

QUADRO PROFESSIONAL

Quadro Professional Bunker IP65, 3000-6500K, DALI

- IP65 weatherproof rating and Vandal-proof IK08 rating
- Power monitoring (DT51)
- LED Lifetime >100,000 hours (L80/B20)
- 12 years design life at max. ambient
- DALI (IEC62386)
- Tuneable white (DT8-Tc) controlled by DALI
- Flicker-free dimming controlled by DALI
- High Quality Lithium battery (LiFePO4) and smart charger
- Self-test (AS2293/IEC62034)
- Emergency models fully compliant (AS/NZS 2293.3)
- Soft-start charger to reduce building load on emergency models



ORDERING INFORMATION	
Order code	14631
Description	Ektor Quadro LED Emergency bunker IP65 - PRO
Driver Type	DALI DT1 and DT8 Dimmable
	Dimmable ~ Includes DALI-2 Driver with full support for DT1, DT6 and DT8-tc allowing flicker free dimming and colour control with compliant DALI-2 Application controllers. DALI DT8 ~ Includes DALI-2 Driver with full support for DT6 and DT8-tc allowing flicker free dimming and colour control with compliant DALI-2 Application controllers.
Item Code	EV-QUADRO-EM-PRO

MECHANICAL	
Body Material	Polycarbonate
Diffuser Material	Polycarbonate
IK Rating	IK08
Installation Type	Surface mount
IP Rating	IP65

ELECTRICAL	
Electrical Rating	Class I
Input Frequency	50 Hz
Input voltage	230Vac
	In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%
Maximum Wattage	27 W
Power Factor	0.95

Standby Power	0.3 W
	Standby power for non-maintained/switched maintained emergency devices is measured when the light is off and the charger is in standby mode. For maintained emergency devices, standby power is measured when the light is on and the charger is in standby mode. Typically, charging occurs for the first 16 hours after the device is powered or after a battery discharge.
Switch Type	Inbuilt Mains Rated DALI Switch
	A Terminal input has been provided to allow the wiring of a Main rated switch input. This input can be programmed to switch any controlled area when using a DALI-2 compliant control system. This input supports IEC62386-301 (momentary or rocker switches), IEC62386-302 (on /off switches) and IEC62386-303 (mains rated sensor inputs).
Working Temp Range	0 to 40 °C

LAMP	
Macadam Steps (SDCM)	3-step MacAdam Ellipse
CCT Configuration	TUNEABLE WHITE
	Full support for DALI-2 DT8 has been provided which allows White colour control on a compliant DALI-2 control system. This function can be used to set a desired colour or to transition between colours depending on the time of day.
Colour Rendering Index (CRI)	>84
Lamp/LED Current	650 mA
Lamp/LED voltage	36 V



LED LIFETIME

LED Lifetime >120000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Atom does not list the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

Ambient Temp (°C) 25 °C 40 °C

L90B10 43000 hrs 43000 hrs

This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 70% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TM-21 Test Hours 20000 hrs

COLOUR TEMPERATURE

CCT 3000 to 6500

CCT Colour Tunable White

Luminaire Lumens >3200 lm

All photometric data has a tolerance of $\pm 10\%$. Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER

Dimmable Yes

Driver Included Yes

Integrated Driver No

Driver Type DALI DT1 and DT8 Dimmable

Dimmable ~ Includes DALI-2 Driver with full support for DT1, DT6 and DT8-tc allowing flicker free dimming and colour control with compliant DALI-2 Application controllers.

DALI DT8 ~ Includes DALI-2 Driver with full support for DT6 and DT8-tc allowing flicker free dimming and colour control with compliant DALI-2 Application controllers.

Power Monitoring DALI Device type 51 power monitoring

Inbuilt DALI-2 support for Device type 51 - Power monitoring for use with DALI-2 compliant control systems which allows the reporting of the products total power consumption for power aggregation and measurements.

Wiring Type Re-wireable terminal block (6 pin)

PSTLM 0.08

Short Term Light Modulation (PstLM): The requirement is that PstLM should be less than or equal to 1.0. This metric measures the short-term flicker severity and ensures that flicker is not perceptible or is at a level that does not cause discomfort or health issues.

SVM 0.018

Stroboscopic Visibility Measure (SVM): The requirement for SVM is that it should be less than or equal to 0.4. The SVM metric assesses the visibility of the stroboscopic effect, which can make moving objects appear to be stationary or moving in discrete steps, thus ensuring that this effect is minimized in lighting environments to prevent visual discomfort and safety hazards.

