBASE 091 is the luxury PDLC film in the today market with 90%-92% transmittance, < 3% haze, which maximizes the clarity of the original glass and enhances privacy.

It is used in scientific research institutions, intelligence agencies, luxury villas, president's office, super 5-star hotels, Hollywood theaters, and other places that require ultra-transparency and absolute privacy.



Note: Color and thickness do not represent the actual situation, only for the convenience of illustration.

Size

FILMBASE 091

Items			
Adhesive PDLC film	Total Thickness		0.47mm
	Cut to Sheet	Width	100-1800(mm)
		Length	100-50000(mm)
	Roll	Width	1200,1500,1800(mm)
		Length	30meters /50meters
	Roll tube	Inner Diameter	6 inches
Laminated PDLC film	Total Thickness		0.38mm
	Cut to Sheet	Width	100-1800(mm)
		Length	100-50000(mm)
	Roll	Width	1200,1500,1800(mm)
		Length	30meters /50meters
	Roll tube	Inner Diameter	6 inches

Optical Parameter

FILMBASE 091

Items	ON/OFF		Test Methods/Standards
Operating voltage	ON	60V	Multimeter/ Voltage Regulator,WGW
Power consumption	ON	≤ 5W/m ²	Multi-parameter electric measuring instrument
Viewing angle	ON	≥ 160°	Visual Inspection
Uv blocking rate	OFF	≥ 99%	Optical transmittance tester
Infrared blocking rate	OFF	≥ 60%	
Response time	OFF→ON	≤ 30 ms	Liquid crystal parameter integrated tester
	ON→OFF	≤ 200 ms	
Operating temperature	--	-30°C ~ 50°C	constant temperature and humidity testing machine
Life-span	--	100000 Hours	GB18910.5-2008
Switching times	--	≥ 2 million times	Self-made on/off tester

PDLC film is driven by AC power, colorless and transparent when power is added, and fogged and translucent when power is removed, and its photoelectric performance is shown in the table above.

Product Transparency / Haze

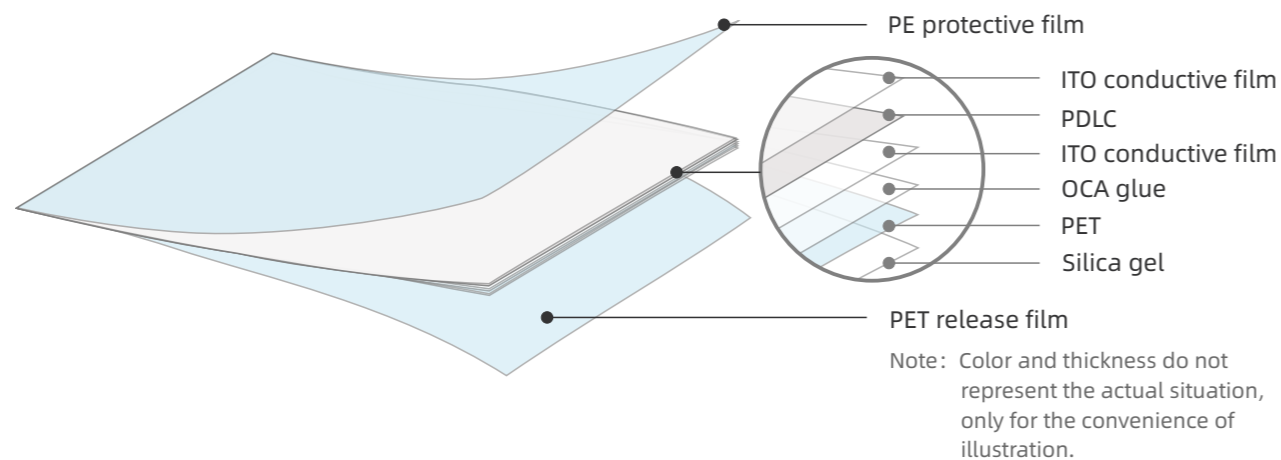
FILMBASE 091

Items	ON/OFF	Full light tester			Parallel light tester	
		Haze	Full light transmittance	b value	45° light	Parallel light
Adhesive PDLC film	OFF	94.5	85.0	7.57	/	/
	ON	3.00	91.0	5.29	60.0	88.0
Laminated PDLC film	OFF	94.5	85.0	6.79	/	/
	ON	3.00	91.0	4.31	60.0	88.0



FILMBASE Warrior

Filmbase Warrior series PDLC film is designed for high temperature application, Such as large-scale architectural curtain walls, outdoor partitions, glass balconies, outdoor swimming pool fences etc.



