

EASY | LED
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MISS NOTHING.

BUBBO[®]

FLOODLIGHT SYSTEM

BUBO®

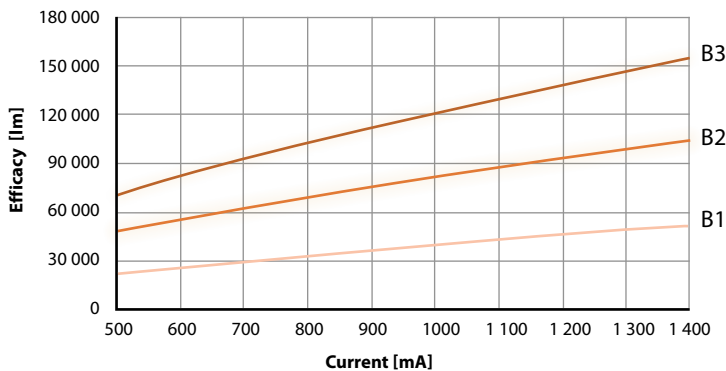
UP TO 1,5 KW
UP TO 173 000 LM

BUBO® PRODUCT FAMILY

Versions B1, B2 and B3 class LED floodlights

Power up to 1 540 W
Light output up to 173 000 lm
Efficacy up to 146 lm/W

FLOODLIGHT EFFICACY



Light Efficacy

The LED technology available in the Bubo™ series meets the strictest TLCI (Television Lighting Consistency Index) requirements for comprehensive high-definition broadcasting with highest quality motion reproduction using flicker-free technology.

The TLCI is similar to the CRI but describes the color rendering for TV cameras.

| | CRI >70 | CRI >80 | CRI >90 | |
|---------|---------|---------|---------|--------------|
| 5 700 K | | o | o | |
| 5 000 K | x | x | | x = standard |
| 4 000 K | x | o | | o = option |
| 3 000 K | o | | | |

TLCI

Television Lighting Consistency Index of over 90 available

Flicker Free

Flicker Free dimming down to 140 mA level.

With PWM technology down to 15 mA (400 - 500 Hz).

Materials

Light engine: Die-casted aluminium chassis with shot-blasted, textured body

Gear unit: Die-casted aluminium chassis with surface texturing, die-casted aluminium lids.

Mounting and frame components: Stainless steel, delta treated screws

Glass: Extra clear thermally hardened glass and stainless steel frame

Optics

Standard symmetrical optics with 12, 34, 70 and 110 degree light distribution beam. Flood light optics UP-F.

IP- and IK-classes IP66, IK08

Protection class CL I

Luminaire ambient

temperature range Up to -40...+60°C (95% RH)

Control

DALI as standard, optional 1–10 V available, also compatible with wide range of intelligent control methods

Mains voltage

230 VAC (operation voltage range:198–264 VAC)

Frequency 50/60 Hz

Power factor PF > 0,95

Surge protection

Standard 4 kV/6 kV - L-N/L-GND, N-GND

Thermal protection

Standard bi-funtional protection with active power adjustment function.

Other

Standard intelligent inrush current control system

Gradual turn-on process in cold environments for protection of LED components.

Installation

Flexible with a range of mounting accessories. Precision aiming device available.

Guarantee 5 years

Additional components / Mounting components

Alternative installation methods for the gear unit
Extension cable kits and long-distance cabling packages available

Surge protection 20kV with two level protection. Protective components designed specially for devices installed in high position.

PRODUCT WEIGHT INFORMATION (KG)

| | Rack with light engines | | Bracket | | Gear unit | |
|---------------------|-------------------------|--------|---------|--------|-----------|--------|
| | Stadion | Area | Hall | Unit | Mounting | |
| Bubo B1 | 9,4 kg | | 3 kg | | | |
| Bubo B2 | 22,2 kg | 8,8 kg | 9 kg | 6,3 kg | 7,6 kg | 0,5 kg |
| Bubo B3 | 33,3 kg | 8,8 kg | 9 kg | 6,3 kg | 8,7 kg | 0,5 kg |
| Total weight | | | | | | |
| Bubo B1G | 16 kg | | | | | |

