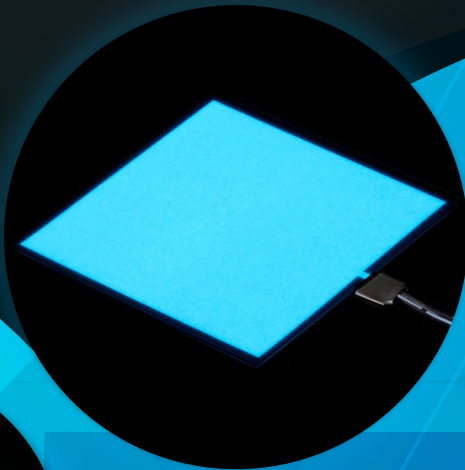


MOVING FORWARD TO THE FUTURE

FLEXLIGHT

CATALOG 2022
EDITION


THIS TECHNOLOGY GIVES YOU **ENDLESS POSSIBILITIES**
AND CAN BE INCORPORATED IN ANY DESIGN OR PROJECT



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-

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COMPANY PROFILE

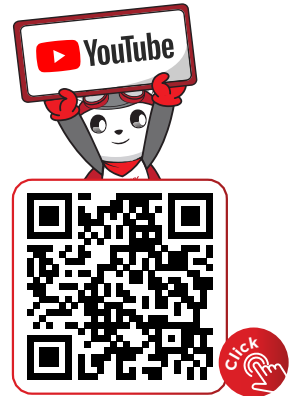


Thai KK Tech Co., Ltd. was established in 2015 is a joint venture between Thai KK Industry Co., Ltd. and E.P.C. Corporation Co., Ltd.

From the beginning to nowadays we has experienced in these fields of business and constantly attended to the research and development focusing in the printed electronic technology which meets with the customer requirement as well.

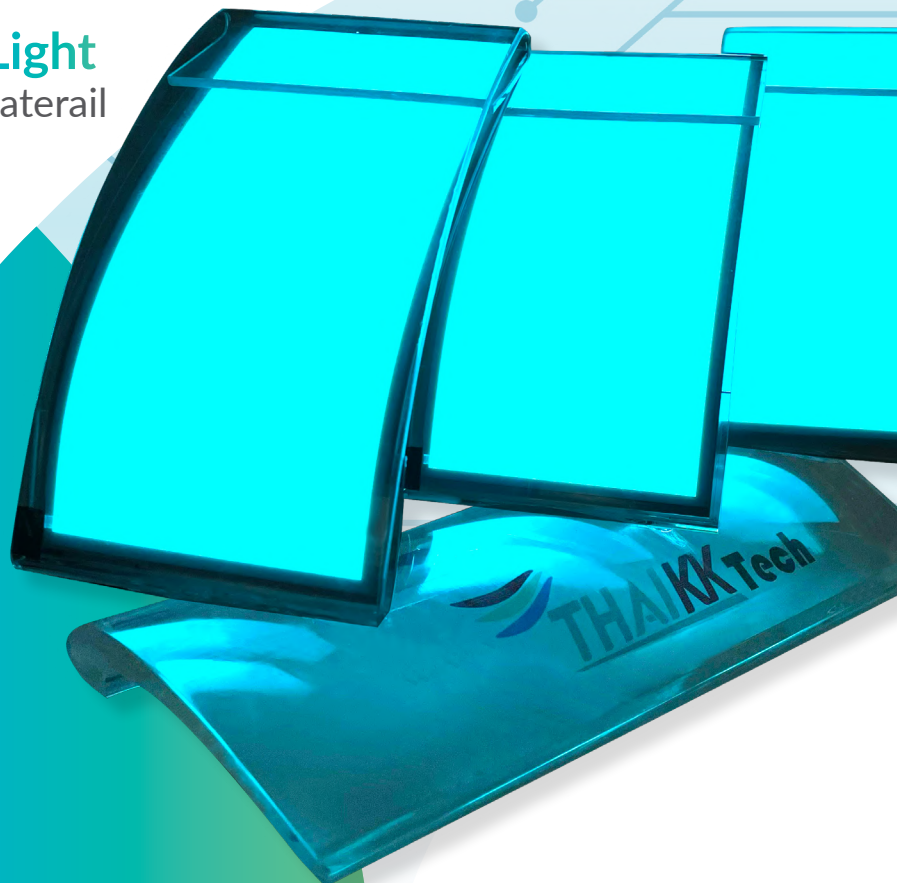
Our main goal is become the leading company in smart label and printed electronic business.