Size

FILMBASE Warrior

Items			
Adhesive PDLC film	Total Thickness		0.47mm
	Cut to Sheet	Width	100-1500(mm)
		Length	100-50000(mm)
	Roll	Width	1200,1500(mm)
		Length	30meters /50meters
	Roll tube	Inner Diameter	6 inches

Optical Parameter

FILMBASE Warrior

Items	ON/OFF		Test Methods/Standards
Operating voltage	ON	60V	Multimeter/ Voltage Regulator,WGW
Power consumption	ON	≤ 5W/m ²	Multi-parameter electric measuring instrument
Viewing angle	ON	≥ 160°	Visual Inspection
Uv blocking rate	OFF	≥ 99%	Optical transmittance tester
Infrared blocking rate	OFF	≥ 60%	
Response time	OFF→ON	≤ 30 ms	Liquid crystal parameter integrated tester
	ON→OFF	≤ 200 ms	
Operating temperature	--	-30°C ~ 90°C	constant temperature and humidity testing machine
Life-span	--	100000 Hours	GB18910.5-2008
Switching times	--	≥2 million times	Self-made on/off tester

PDLC film is driven by AC power, colorless and transparent when power is added, and fogged and translucent when power is removed, and its photoelectric performance is shown in the table above.

Product Transparency / Haze

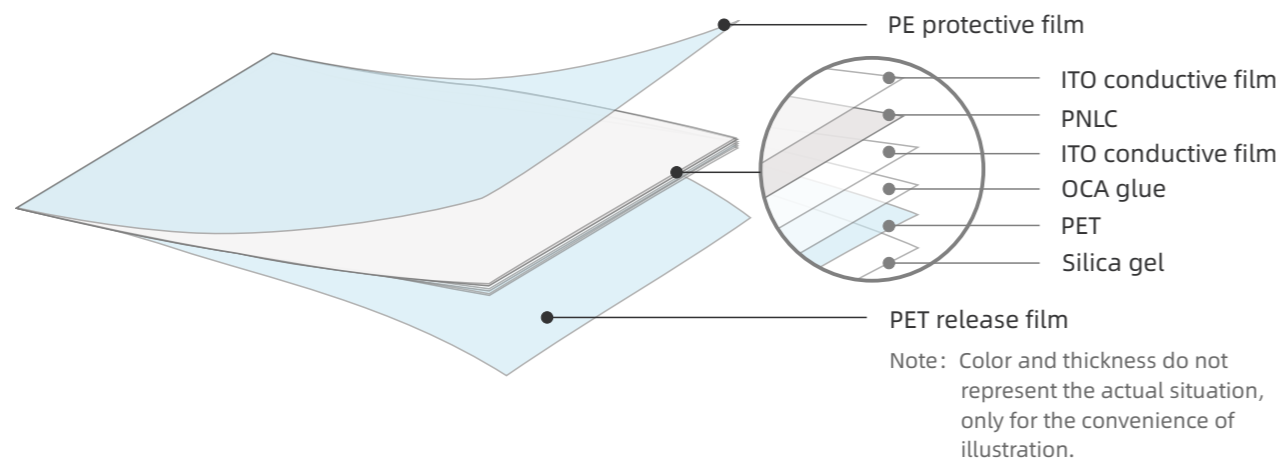
FILMBASE Warrior

Items	ON/OFF	Full light tester			Parallel light tester	
		Haze	Full light transmittance	b value	45° light	Parallel light
/	OFF	94.5	78.0	5.93	/	/
	ON	4.53	83.5	3.77	58.0	81.0



FILMBASE Reverse

Filmbase Reverse film is a special transparent liquid crystal film, can be sandwiched in the glass or adhesive on the glass, become opaque when power on, can be widely used in space partition, electronic products, automotive fields, can be sandwiched into the glass or Adhesive onto the existed glass.