BUBO® MODELS

Model B1

| | | | | | | |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Driving current [mA] | 500 mA | 700 mA | 850 mA | 1 000 mA | 1 200 mA | 1 400 mA |
| LEDs | 120 | | | | | |
| Input power [W] | 180 W | 251 W | 305 W | 360 W | 437 W | 514 W |
| Luminous flux [lm] | 26 300 lm | 34 800 lm | 40 400 lm | 45 900 lm | 52 300 lm | 58 000 lm |

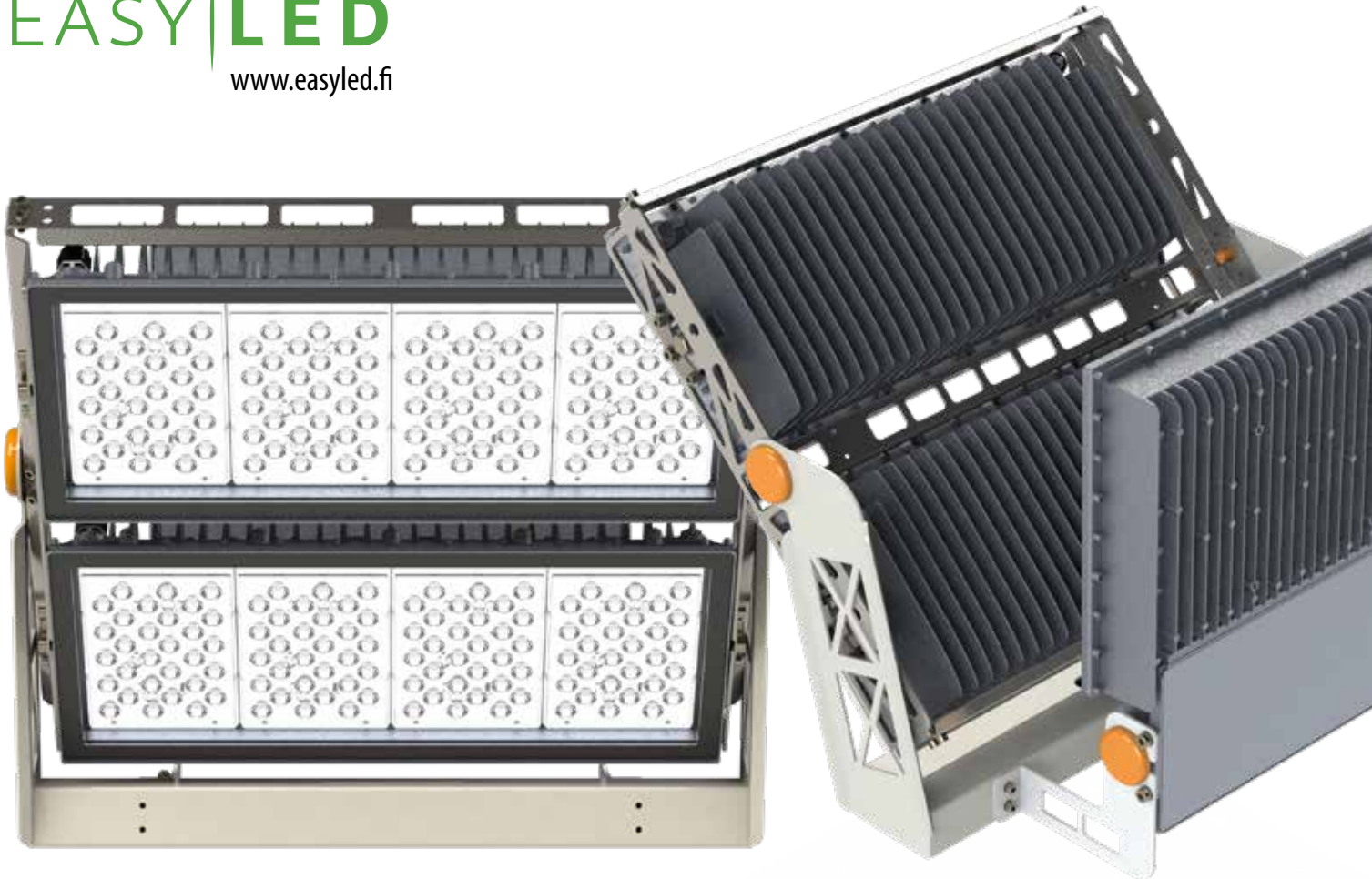
Model B2

| | | | | | | |
|-----------------------------|-----------|-----------|-----------|-----------|------------|------------|
| Driving current [mA] | 500 mA | 700 mA | 850 mA | 1 000 mA | 1 200 mA | 1 400 mA |
| LEDs | 240 | | | | | |
| Input power [W] | 360 W | 502 W | 610 W | 720 W | 874 W | 1 027 W |
| Luminous flux [lm] | 52 600 lm | 69 500 lm | 80 800 lm | 91 700 lm | 104 500 lm | 116 000 lm |

Model B3

| | | | | | | |
|-----------------------------|-----------|------------|------------|------------|------------|------------|
| Driving current [mA] | 500 mA | 700 mA | 850 mA | 1 000 mA | 1 200 mA | 1 400 mA |
| LEDs | 360 | | | | | |
| Input power [W] | 540 W | 753 W | 915 W | 1 080 W | 1 310 W | 1 540 W |
| Luminous flux [lm] | 78 800 lm | 104 000 lm | 121 000 lm | 137 000 lm | 156 000 lm | 173 000 lm |





BUBO® | MISS NOTHING.

A perfect scoring position in front of a cheering audience, a demanding cargo loading job for the last boat of the night, or a large warehouse area under your watchful eyes - BUBO® lights up your success. BUBO® lighting system, designed for illuminating large areas, is the perfect choice for stadiums and arenas, ports, storage areas, airports and cranes. Also applicable to indirect lighting. Easy LED's lighting solution and design know-how guarantees you illumination that meets your needs.

