

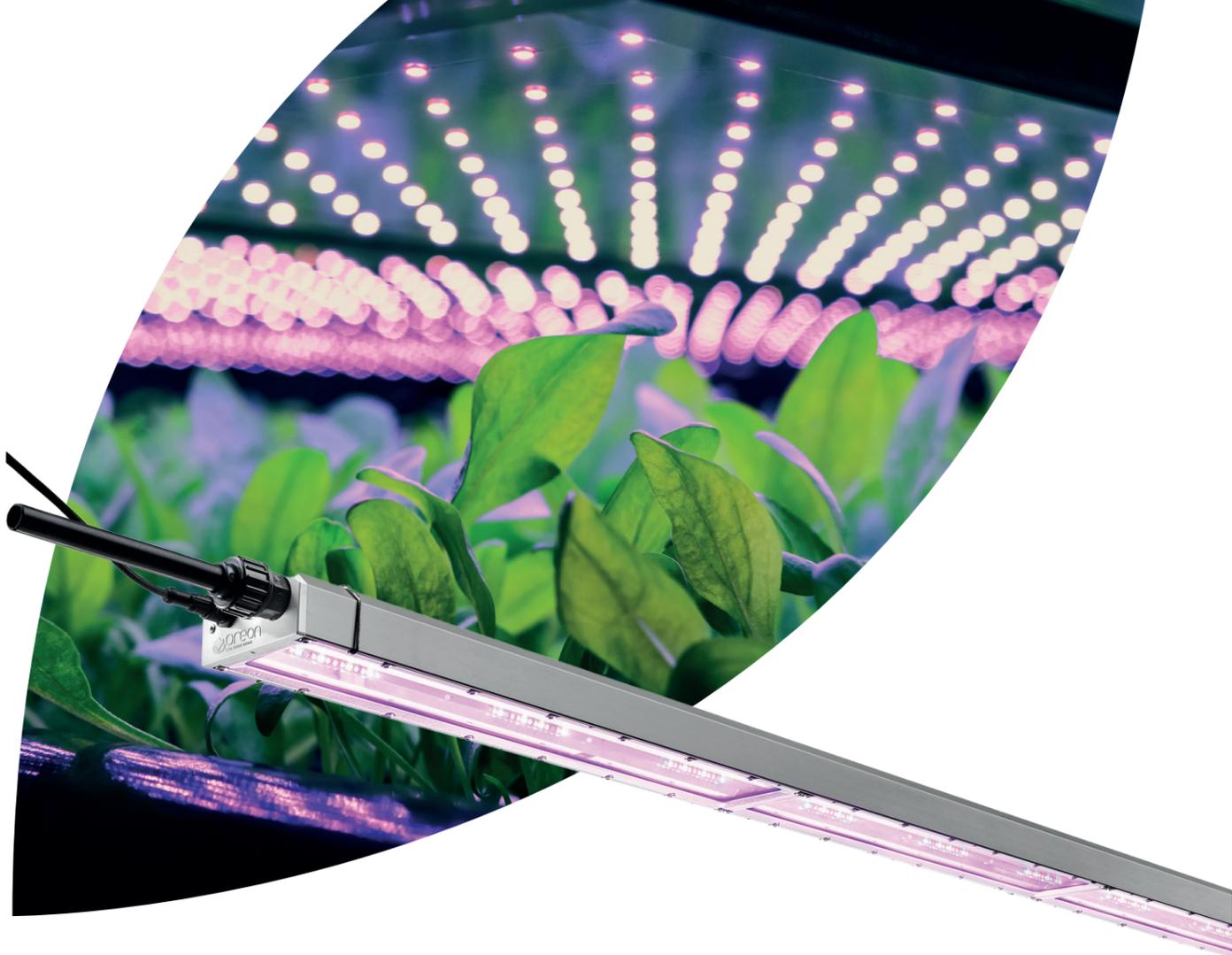


OPTIMAL LED PERFORMANCE FOR INDOOR AND VERTICAL FARMING



EMBRACE XL

THE DUTCH POWERHOUSE

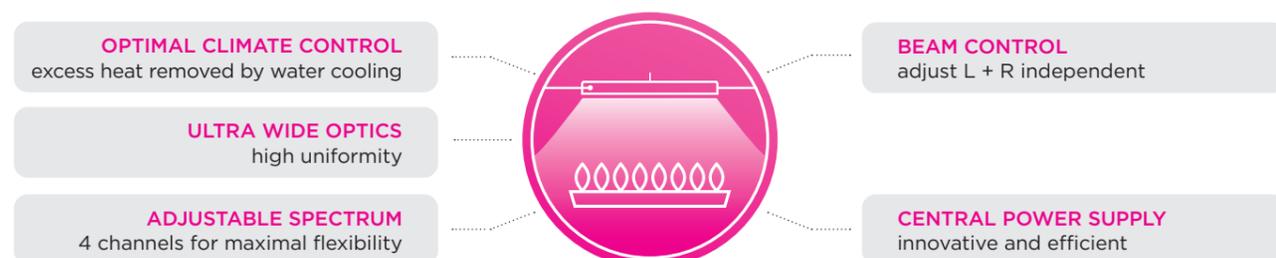


EMBRACE XL POWER MEETS PRECISION

The Embrace XL combines Oreon’s advanced water-cooled LED technology with an impressive light output of approximately 1800 $\mu\text{mol/s}$, allowing you to achieve target light levels with fewer fixtures and greater efficiency.

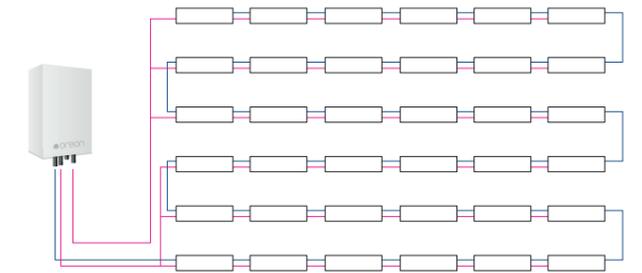
Designed for close-to-crop applications, it delivers uniform light distribution even at just 30 cm from the crop: perfect for multi-layer systems and under-bench propagation. With four independently controllable colour channels, the Embrace XL offers exceptional flexibility for any crop and every growing phase. The water-cooled design enables both horizontal and vertical installation, giving you complete freedom in your cultivation setup. The water - cooling removes all excess heat and ensures a better balanced climate.

High output. Full control. Optimized growth.