Size

FILMBASE Reverse

Items			
Adhesive PNLC film	Total Thickness	0.37mm	
	Cut to Sheet	Width	100-1400(mm)
		Length	100-50000(mm)
	Roll	Width	1200,1400(mm)
		Length	30meters /50meters
	Roll tube	Inner Diameter	6 inches
Laminated PNLC film	Total Thickness	0.28mm	
	Cut to Sheet	Width	100-1400(mm)
		Length	100-50000(mm)
	Roll	Width	1200,1400(mm)
		Length	30meters /50meters
	Roll tube	Inner Diameter	6 inches

Optical Parameter

FILMBASE Reverse

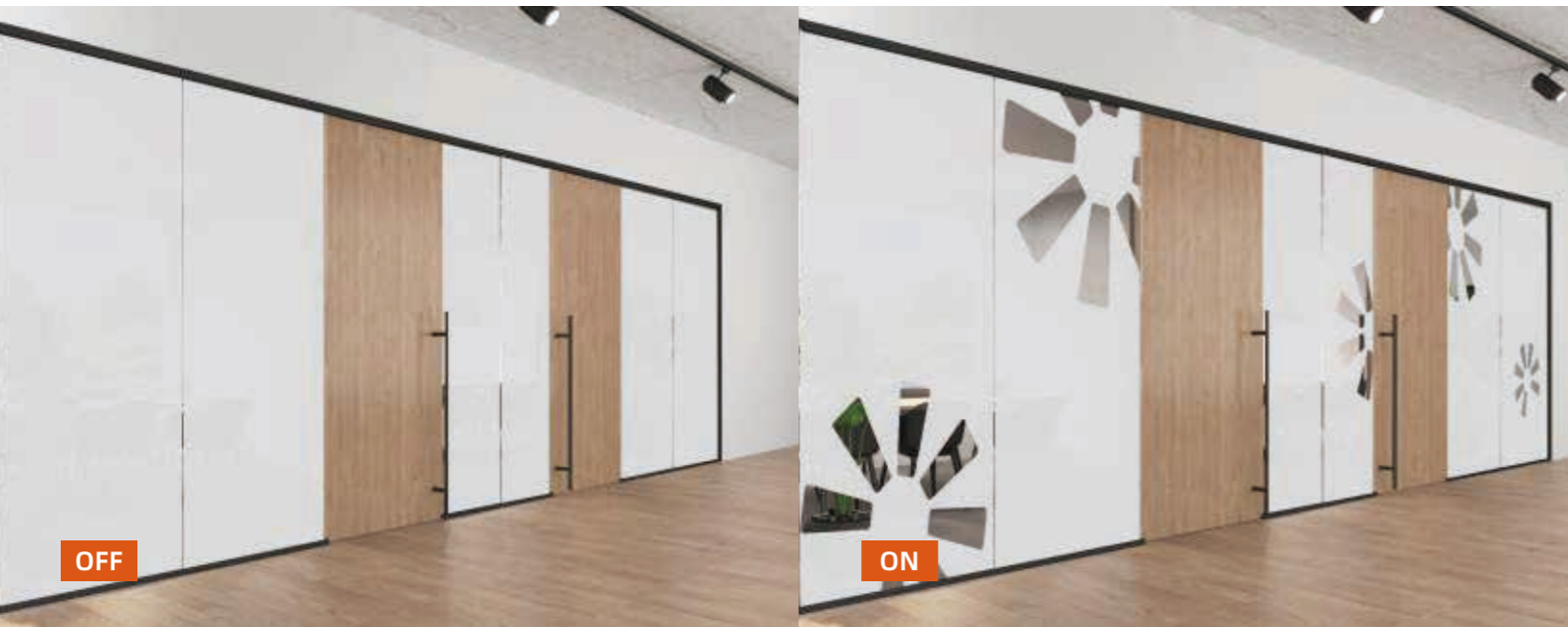
Items	ON/OFF		Test Methods/Standards
Operating voltage	ON	60V	Multimeter/ Voltage Regulator,WGW
Power consumption	ON	avg 4-6/m ²	Multi-parameter electric measuring instrument
Viewing angle	OFF	≥ 160°+1	Visual Inspection
Uv blocking rate	ON	≥ 85%	Optical transmittance tester
Infrared blocking rate	ON	≥ 60%	
Response time	OFF→ON	≤ 200 ms	Liquid crystal parameter integrated tester
	ON→OFF	≤ 220 ms	
Operating temperature	--	-30°C ~ 50°C	constant temperature and humidity testing machine
Life-span	--	100000 Hours	GB18910.5-2008
Switching times	--	≥2 million times	Self-made on/off tester