BUBO® the biggest and the brightest: The lighting system is designed for large area illumination. The luminaires are available in one, two or three module systems and offer unbeatable light efficacy.

BUBO® is intelligent: Intelligent lighting control methods, DALI-system (standard). Dynamic control and management; instant ON/OFF.

BUBO® is cost-effective: The luminaire is assembled in a tough die-casted aluminium chassis and it requires little maintenance and has a long lifespan of several decades.

BUBO® is TV-compatible: The uniform, flicker-free light is compatible with current broadcasting requirements, which is especially important in sports broadcasting.

BUBO® -LIGHTING SYSTEM LIFESPAN WITH GEAR UNIT (standard)

| | AREA | | | | | |
|----------------------------------|----------|-----|---------|---------|---------|--------|
| Driving current [mA] | 500 | 700 | 850 | 1000 | 1200 | 1400 |
| LED Module CRI72 L90B10, C10 [h] | >150 000 | | | 125 000 | 50 000 | 20 000 |
| LED Module CRI72 L80B10, C10 [h] | >150 000 | | | | 140 000 | 90 000 |
| LED Module CRI82 L90B10, C10 [h] | >150 000 | | 130 000 | 80 000 | 35 000 | 16 000 |
| LED Module CRI82 L80B10, C10 [h] | >150 000 | | | | 130 000 | 85 000 |

BUBO® -LIGHTNING SYSTEM LUMINAIRE AMBIENT TEMPERATURE WITH GEAR UNIT (standard)

| | | | | | | |
|--------------------------|----------|-------|-------|-------|-------|--------|
| Max Temperature outdoors | +60°C | +55°C | +50°C | +50°C | +45°C | +40°C |
| Max Temperature indoors | +55°C | +50°C | +45°C | +45°C | +35°C | +30°C |
| Min Temperature | -40°C | | | | | |
| Gear unit lifespan @ta25 | >100 000 | | | | | 75 000 |