Company Profile
VIDEO



Flex Light
Raw Materail

Packaging
Luxury Box



QUALITY

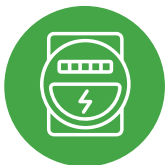
OVERVIEW

Flex light is a kind of electrical device. Produced by Print electronics method, which is considered one of the modern methods of producing electronic products. Including using raw materials, which are special types of ink that can be printed

The printing process is carried out in a standardized and organized control room. The flex light sheets produced are QA checked for light luminance, encapsulation efficiency or moisture resistance. Including the power consumption rate which must be within the specified standards



ILLUMINATION TEST



ENERGY CONSUMPTION RATE

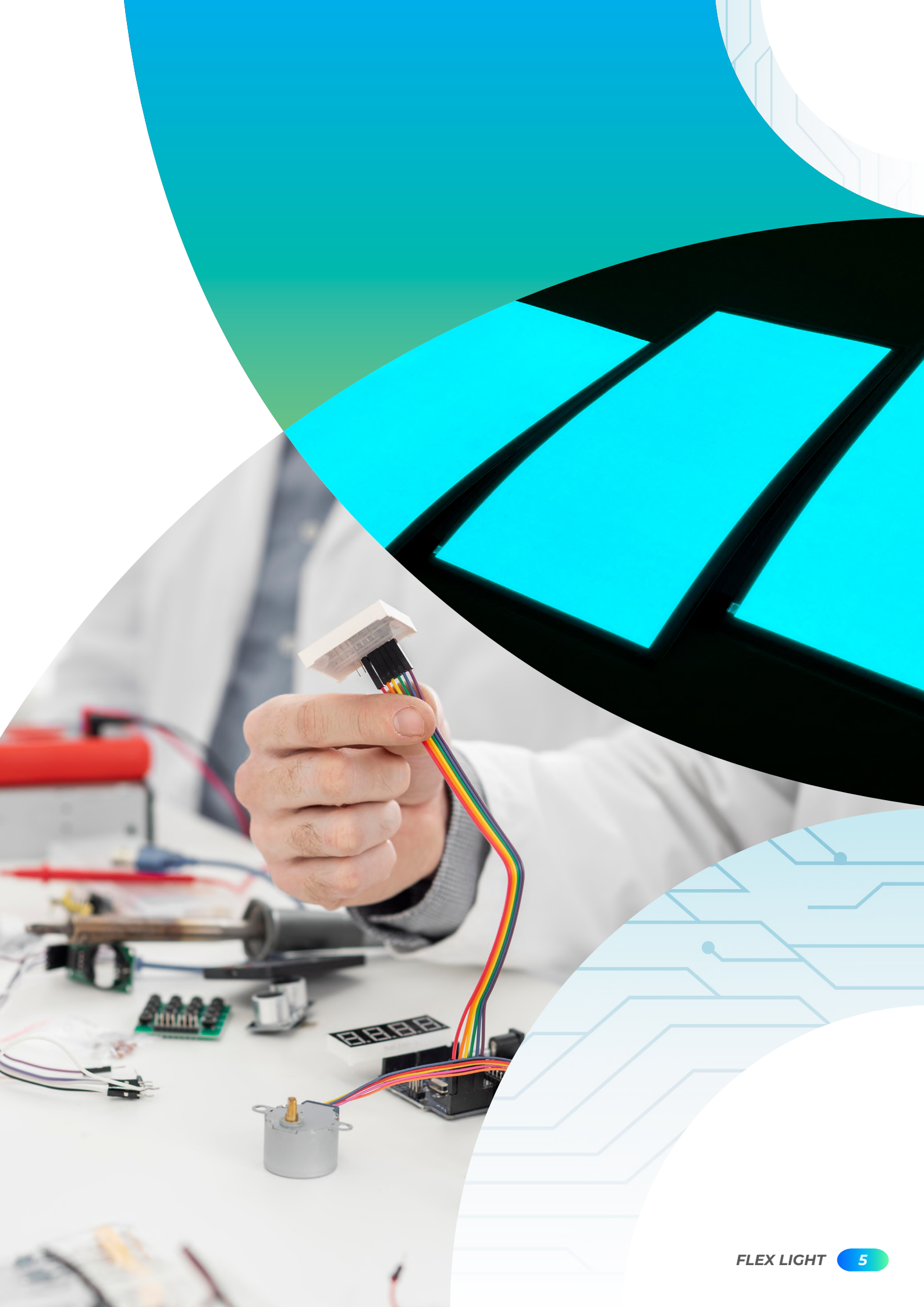


IMPACT TEST



WATERPROOF TEST





WHY

FLEX LIGHT?



