Luminous Textile

Bring spaces to life
Imagine creating a breathtaking interior with the power to attract and engage, surprise and delight, uplift and inspire. A space that blends light, texture and dynamic content in one ambient experience. One that is so flexible, you can change it to reflect every mood and moment.

That is the beauty of Luminous Textile. It combines multi-colored LEDs seamlessly within beautiful textile panels that also soften sound. A solution that gives you endless ways to play with color, movement, texture and light. So you can express emotions, make a design statement and bring spaces to life.
Inspire your creativity

Luminous Textile is a revolutionary way to enhance interiors with light, texture and dynamic content. A combination of multi-colored LEDs within textile panels that gives you the ultimate creative freedom. You can choose the size and number of panels as well as how you arrange them. Then there is an array of white and colored Kvadrat textiles with different weaves to choose from.

Design freedom

A unique solution, Luminous Textile panels are completely integrated, making them very easy to install. They come in a wide range of sizes and can be arranged in infinite ways so you can orchestrate your own composition. Create one huge mood wall as a sensational backdrop. Follow the rise of a staircase with staggered panels. Or scatter individual panels over a wall and display fluid content across them. Anything is possible.

Play with dynamic content

Use videos from our online standard portfolio to add decorative effects or produce natural ambiences. Or upload your own video (dynamic video content) with our special software to create a personal look and feel. It is easy to control Luminous Textile with any device that is connected to the panel network, such as a mobile phone, laptop or tablet. So you can change the atmosphere in a room at the touch of a button.

Kvadrat textiles

The panels are finished with beautiful Kvadrat textiles (fire rated). The Kvadrat Soft Cells patented tensioning system keeps the textile under constant tension within an aluminum frame. With a choice of rich colors, high quality textiles and beautiful textures, the panels are designed to look stunning in their own right. Switching the dynamic video content on adds an extra element of surprise that never fails to delight.

Soften sounds

The combination of elements used in each Luminous Textile panel creates acoustic properties that absorb sounds. Unlike hard materials like glass, concrete and steel that amplify noise, Luminous Textile helps to dampen sound and soften echoes. So it can play a practical as well as a decorative role everywhere from office reception areas and restaurants to hospitals and airport lounges.

Explore the possibilities

Luminous Textile is not intended for information or sales messages. Rather than overloading the senses, it creates soft atmospheres and ambiences. The combination of soft, diffused light and the aesthetics of the material creates a very special effect that has an almost dreamlike quality. With design freedom and fully customizable content, it makes the possibilities for mood creation endless. How will it light your creativity?
Inspiration everywhere

Every space demands its own meaningful solution. Luminous Textile helps you achieve your boldest visions and capture the essence of a space in a totally unique way.

Magical retail

The longer people linger in store, the more they’re likely to buy. Luminous Textile creates magical effects everywhere from the front window to the fitting room. Creating stopping power, attracting glances, enhancing the personality of a brand, reinforcing its identity and guiding shoppers effortlessly through the store.

It is also a welcome distraction, reducing the perception of waiting times in the fitting room or at the store checkout. Enhancing the shopping experience even further.

Enchanting hospitality

Create an enchanting experience that will enhance hotels, bars and restaurants. Help hotel guests to wake up naturally by showing a beautiful sunrise in the breakfast room. Transform a restaurant into an alfresco dining experience with a stunning outdoor scene. Or turn up the pace in bars and clubs with cool and colorful disco content. With Luminous Textile you can even take conference rooms from boring to inspirational.

Inspirational offices

Modern offices can feel cold and impersonal. Luminous Textile is the perfect way to emphasize the personality of your company. It adds the warmth and inspiration that stimulates creativity, improves productivity and energizes office life. With softened sound to improve concentration and promote well being. So business is a pleasure.

Soothing healthcare

Hospital visits make people feel anxious. De-stress waiting areas and create a positive distraction with soothing, dynamic video content. Patients can relax, staff feel energized and treatment goes more smoothly. Luminous Textile makes everyone feel better about a stay in hospital.
Power supply requirements for 24 V version

The power supplies must meet the following requirements:

**External power supply characteristics**

<table>
<thead>
<tr>
<th>Power supply type</th>
<th>Type I: 24 Vdc double isolated output (SELV equivalent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required protections</td>
<td>Short circuit protection (over temperature protection)</td>
</tr>
<tr>
<td>Compliancy</td>
<td>Local safety and EMC regulations</td>
</tr>
<tr>
<td>DC output voltage (Vo)*</td>
<td>24 ±1 V</td>
</tr>
<tr>
<td>(for full output load range)</td>
<td></td>
</tr>
<tr>
<td>Max. DC output power (Po)*</td>
<td>288 W</td>
</tr>
<tr>
<td>Max. ripple and noise</td>
<td>300 mVp-p</td>
</tr>
<tr>
<td>(for full output load range)</td>
<td></td>
</tr>
<tr>
<td>Max. 24 V cable length</td>
<td>See table External power supply details</td>
</tr>
</tbody>
</table>

* See table External power supply details for the minimum required power ratings and cable lengths with respect to the length of Luminous Textile.