PNLC film is driven by AC power, fogged and translucent when power is added, colorless and transparent when power is removed, and its photoelectric performance is shown in the table above.

Product Transparency / Haze

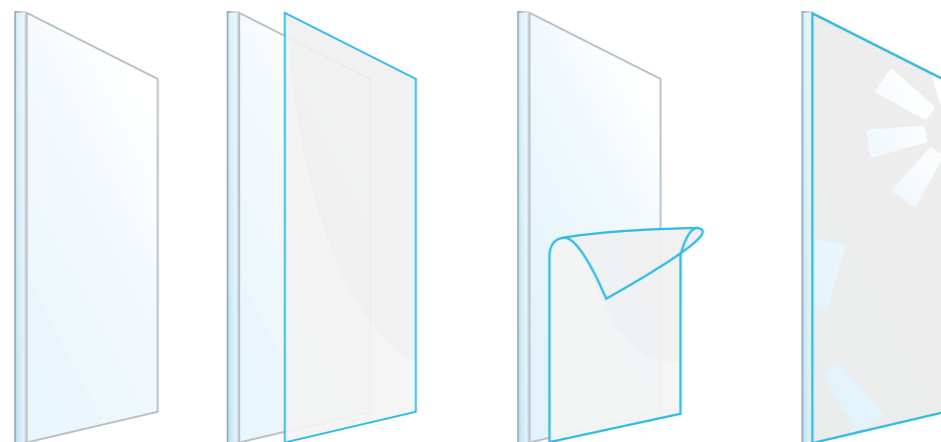
FILMBASE Reverse

Items	ON/OFF	Full light tester			Parallel light tester	
		Haze	Full light transmittance	b value	45° light	Parallel light
Adhesive PNLC film	OFF	7	90.0	3.85	80.0	85.0
	ON	92	88.0	4.42	/	19.0
Laminated PNLC film	OFF	7	90.0	1.71	80.0	85.0
	ON	92	88.0	1.84	/	19.0



FILMBASE Limited edition

Limited edition is Filmbase luxury customized series, which allow etching content inside the smart film, such as company logo, slogan, products, art paintings, pictures etc., All contents can be switchable automatically. Can be sandwiched into the glass or Adhesive onto the etched glass to click to privacy.



Size

FILMBASE Limited edition

Items			
Adhesive PDLC film	Total Thickness		0.47mm
	Cut to Sheet	Width	less than 1500
		Length	less than 1500
Laminated PDLC film	Total Thickness		0.38mm
	Cut to Sheet	Width	less than 1500
		Length	less than 1500

Optical Parameter

FILMBASE Limited edition

Items	ON/OFF		Test Methods/Standards
Operating voltage	ON	60V	Multimeter/ Voltage Regulator, WGW
Power consumption	ON	≤ 5W/m ²	Multi-parameter electric measuring instrument
Viewing angle	ON	≥ 160°	Visual Inspection
Uv blocking rate	OFF	≥ 99%	Optical transmittance tester
Infrared blocking rate	OFF	≥ 60%	
Response time	OFF→ON	≤ 30 ms	Liquid crystal parameter integrated tester
	ON→OFF	≤ 200 ms	
Operating temperature	--	-30°C ~ 50°C	constant temperature and humidity testing machine
Life-span	--	100000 Hours	GB18910.5-2008
Switching times	--	≥ 2 million times	Self-made on/off tester