BUBO® -LIGHTING SYSTEM LIFESPAN WITH GEAR UNIT (standard)

| | STADIUM | | | | | |
|----------------------------------|----------|-----|---------|---------|---------|--------|
| Driving current [mA] | 500 | 700 | 850 | 1000 | 1200 | 1400 |
| LED Module CRI72 L90B10, C10 [h] | >150 000 | | | 110 000 | 30 000 | 14 000 |
| LED Module CRI72 L80B10, C10 [h] | >150 000 | | | | 110 000 | 75 000 |
| LED Module CRI82 L90B10, C10 [h] | >150 000 | | 115 000 | 60 000 | 24 000 | 12 000 |
| LED Module CRI82 L80B10, C10 [h] | >150 000 | | | | 105 000 | 65 000 |

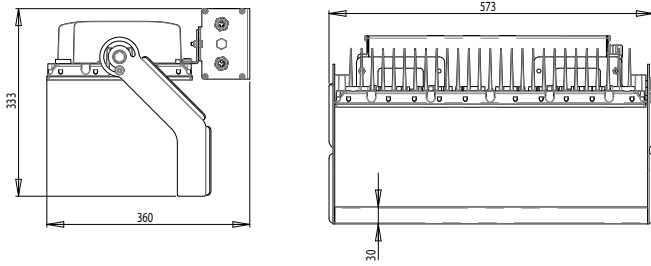
BUBO® -LIGHTNING SYSTEM LUMINAIRE AMBIENT TEMPERATURE WITH GEAR UNIT (standard)

| | | | | | | |
|--------------------------|----------|-------|-------|-------|-------|--------|
| Max Temperature outdoors | +65°C | +60°C | +60°C | +55°C | +45°C | +35°C* |
| Max Temperature indoors | +60°C | +55°C | +55°C | +50°C | +40°C | +30°C* |
| Min Temperature | -40°C | | | | | |
| Gear unit lifespan @ta25 | >100 000 | | | | | |

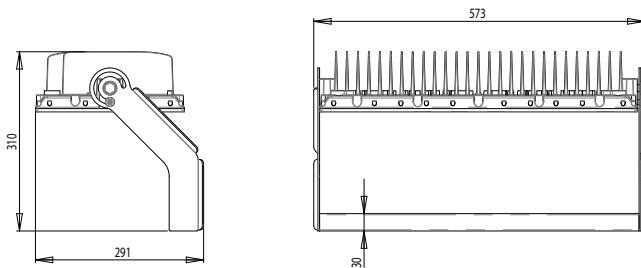
*Bubo is also suitable for indirect lighting. Different maximum operating temperatures for the 1400 mA version: +30°C outside and +25°C inside.

BUBO® DIMENSIONS

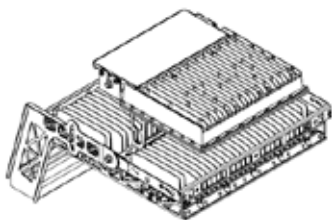
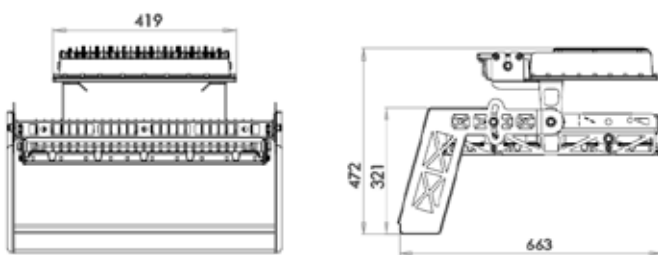
Bubo® B1G



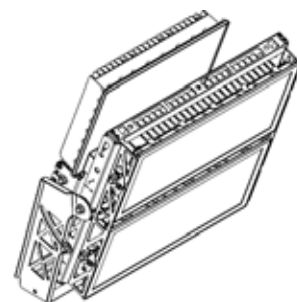
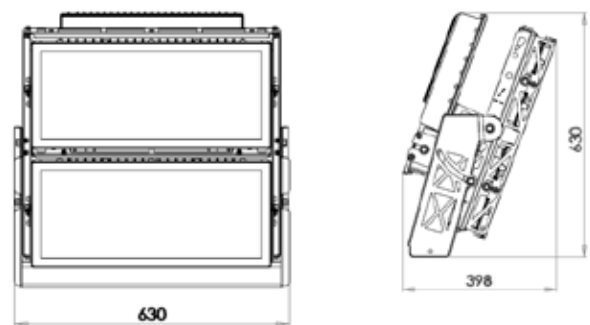
Bubo® B1