**Important**

It is the responsibility of the customer to provide power supplies for the 24 V versions.

**Important**

Panels with a length of more than 4.38 m (172.4 in) require two separated external power supplies.

**External power supply details**

<table>
<thead>
<tr>
<th>Luminous Textile length (m)</th>
<th>Driver box 1 power supply**</th>
<th>Driver box 2 power supply**</th>
<th>Max. cable length (m)****</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in)</td>
<td>Rated current (A)***</td>
<td>Rated power (W)</td>
<td>Max. cable length (m)****</td>
</tr>
<tr>
<td>0.72</td>
<td>28.3</td>
<td>2.2</td>
<td>52</td>
</tr>
<tr>
<td>0.78 to 1.44</td>
<td>30.7 to 56.7</td>
<td>4.2</td>
<td>100</td>
</tr>
<tr>
<td>1.50 to 2.16</td>
<td>59.1 to 85.0</td>
<td>6.1</td>
<td>148</td>
</tr>
<tr>
<td>2.22 to 2.88</td>
<td>87.4 to 113.4</td>
<td>8.1</td>
<td>194</td>
</tr>
<tr>
<td>2.94 to 3.60</td>
<td>115.7 to 141.7</td>
<td>10.0</td>
<td>240</td>
</tr>
<tr>
<td>3.66 to 4.32</td>
<td>144.1 to 170.1</td>
<td>12.0</td>
<td>288</td>
</tr>
<tr>
<td>4.38 to 5.04</td>
<td>172.4 to 198.4</td>
<td>7.1</td>
<td>170</td>
</tr>
<tr>
<td>5.10 to 5.76</td>
<td>200.8 to 226.8</td>
<td>8.1</td>
<td>194</td>
</tr>
<tr>
<td>5.82 to 6.48</td>
<td>229.1 to 255.1</td>
<td>9.1</td>
<td>218</td>
</tr>
</tbody>
</table>

**Each driver box requires a separate power supply.**

*** Currents measured at Vo = 24.0 V

**** Max. cable length requirement is for 2 x 2.5 mm² or AWG13 cables.
Specifications
Due to continuous improvements and innovations, specifications may change without notice.

**General characteristics**

- Max. luminous flux: 500 lm/m² (46.3 lm/ft²)
- Max. luminance: 190 cd/m² (17.6 cd/ft²)
- Light source: RGB LEDs
- RGB light engine: 60,000 hrs, \( T_{90} = 25 \) °C (77 °F)
- Burning hours L70
- Pixel pitch: 60 mm (2.36 in)
- Minimum frame rate: 50 FPS
- Number of colors: 16.8 million
- Number of panels in a system: Unlimited
- Weighted acoustic absorption coefficient: 0.45
- EN ISO 11654 rating: Class D
- Data connection: RJ45 Ethernet connection, port for optional remote control

**Electrical specifications AC version**

- AC input voltage: 100 to 240 V
- AC input frequency: 50/60 Hz
- Nominal input power: 62 W/m² (5.8 W/ft²)
- Input power: 60 to 68 W/m² (5.6 to 6.3 W/ft²)
- Input connector CE version: C14 input and output socket
- Input connector UL version: 3-Pin, screw terminal (suitable for stranded or solid wiring)

**Electrical specifications 24 V version**

- DC input voltage: 22.5 to 25.5 V
- DC input current (panel size dependent): 2.2 to 12 A
- Nominal input power: 55 W/m² (5.1 W/ft²)
- Input power: 54 to 59 W/m² (5.0 to 5.5 W/ft²)
- Max. DC input power per driver box: 288 W
- Max. current transients drawn from external PSU: 10 A/ms
- Max. allowed input ripple and noise (full range): 300 mVpp
- Input connector: 2-pin, screw terminal (suitable for stranded or solid wiring)

**Approbation / compliance**

- Fire safety: B-s2 d0 (EN 13501-2 Euroclass), UL723, ASTM E84, NFPA 255
- Approbations Europe: CE
- United States / Canada: UL and c-UL listed (24 V version n.a.)

**Mechanical**

- Length: 0.72 to 6.48 m (28.3 to 255.1 in)
- Increments: 60 mm (2.36 in)
- Width: 0.72 to 1.2 m (28.3 to 47.2 in)
- Increments: 60 mm (2.36 in)
- Thickness excluding installation elements: 127 mm (5 in)
- Weight (depending on size):
  - Smallest size: 19.3 kg/m² (3.95 lb/ft²)
  - Largest size: 8.7 kg/m² (1.78 lb/ft²)
- Mounting options: Wall (portrait/landscape, surface or recessed), ceiling (surface, recessed or suspended)
- Finish: Beautiful array of Kvadrat textiles (ask your local representative for more information)

**Ordering information**

For more information visit [www.colorkinetics.com/luminous-textiles](http://www.colorkinetics.com/luminous-textiles)