The PL1 series – Panel lights with Tunable White DALI DT8
The ideal area lighting for HCL applications

B.E.G.’s new PL1 “Tunable White” LED panel lights combine an attractive design with modern LED technology. The extremely flat housing is particularly suitable for installation into modular suspended ceilings with little installation depth. The diffuser is homogeneously illuminated and offers a convenient light distribution in the room. The lights are also available with a microprismatic cover allowing to reduce the glare to UGR <19. The high-quality and economical LEDs assure an operating time of more than 40000 hours with a luminous efficacy of up to 3550 lumens.

The luminaires are equipped with warm-white and daylight-white LEDs which can be controlled separately. The LED driver works according to the newest DALI device type 8 standard for Tunable White. Therefore, only one DALI address is required per luminaire instead of two. The LED panel lights can be dimmed and also the colour temperature can be steplessly adjusted from warm white (2900 K) to daylight white (6800 K). Therefore, the luminaires are perfectly suited for Human Centric Lighting (HCL). With this type of lighting control, the colour temperature and the light intensity are changed over the day, imitating the natural daylight. The luminaires can be biodynamically controlled with B.E.G.’s HCL occupancy detector PD4-M-HCL. It is also possible to control the luminaires with other DALI HCL systems supporting Device Type 8.

This HCL technology is particularly suited for offices and other work stations as well as retirement homes and hospitals. Especially in the medical sector, the imitation of daylight can improve healing processes. A cool daylight-white illumination is stimulating and activating. However, the warm-white light is also important. It is relaxing and supports a healthy sleep.
LED panel light for biodynamic light

The PL1 LED panel lights are available in several versions: with diffuser or microprismatic structure, with dimensions 600 x 600 mm or 625 x 625 mm or in the long versions 300 x 1,200 mm or 312.5 x 1250 mm.

B.E.G. offers these luminaires with a frame in the colours white or aluminium-like silver. Thanks to this, the luminaires fit perfectly into many ceiling systems.

<table>
<thead>
<tr>
<th>h (m)</th>
<th>Ø (m)</th>
<th>E (lx)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,0</td>
<td>1,9</td>
<td>1698</td>
</tr>
<tr>
<td>2,0</td>
<td>3,9</td>
<td>425</td>
</tr>
<tr>
<td>3,0</td>
<td>5,8</td>
<td>189</td>
</tr>
<tr>
<td>4,0</td>
<td>7,8</td>
<td>106</td>
</tr>
<tr>
<td>5,0</td>
<td>9,7</td>
<td>68</td>
</tr>
</tbody>
</table>

Angle of radiation

88,2°
PL1-600-LED-AG-DALI-TW / PL1-625-LED-AG-DALI-TW square

- Very flat square LED panel light
- For installation into suspended ceilings Module 600 or 625
- Light colour adjustable from 2900 K to 6800 K
- DALI driver type 8 for controlling the light temperature
- Very uniform brightness of the luminaire
- Good glare reduction thanks to microprismatic structure UGR < 19 (version AG)

**Technical data**

- **Voltage:** 200 - 240 V AC 50/60 Hz
- **Power consumption:** 45 W
- **Illuminant:** LED module
- **Light color:** ca. 2900 K warm white - ca. 5800 K / 6800 K daylight white
- **Light flux:** to 3550 lm
- **Colour reproduction:** > CRI 80
- **Glare reduction:** UGR<19 (version AG)
- **Photobiological safety:** RG 0
- **Dimmability:** DALI Device Type 8
- **Degree / class of protection:** IP20 / II
- **Mounting:** False ceiling mounting Module 600 / 625
- **Housing:** white / silver aluminium frame
## Variants

<table>
<thead>
<tr>
<th>Model</th>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>PL1-625-LED-DALI-TW-S</td>
<td>93681</td>
<td>620 x 620 x 10 mm, Module 625, silver</td>
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<tr>
<td>PL1-600-LED-AG-DALI-TW-S</td>
<td>93151</td>
<td>595 x 595 x 10 mm, Module 600, UGR&lt;19, silver</td>
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<tr>
<td>PL1-600-LED-AG-DALI-TW</td>
<td>93084</td>
<td>595 x 595 x 10 mm, Module 600, UGR&lt;19, white</td>
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<tr>
<td>PL1-625-LED-AG-DALI-TW</td>
<td>93094</td>
<td>620 x 620 x 10 mm, Module 625, UGR&lt;19, white</td>
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</tbody>
</table>
Extremely flat linear LED panel light
For installation into suspended ceilings Module 300 or 312.5
Light colour adjustable from 2900 K to 6800 K
DALI driver type 8 for controlling the light temperature
Very uniform brightness of the luminaire
Good glare reduction thanks to microprismatic structure UGR < 19 (version AG)

Technical data
- Voltage: 200 - 240 V AC 50/60 Hz
- Power consumption: 45 W
- Illuminant: LED module
- Light color: ca. 2900 K warm white - ca. 5800 K / 6800 K daylight white
- Light flux: up to 3,550 lm
- Colour reproduction: > CRI 80
- Glare reduction: UGR<19 (version AG)
- Photobiological safety: RG 0
- Dimmability: DALI Device Type 8
- Degree / class of protection: IP20 / II
- Mounting: False ceiling mounting Module 300 / 312.5
- Housing: white or silver frame
### Variants

<table>
<thead>
<tr>
<th>Variant</th>
<th>Code</th>
<th>Dimensions</th>
<th>Module</th>
<th>UGR</th>
<th>Color</th>
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<td>300</td>
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<td>307 x 1245 x 10 mm</td>
<td>312.5</td>
<td>&lt;19</td>
<td>white</td>
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</tbody>
</table>

Biologically effective light has a positive effect on patients in hospitals. In retirement homes, HCL can improve the residents’ sleep and the well-being.