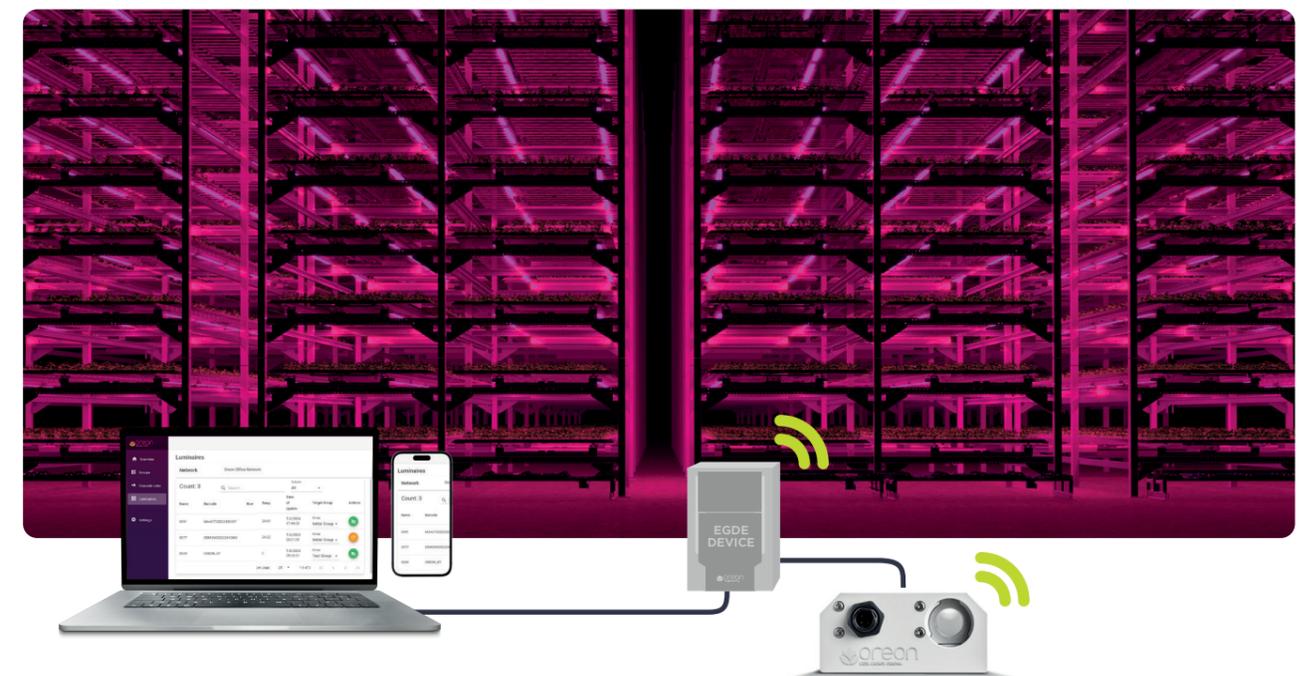
CENTRAL POWER SUPPLY

Oreon uses a central Power Supply Unit (PSU) to power up to 36 fixtures from a single source. The PSU can be installed outside the growing area, preventing additional heat load inside the cultivation environment. Installation is quick and straightforward thanks to the daisy-chain cabling system, allowing multiple fixtures to be easily connected in series. This reduces cabling complexity and streamlines setup.



CONTROL CENTER

The Oreon LED Control Center (OLCC) enables growers to control their assimilation lighting with unmatched precision. The lighting installation is dynamically controlled by a wired network, which allows spectrum and intensity control of each fixture.



EDGE DEVICE

- Only wired ethernet connection needed
- IOT Edge device connects network dot cloud platform
- Stable wired (daisy-chain) inter lamp connection

CLOUD

- Access through Oreon Cloud platform
- Create unlimited schedules
- No limit of changes per day



EMBRACE XL

MULTIPLE APPLICATIONS

The Embrace XL is applicable to different setups due to its power and spectral flexibility.



Figure 1 | vertical farm area with +/- 35 cm height between crop and lights.



Figure 2 | underbench setup with +/- 90 cm height between crop and lights.

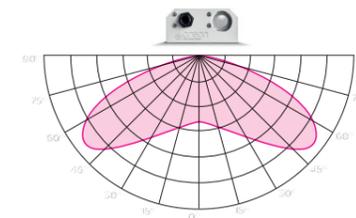
TECHNICAL DATA

Length (cm) 220
 Heart tot heart (cm) 225
 Photon flux (μmol/s) up to 1800
 Efficiency (μmol/J) up to 3.8
 Power consumption (W) maximum 600W

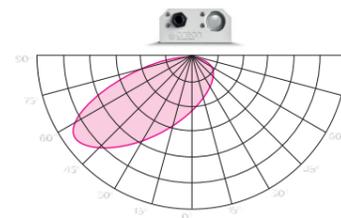
EMBRACE XL

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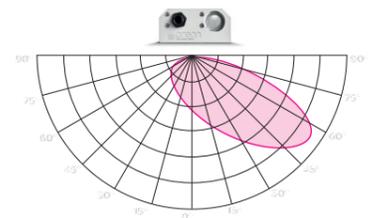
3:1 LIGHT DISTRIBUTION



INDEPENDENT BEAM ANGLE (L)



INDEPENDENT BEAM ANGLE (R)