Product Transparency / Haze

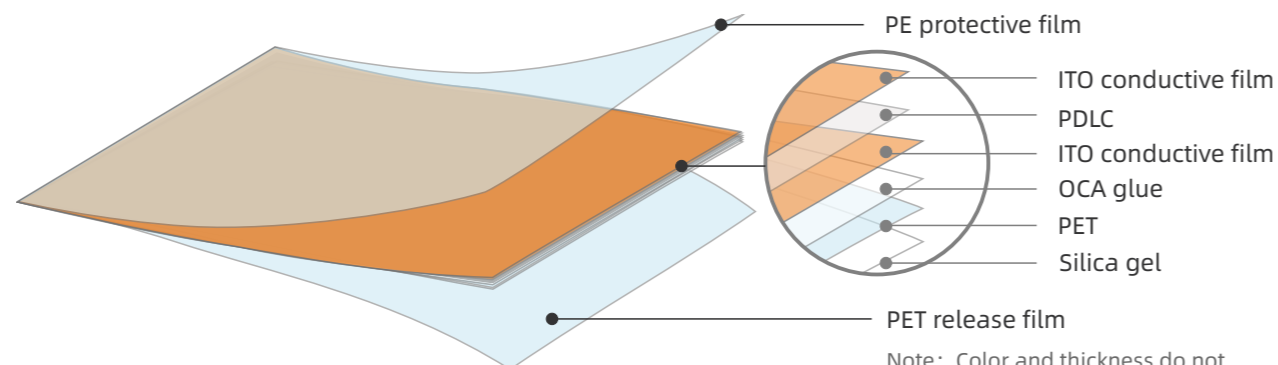
FILMBASE Limited edition

Items	ON/OFF	Full light tester			Parallel light tester	
		Haze	Full light transmittance	b value	45° light	Parallel light
Adhesive PDLC film	OFF	94.5	78.0	6.95	/	/
	ON	4.53	88.0	4.71	58.0	86.0
Laminated PDLC film	OFF	94.5	78.0	5.9	/	/
	ON	4.53	88.0	3.72	58.0	86.0



FILMBASE Colorful

Filmbase Colorful PDLC film is designed for the application where need different colors such as gray, black, red, green, blue or other colors. Warmly welcomed by art centers, kindergartens, supermarkets, theme restaurants, places that need diversified design.can be sandwiched into the glass or Adhesive onto the exited glass to click to privacy.



Note: Color and thickness do not represent the actual situation, only for the convenience of illustration.

Size

FILMBASE Colorful

Items			
Gray adhesive PDLC film	Total Thickness		0.47mm
	Cut to Sheet	Width	100-1800(mm)
		Length	100-50000(mm)
	Roll	Width	1200,1500,1800(mm)
		Length	30meters /50meters
	Roll tube	Inner Diameter	6 inches
Gray laminated PDLC film	Total Thickness		0.38mm
	Cut to Sheet	Width	100-1800(mm)
		Length	100-50000(mm)
	Roll	Width	1200,1500,1800(mm)
		Length	30meters /50meters
	Roll tube	Inner Diameter	6 inches
Other colors adhesive PDLC film (black,blue,green,orange,red)	Total Thickness		0.54mm
	Cut to Sheet	Width	100-1500(mm)
		Length	100-50000(mm)
	Roll	Width	1500(mm)
		Length	30meters /50meters
	Roll tube	Inner Diameter	6 inches