EMERGENCY (EM SUFFIX)

Replacement Battery Code 01302

Emergency Classification C0:D50, C90:D50

Emergency Control DALI Monitored (DT1)

DALI Monitored ~ Supports Emergency test and monitoring over DALI (IEC62386) with full compliance to IEC62386-202.

Emergency Duration 90 mins

Emergency Mode Maintained

COMPLIANCE

Product Design Life 12 years

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

Standards AS/NZS 60598.1
AS 60598.2.22
AS/NZS 61347.1
AS/NZS 61347.2.13
AS/NZS CISPR 15
AS/NZS 2293.3

WARRANTY

Commercial Use Warranty 5Y return to base on General lighting components
8Y return to base on Emergency lighting components

VIP Warranty 2 Onsite, 3 RTB (Total 5 Years)

VIP warranty is available to registered users and is subjected to additional terms and conditions.

DIMENSIONS

Product Height 102 mm

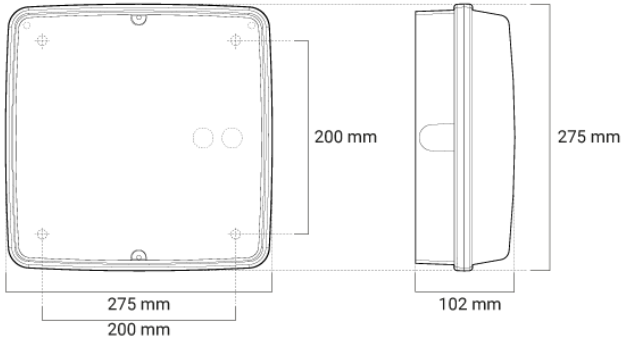
Product Length 275 mm

Product Width 275 mm

LINE DRAWINGS

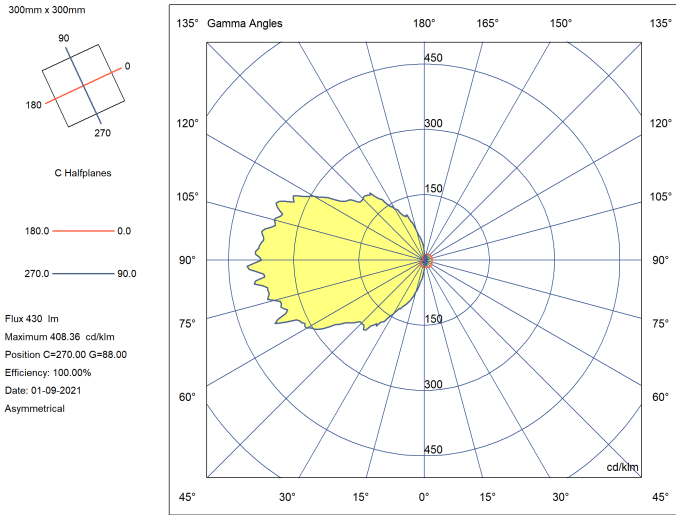


EV/QUADRO/PRO

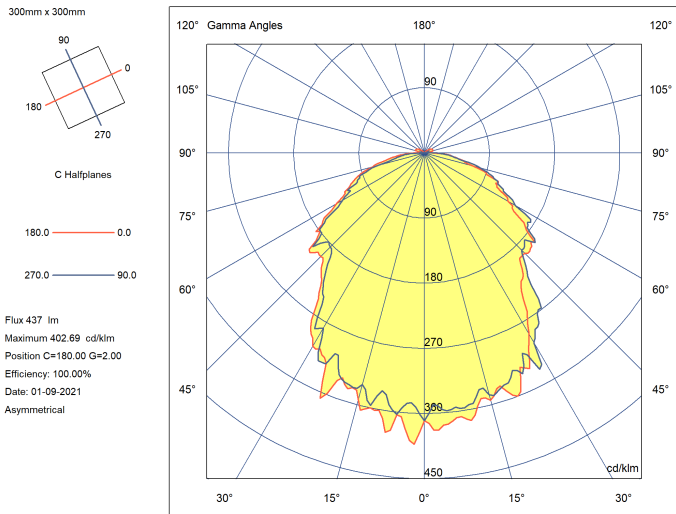


PHOTOMETRICS

EV/QUADRO/EM/PRO (EM / Wall)



EV/QUADRO/EM/PRO (EM / Ceiling)



EV/QUADRO/PRO (4000K)

