# **LEDLIGHTPANEL**

## **Main Features**

Light Panel is developed based on LGP as an innovative light source, with LED strips around, can be very slim to save space, widely used for lighting decoration. Size, specifications and lighting color can be customized, popular in the retail market, signage, display, exhibitions and architectures.

Light Panels are highly customized product category, they are basically produced for specific project.

- retail fixtures backlighting
- onyx backlighting
- LED signage
- LED light box



## Quality

## **Specifications**

Power

Thickness

LED Strip

Efficacy, Ra

Uniformity

Plug











Input Voltage 12/24V DC Constant Voltage

12w-14.4w/ meter (2835 LED); 10w/ meter (3528RGB)

LGP 2mm-12mm

1 edge(short side<300mm);

2 edges(300mm<short side<900mm)

4 edges(short side>900mm)

Euro plug, US plug, ect.

85-100lm/w, 80-90Ra

>90%



**RGB & RGBW** color changing panel



They are dimmable



Dynamic CCT is possible



We also can provide IP 65 light panel for damp locations, moisture resist.

## **KEY FEATURES**



STRONG COLOR RENDERING



OUTSTANDING **BRIGHTNESS** 



**FRAMELESS** DESIGN



EVEN ILLUMINATION





**CUSTOM FRAME** COLORS



TILE SHEETS FOR GREATER COVERAGE

## **MECHANICAL**

	STANDA RD	SPECIAL ORDER OPTIONS
Max. Panel Size	60" x 120" 1524 mm x 3048mm	Same as standard
Max. Panel Size	any size less than 60" x 120" any size less than 1524 mm x 3048mm	Same as standard
Acrylic Thickness for Panel Widths < 2.5ft (750mm) for Panel Widths 2.5ft (750mm)	5/32" 4mm 15/64" 6mm	5/16″8mm
Overall Thickness for Panel Widths < 2.5ft (750mm) for Panel Widths 2.5ft (750mm)	1/4" 6.5mm 3/8" 9.5mm	Varies
Weight	1.5 lbspersq.ft 7.32kg persq. m.	Varies
Operating Temperature	-2 2°F to 122°F -30°C to 50°C	Same as standard

The above parameters in the table are our common standards, as the LED Light Panel can be highly customized, which is capable of any shapes, sizes, colors, and parameters. Any special project requirement, please contact our representatives.

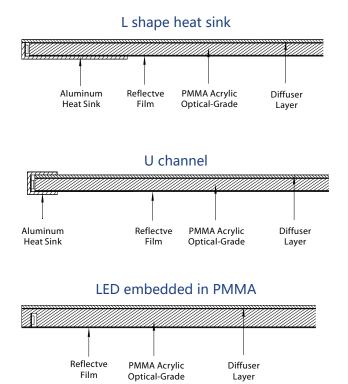
## **CONSTRUCTION & BASE MATERIAL**

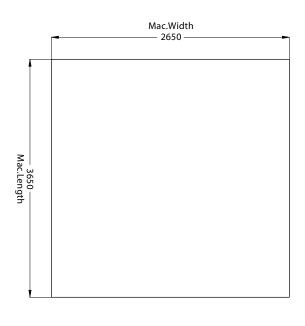
Light Guide Panel Material PMMA Optical Grade Acrylic panel Reflective Film Material PET

Flexible Diffuser Material PET

Rigid Diffuser Material Extruded acrylic paper-masked sheet Heat Sink Material Aluminum Construction LED Panels are constructed of a cast PMMA Optical Grade Acrylic panel with a light guide pattern dotted uniquely to the acrylic surface. LEDs populate the edges of the acrylic panel. A heat sink and opaque white reflector backer is also provided.

Overall Thickness Light Panel thickness is determined by panel shape, size, and color temperature. The overall thickness of standard panels shall never exceed 1/4" (6.5mm) for standard panel





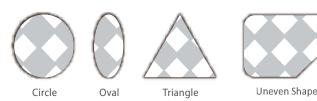
## CONSTRUCTION & BASE MATERIAL

Custom Sizes The size of LED panels may be customized for the design or installation being specified. The maximum size allowed for a panel is 60"x20" (1524mm x 3048mm).

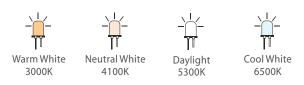
Custom Shapes LED panels can be cut into any desired shape including circles, ovals, and uneven shapes. For details, please consult with our project specialist for more details.

Custom Color Temperatures LED panels shall be available for applications requiring color temperatures ranging from 3000K-6500K. Standard CCTs include 3000K, 4100K, 5300K, and 6500K. (Actual Kelvin temperatures may vary ±300K based on environmental conditions and application materials, including the light panel itself and

#### **CUSTOM SHAPES & SIZES**



## STANDARD COLOR TEMPERATURES (CCT)



### **ELECTRICAL**

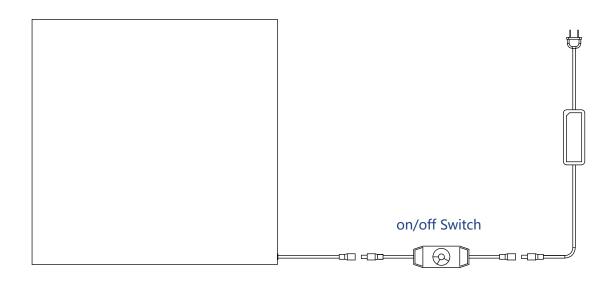
#### **DIMMING**

LED light panels are fully dimmable to <10% when utilized with a dimmable power supply. Dimming options include: Pulse-width modulation dimming (PWM)  $\cdot$  0-10V dimming  $\cdot$  DMX/DALI  $\cdot$  Magnetic low voltage (MLV)  $\cdot$  Electronic low voltage (ELV)  $\cdot$  Remote Control Plugin  $\cdot$  Inline Plugin.

