

Photodiode & Photocell Precautions



Preamble:

Thank you for choosing Hytronik. Our products integrate advanced photodiode and photocell technologies to support precise light detection and daylight harvesting control. To ensure accurate performance and reliable operation, please carefully read and follow the precautions below.

1. Lux Measurement Principle

- The lux reading of Hytronik's products reflects the surrounding light at the sensor's physical location, not the light level on the floor or working surface.
- Since users' visual experience depends on floor lighting, please adjust the lux setting according to the real installation environment to achieve the expected result.

2. Environmental Influence

The operation of photodiode/photocell is affected by localized environmental conditions within approximately 2 – 3 meters, including:

- Reflected light and surrounding furnishings
- Floor and wall colors
- Surface smoothness and texture
- Season and weather can also affect performance. The sun's position and light spectrum vary across seasons and weather conditions, changing the light received by the sensor and thus affecting user experience.

3. Installation Guidelines

- For daylight harvesting applications, install the photodiode/photocell in a moderate position — not too close to the luminaire (to prevent excessive feedback) and not too far (to avoid weak feedback).
- The ideal distance varies depending on fixture power, optical design, and environmental reflections (from floor, windows, walls, etc.). This should be evaluated case by case on-site.

4. System Setup & Calibration

- Any dimming or lux-switching setup should be conducted after the installation area is fully completed and furnished.
- If setup is done in an unfinished area, only basic function demonstration is possible. Additional commissioning may be required later to fine-tune lighting levels.



5. Field Testing Reminder

- Always perform field testing before mass installation to confirm that the photodiode/photocell performs normally under actual site conditions.
- If the installation environment is not suitable, the sensor may not function properly.

HYTRONIK INTERNATIONAL

Hytronik UK:

Unit 3 Tallow Way, Fairhills Industrial Estate, Irlam, Manchester, M44 6RJ, United Kingdom
E-mail: info@hytronik.com

Hytronik DACH:

Heinrich-Hertz-Straße 15 / 65582 Diez. Germany
E-mail: support_dach@hytronik.com

Hytronik Iberia & Latam:

Carrer del Moro Zeid, 11, Piso 3, Ciutat Vella, 46001 Valencia
E-mail: support_dach@hytronik.com

Hytronik SVK & CZE:

Techlum s.r.o (Slovakia, Slovenia) Staré Grunty 7A 841 04 Bratislava
E-mail: info@techlum.sk

Hytronik Asia:

Pude Industrial Park, Dushi Village, Pingtan Town, Huiyang District, Huizhou City 516259
E-mail: info@hytronik.com