Lightweight and Thin shape



Flexibility

Can be applied to a flat or curved surface



Various Shapes

Produced in flat sheets or various shapes



Works in all sorts of environment and temperature



Low power consumption

Consumes less electricity



AVERAGE SERVICE LIFE

8,000 HOURS

*Depending on the environment



Electroluminescent (EL) or Flex light

is a flexible sheet coated with EL material which is an optical phenomenon and electrical phenomenon in which a material emits light in response to the passage of an electric current or to a strong electric field.

WHAT IS FLEX LIGHT?

Flex light is Electroluminescent Panels

Commonly called EL Panels, or EL Sheets are thin and flexible nature, which allows them to be mounted in numerous locations, even curved surfaces.

All EL Panels (also called Light Panels, Luminescent Panels) are a Filmic thin laminated panels made from the element Phosphor that has a great glow when an electrical current AND high frequency passes.

In order to light up, every EL Panel requires an inverter to operate. The inverter sends a proper voltage and frequency throughout the panel which illuminates it beautifully and evenly.

Each inverter is rated for a specific square inch range, which is calculated by taking the TOTAL surface area of the panel. In some instances, people may want multiple EL Panels on a single inverter, **A suitable inverter can be apply powers to one larger panel, or multiple small panels.**

Side View

Light Emission

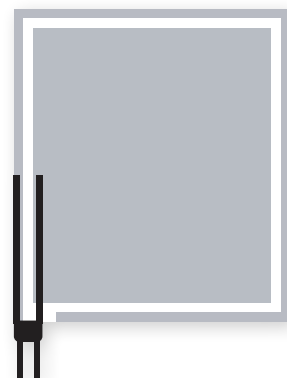
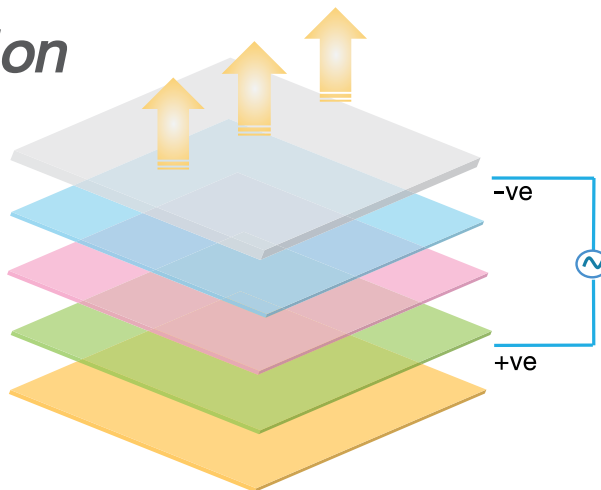
Substrate