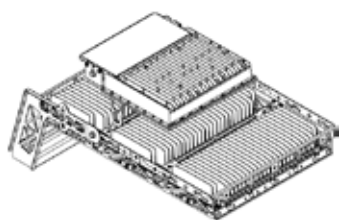
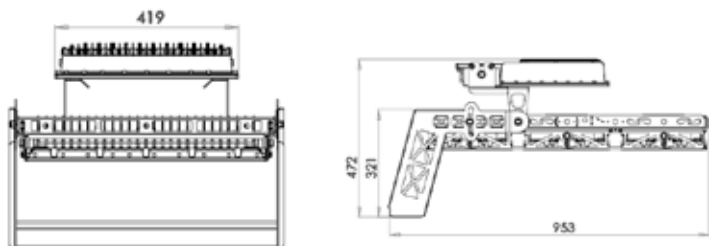
Bubo® B2 area



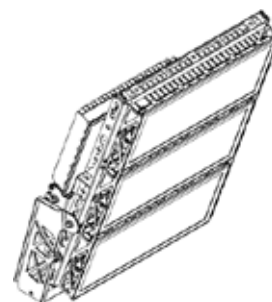
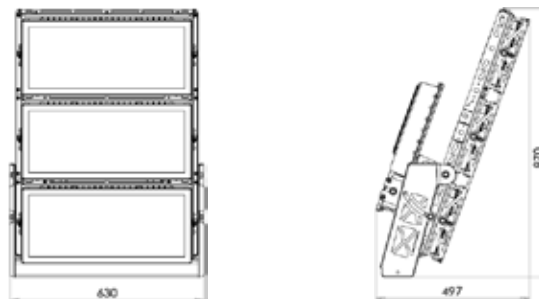
Bubo® B2 stadium



Bubo® B3 area

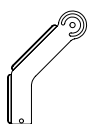


Bubo® B3 stadium

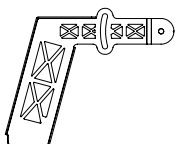


Bubo® brackets

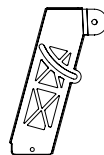
B1G/B1 bracket



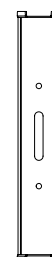
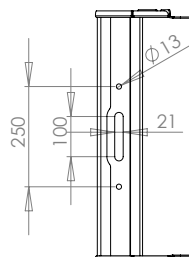
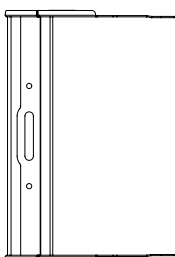
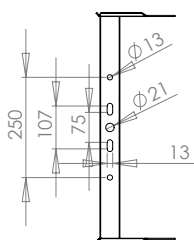
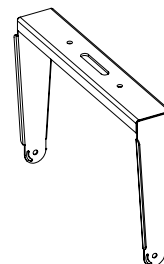
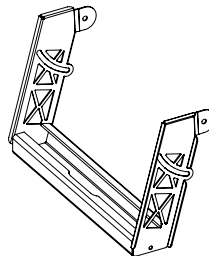
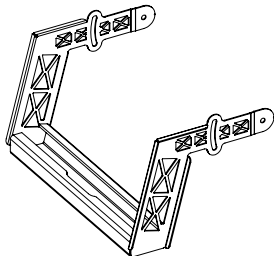
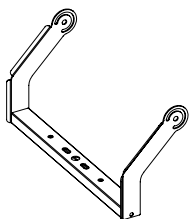
Area bracket



Stadium bracket



Hall bracket





BUBO®

FLOODLIGHT SYSTEM

EASY LED THE BRIGHT CHOICE

Investing in high quality LED lighting today will pay off far into the future. Easy LED Oy is a Finnish company specialised in manufacturing of energy efficient LED lighting systems for different environments, such as sports arenas, industrial premises, roads and areas as well as retail and office spaces.



EASY LED

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