PRODUCT FEATURES

Housing material and finishing Aluminium (IK10). Finishing anodized/antifouling powder coating (dirt repellent)
 LED protection cover High transmission glass (transmission >95%) (IK07)
 Ingress Protection LED compartment IP67 (dust- and watertight, hermetically sealed). Fixtures can be cleaned by using pressurized water, the complete electrical circuit is sealed waterproof.

Lifespan and warranty L90 B0 - 50,000 hours, 7 years warranty

COOLING LIQUID AND CIRCUIT

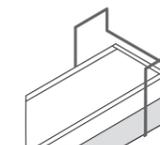
Cooling liquid Water (pH 4-8)
 Cooling liquid temperature From dew point to 113°F | 45°C
 Water connection Pipe thread ISO 228-G 3/8" (2x)
 Required flow velocity Flow velocity must be at least 0.2 m/s and should not exceed 1.5m/s
 Flow velocity formula $v = Q \cdot n / 7200$ (velocity in m/s, channel inner diameter 15mm)
 v: minimally required flow velocity of water in the cooling channel of the lamp (m/s)
 q: heat imparted per fixture (Watt), n: number of fixtures in series on a cooling pipe.

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MOUNTING

Installation Dedicated wire brackets. Various options.

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WEIGHT AND DIMENSIONS

Nett weight 27.12 lbs | 12.3 kg
 Product dimensions (L x W x H) 86.65" x 4.53" x 1.97" | 2201 mm x 115 mm x 50 mm
 Carton dimensions 2 pcs (L x W x H) 89.76" x 11.22" x 3.74" | 2280 x 285 x 95 mm

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 89.76" x 11.22" x 3.74" | 2280 x 285 x 95 mm



LOGISTIC SPECIFICATIONS

Transport
 HS-code

In consultation, depending on quantity/location
 9405 4239 90



V260301 | Subject to printing and typing errors.



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