

5 unique functions PDLC glass provides for you!



Nowadays people are chasing higher requirements for interior designs and energy-saving or privacy keeping functions. PDLC glass came into being a suitable option. Here we are going to discuss some unique functions PDLC smart glass going to provide you!

What is PDLC glass?

PDLC glass is also called [smart glass](#), switchable glass, magic glass, etc. It is a new type of special glass with a sandwich structure formed by compounding a liquid crystal film (commonly known as a PDLC film, or Polymer Dispersed Liquid Crystal) into two layers of glass. We control the transparent and opaque state of smart dimming glass through the switch of

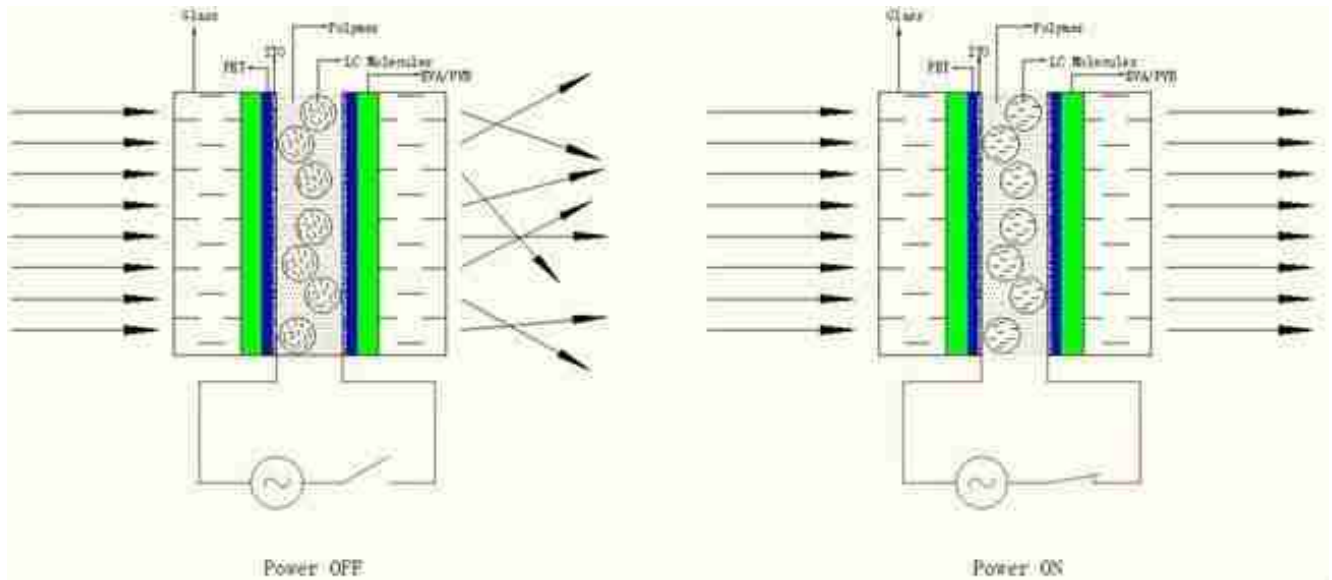
electricity power.



PDLC film structure

The principle of PDLC smart glass

When the electricity is powered off, the rod-shaped polymer is in a chaos state, so that the external light cannot get through the glass and therefore is reflected out, so the glass is in a misty and opaque state; When the electricity is on, the rod-shaped polymer will be attached to the ITO conductive layers, standing in an ordered line, so that external light can penetrate the glass transmit the light, therefore the PDLC glass appears transparent and clear status. As below picture shows:

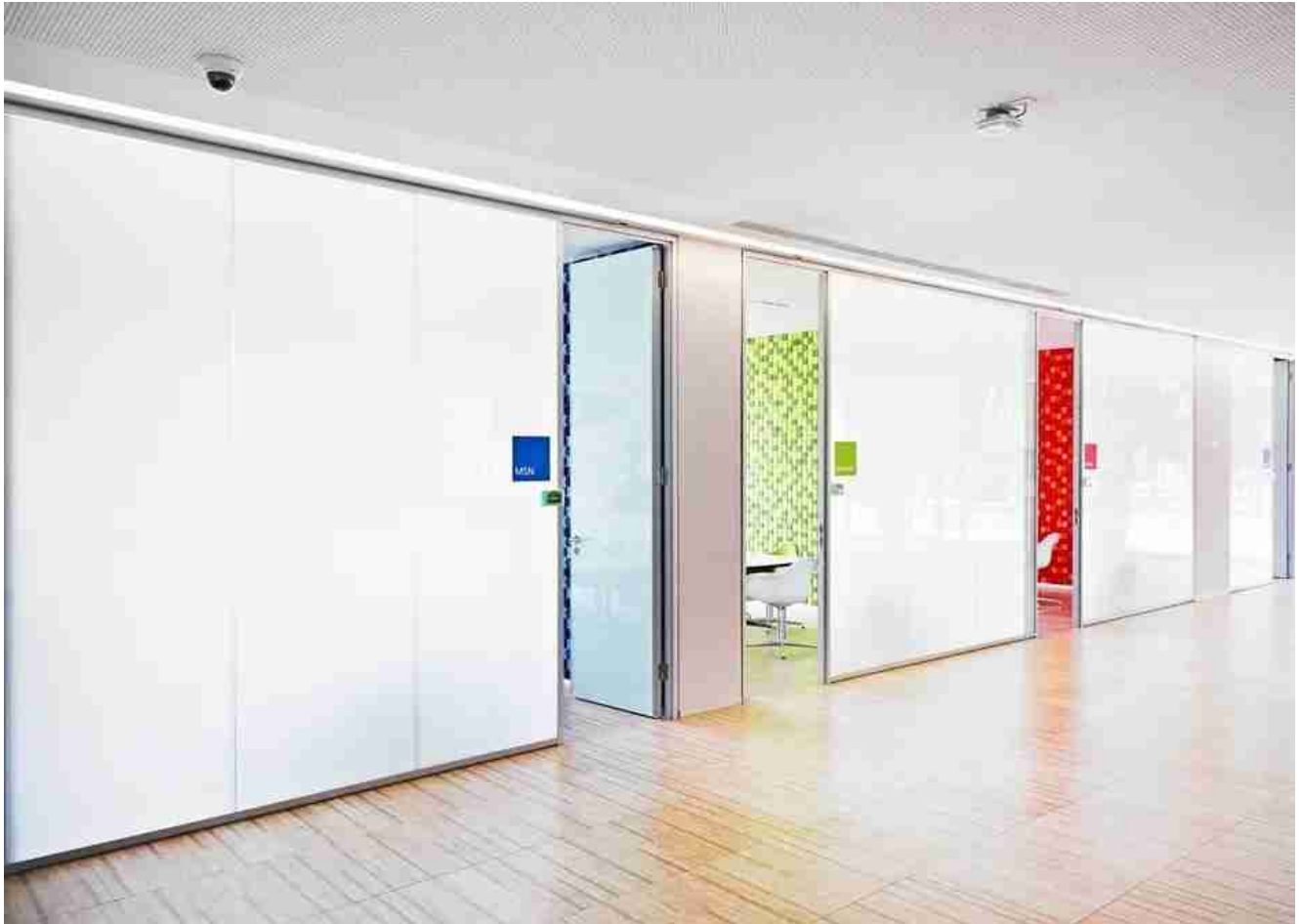


How PDLC glass works?

5 advanced functions of PDLC glass:

1. Privacy protection.

The fundamental function of intelligent PDLC glass is to keep privacy protection, which can control the transparent and opaque state of the glass at any time; it has varieties of applications in offices, residences, hotels, etc., It can be considered as a good curtain providing privacy.



Privacy glass function

2. Projection function.

Due to the opacity of the smart dimming glass in the power-off state, its milky white film has a very good projection effect, and it can be viewed on both sides, saving the cost of the projection screen.



Projection on PDLC smart glass

3. Energy saving function.

The power consumption per square meter of PDLC glass is only 4~5W, the power consumption is very low, it can efficiently block solar infrared and ultraviolet rays. It has good environmental protection advantages. Below is a video showing how PDLC glass works:

4. Soundproof & safety

PDLC glass film normally will be applied in a laminated glass structure. Laminated glass has the ability of soundproofing and endures higher impact comparing to [single tempered glass](#). It will keep you away from the noisy environments and meanwhile provide strong anti-impact functions.

5. Decorative functions

We can choose [color PVB](#) or tinted glass or [digital printed glass](#) to make your PDLC glass a more unique design. Such as red, blue, green, orange, yellow, etc colors are all available. Just share your inspirations, [we can help to realize it!](#)



Colorful designs for PDLC smart glass