Transparent Electrode

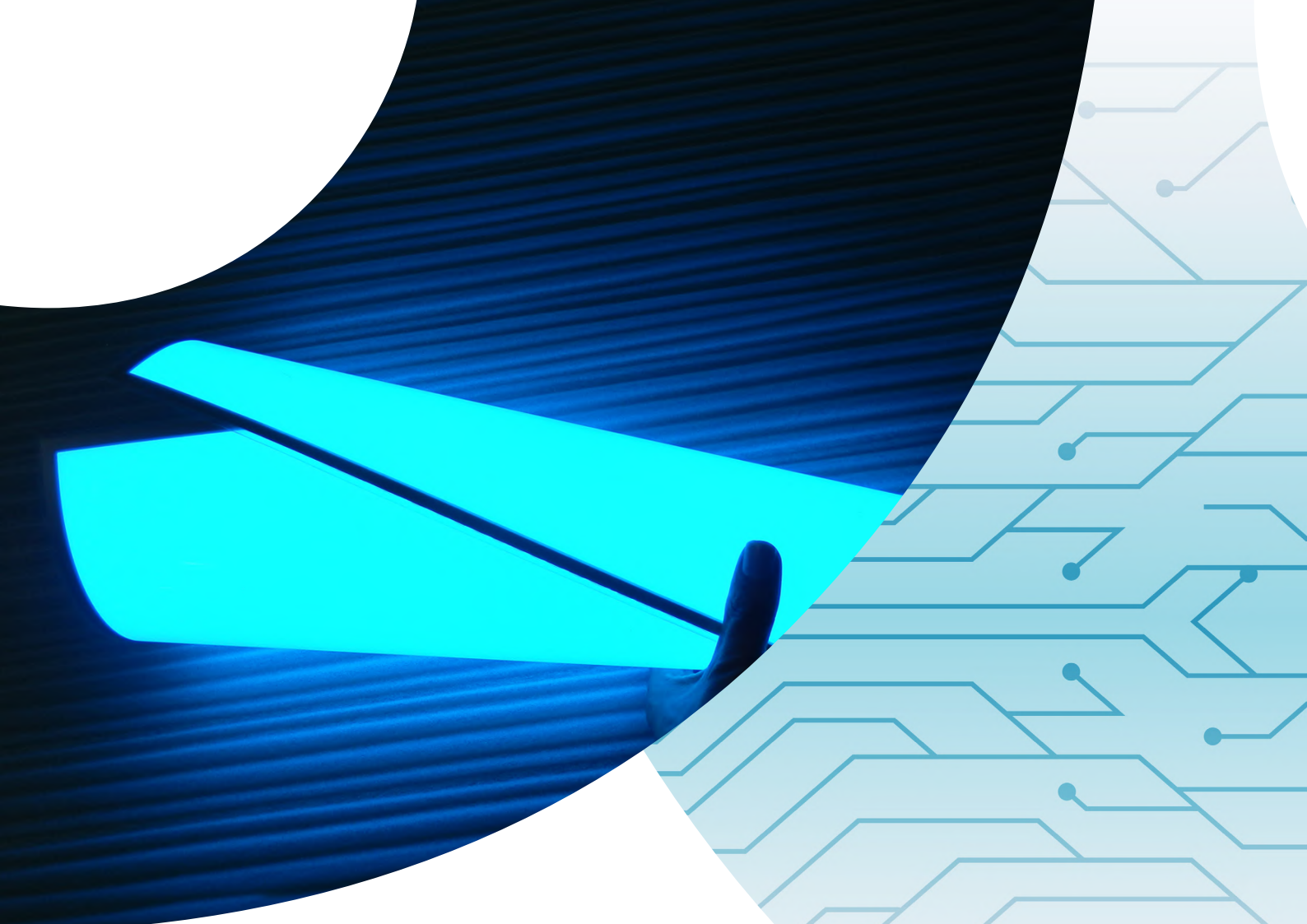
Emitting layer

Insulator

Metal Electrode



Top View



💡 We can printing onto a transparency materials and placing that on top.

This technology gives you **endless possibilities** and can be incorporated in **any design or project.** 💡

Product Description

FLEX LIGHT

General Property

- ✓ **Flexibility** - Can be applied to a flat or curved surface
- ✓ **Low operating temperature** - Flex light is a cold lighting source and does not generate any heat due to its electronic luminous emission
- ✓ **Lightweight and Thin shape**
- ✓ **Efficiency** - 80% of energy is converted to light
- ✓ **Low power consumption** - Consumes less electricity
- ✓ **No Glare** - Flex light produces a soft even light over the entire surface
- ✓ **Visibility** - can be seen from far distances in darkness, smoke and fog
- ✓ **Works in all sorts** of environment and temperature
- ✓ **Maintenance free** and only need power to make it working instantly

Typical Properties

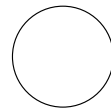
PROPERTY	DETAIL
Initial Brightness	200 lux
Average Service Life	8000 hrs
Color	<ul style="list-style-type: none">• White (available tough printing overlay)• Blue-Green
Thickness	200 - 300 Micron
Dimension	Adapted to the design
Lighting	Animating or flashing

Flex light

Electroluminescent (EL) or Flex light is a flexible sheet coated with EL material which is an optical phenomenon and electrical phenomenon in which a material emits light in response to the passage of an electric current or to a strong electric field.

As applied an AC/ DC signal of sufficient voltage and frequency through the driving electronic, an electric field is formed across the sheet allows the phosphor crystals rapidly charged and emitted light energy which illuminated the printed overlay. This causes to have the visible light.