Optical Parameter

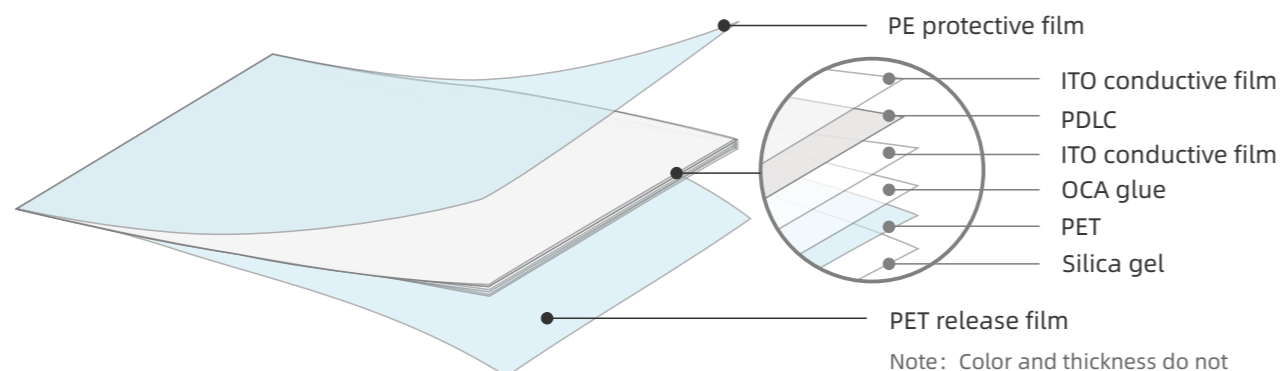
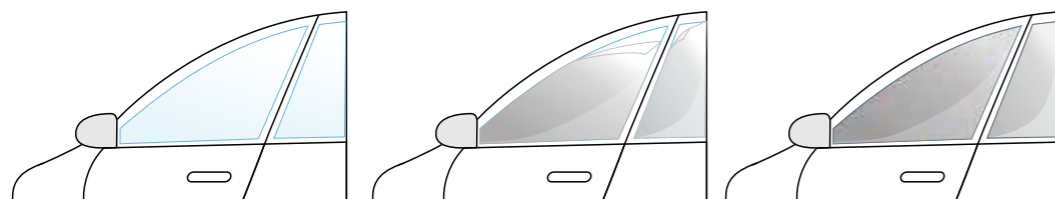
FILMBASE Colorful

Items	ON/OFF		Test Methods/Standards
Operating voltage	ON	60V	Multimeter/ Voltage Regulator,WGW
Power consumption	ON	≤ 5W/m ²	Multi-parameter electric measuring instrument
Viewing angle	ON	≥ 160°	Visual Inspection
Uv blocking rate	OFF	≥ 99%	Optical transmittance tester
Infrared blocking rate	OFF	≥ 60%	
Response time	OFF→ON	≤ 30 ms	Liquid crystal parameter integrated tester
	ON→OFF	≤ 200 ms	
Operating temperature	--	-30°C ~ 50°C	constant temperature and humidity testing machine
Life-span	--	100000 Hours	GB18910.5-2008
Switching times	--	≥2 million times	Self-made on/off tester



FILMBASE Auto Smart Film

Auto smart film is a smart film product developed by our company on the basis of the first generation of smart film, using special substrates and wide temperature liquid crystal materials, and specially developed for automotive use conditions.



PET release film

Note: Color and thickness do not represent the actual situation, only for the convenience of illustration.

Product Size

Auto smart film

Items		
Thickness	Total thickness (without protective film)	0.13mm
	PDLC	0.12mm
	Silica gel	0.01mm
	PE protective film	130μm
	PET release film	50μm
Sheet	Width	1200,1500 ¹ *mm
	Length	According to customer requirements
Roll	Width	1250,1500 ² *mm
	Length	≤ 50m/Roll
Roll tube	Inner Diameter	6 inches

Note*: This width is the actual size, the width of the calculated area is 1200,1500, mm

Photoelectric Performance

Auto smart film

Items	ON/OFF		Test Methods/Standards
Operating voltage	ON	60V	Multimeter/ Voltage Regulator,WGW
Power consumption	ON	≤ 5W/m ²	Multi-parameter electric measuring instrument
Viewing angle	ON	≥ 160°	Visual Inspection
Uv blocking rate	OFF	≥ 99%	Optical transmittance tester
Infrared blocking rate	OFF	≥ 82%	
Response time	OFF→ON	≤ 30ms	Liquid crystal parameter integrated tester
	ON→OFF	≤ 200ms	
Operating temperature	--	-30°C ~ 95°C	constant temperature and humidity testing machine
Lifetime	--	10 -15 years	GB18910.5-2008
Switching times	--	≥ 100 ten thousand Times	Self-made on/off tester

Auto smart film is driven by AC power, gray and transparent when power is added, and fogged and translucent when power is removed, and its photoelectric performance is shown in the table above.

Product Transparency / Haze

Auto smart film

Operating ambient temperature	透度	Full light tester			Parallel light tester		
		ON/OFF	Haze	Full light transmittance	b value	45° light	Parallel light
/	/	OFF	94.2	51.19	5.24	/	/
		ON	2.94	56.43	3.2	38.4	55.26