#### **POWER SUPPLY**

Input Voltage This luminaire shall be equipped and powered by an external 12VDC or 24VDC constant voltage power supply. A variety of dimming controls compatible with the power supply shall be offered for customizable installations. Power Consumption Shall vary depending on panel size and selected strip configuration. Larger light panels shall require higher power LEDs to maintain evenness in illumination. Please Use Only with Class 2 Power Supply we offer a full range of Class 2 power supplies that are compatible with.

Connector Type The default connector type for this luminaire shall be DC barrel jack. Light panel luminaires may also be requested with hardwire or Molex connectors. Wiring in Parallel Multiple light panels may share a single

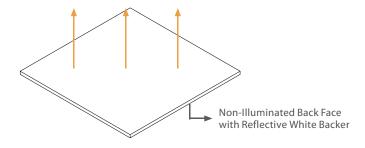


#### **DIMMING**

LED strips utilized to power panels are configurable on all sides of the panel, including long edges, short edges, inside circumference, outside circumference, and custom configurations. LEDs shall be selected for 1-sided, 2-sided, or 4-sided placement with standard or high power LEDs, depending on the application requirements. LED strips may be placed outside of the panel or embedded.

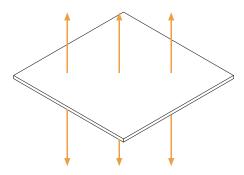
## SINGLE FACE ILLUMINATION

Illumination Single Front Face



#### DOUBLE FACE ILLUMINATION

Double Face Illumination

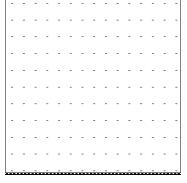


Illuminated on Both Sides Without Reflective White Backer or 2Panels Back to Back for Better Brightness

#### 1-SIDED LED STRIP ILLUMINATION

1-Side LED Strip Illumination

Width LESS than 12"(304.8mm)

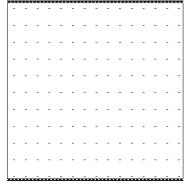


Max Length 120"(3048mm)

#### 2-SIDED LED STRIP ILLUMINATION

2-Side LED Strip Illumination

Width GREATER than 12"(304.8mm)

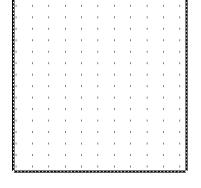


Max Length 120"(3048mm)

#### 4-SIDED LED STRIP ILLUMINATION

4-Side LED Strip Illumination

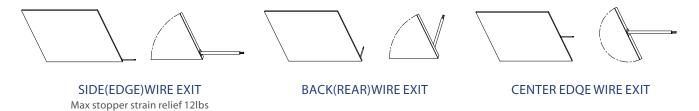
Based on your application,4 side illumination may be recomended



## **Dry & Damp Location Series**

#### **WIRE EXITS**

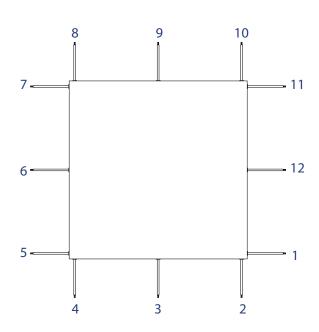
Wire Exit Placement The placement of the primary wire exit shall include corner, side, and rear placement. Wire exit shall be confirmed during the design phase to ensure proper strain relief and maintain product installation integrity. LEDCONN recommends wire exits at any of the 12 locations indicated on the Standard Wire Exit Guide. Outside of recommended standard wire exit locations, custom placements for wire exits may also be accommodated. Any wire exit placements that are requested along a panel's edge with an integrated LED strip may cause dark spots.



#### STANDARD WIRE EXIT GUIDE

Multiple Wire Exits panels shall also accommodate multiple wire exits if required for the application. Please consult a project coordinator for more consultation about unique wire exit placements. Cord Length Standard cord lengths shall be 12" (304.8mm), 36" (914.4mm) & 72" (1828.8mm). Wire length may be customized to any desired length for the unique application requirements.

Choose where you would like to place the wire exit. Wire exits 1-12 are the most commonly requested positions.



## **Dry & Damp Location Series**

#### INSTALLATION

LED light panels shall be used for indoor and dry location applications only. For environments requiring damp location treatment, optional IP65 waterproof treatment is available.

IP65 Outdoor Rating LED panels requested with IP65 damp to bow more easily. To prevent bowing, additional reinforcements location treatment shall be dust tight and protect against gentle water shall be recommended to facilitate handling the needs of larger contact or humidty. Panels requested for indoor/dry location only are IP65 safe by default.

Operating Temperature LED light panels shall operate in a temperature range of -22°F min to +122°F max (-30°C min to +50°Cmax).

Heat Sink shall be assembled and distributed with heat sink pre-installed.

Predrilled Holes & Cutouts During production, light panels may be custom ordered with predrilled holes or cut outs.

Drilling On-Site light panels may be drilled on-site but doingso may void the warranty.

Deflection As LED light panels increase in size, they tend applications.

Mounting Mounting options for light panels shall include Z clips, stand offs, and mirror clips.

Full Solutions LED Light Boxes For applications requiring a full solution LED light box, we offer state-of-the art snap frames and Fabric Light Boxes. For more information, please reach out to a Sales Rep or visit us online