Color



White (available tough printing overlay)



Blue Green

Technical Data

INVERTER

ALL Flex light or Electroluminescent material needs an inverter to make it work. Inverter does is convert a voltage into a high frequency. In doing so, it excites the phosphor particles inside the EL Material and glows a brilliant glow.

Inverters are a specific design for EL material, so be sure to select an inverter that is capable of handling the Electroluminescence.



Product Detail

Model	Power Consumption (Power, Current)	Operating Voltage for EL	Frequency Blue, White (Hz)	Inverter Size (mm)
Flex Light A4 (Inverter 12 VDC)	22W, 1.8A	150 VAC	800, 1100	116 x 56 x 35
Flex Light A4 (Inverter 220VAC)	22W, 1.8A	150 VAC	800, 1100	116 x 56 x 35
Flex Light A5 (Inverter 12 VDC)	13.2W, 1.1A	120 VAC	600, 900	116 x 56 x 35
Flex Light A5 (Inverter 220VAC)	13.2W, 1.1A	120 VAC	600, 900	116 x 56 x 35
Flex Light Tape 0.5m (Inverter 3VDC)	4W, 1.3A	85 VAC	600, 900	90 x 32 x 25
Flex Light Logo Set VAC (Inverter 3VDC)	3W, 1A	85 VAC	600, 900	90 x 32 x 25



Feature

Type	Feature
Standard Set	Blink, Steady
Dim Set	Blink, Steady, Fade (in-out)
Dim set and Sound Sensor	Blink, Steady, Fade (in-out), Control by sound sensor
Dim set, Sound Sensor and Light Sensor	Blink, Steady, Fade (in-out), Control by sound sensor and Control by light sensor
Custom	Custom Feature



Starter Set



Packaging Set



Logo Set



Inverter

Applications

Packaging



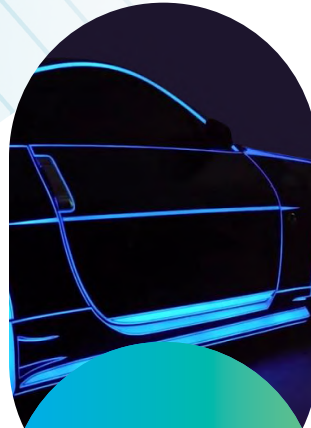
- Luxury box
- Limited package

Advertising



- Billboard
- Signage
- Lightbox
- Bus Shelters
- Vehicle Wraps
- Point of Purchase/ Sale (POP/POS)

Decorations



- Backdrop
- Wallpaper
- Toilet Frame
- Festival Lighting or Automotive Decoration

Safety Equipments



- Vest
- Helmet
- Belts
- Indicator or Sign
- Safety Cone
- Vehicle Signage

Advertising

Signage



Fashion & Accessories



Gift, Toys, Souvenirs



- Inflatable
- Card
- Clock
- Mat
- Frames

Architectural Lighting



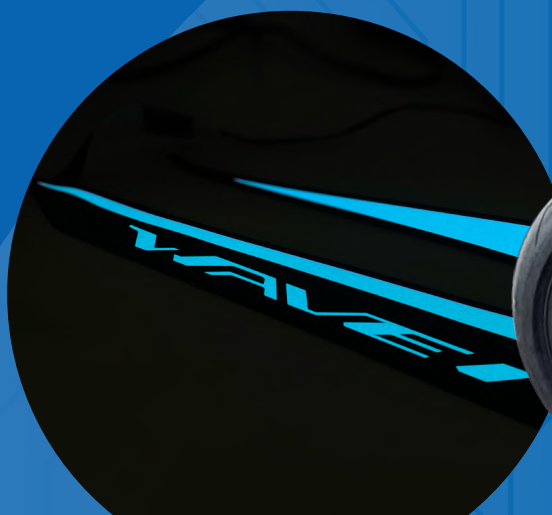
- Exterior Lighting
- Interior Lighting

Fashion & Accessories



- Cap
- Shoes
- Bag

Automotive Decoration



MOVING FORWARD TO THE FUTURE

OUR MAIN GOAL IS
BECOME THE LEADING COMPANY
IN PRINTED ELECTRONIC AND
SMART LABEL BUSINESS

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FIND OUT MORE
scan here

