

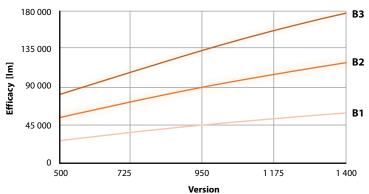
BUBU

BUBO® PRODUCT FAMILY

Versions B1, B2 and B3 class LED floodlights

Power Light output Efficacy up to 1 540 W up to 182 000 lm up to 154 lm/W

FLOODLIGHT EFFICACY - Bubo B3, B2 or B1



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		X	0	
5 000 K	X	О		x = standard
4 000 K	X	X		o = option
3 000 K	0			

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 DMX/RDM and $1-10\,\mathrm{V}$ 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.

Othe

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

Version	500 700		850	850 1000		1400			
LEDs		120							
Input power [W]	180 W	251 W	305 W	360 W	437 W	514 W			
Luminous flux [lm]	27 650 lm	36 580 lm	42 510 lm	48 250 lm	55 010 lm	61 040 lm			

Model B2

Version	500	700	850	1000	1200	1400			
LEDs		240							
Input power [W]	360 W	502 W	610 W	720 W	874 W	1 027 W			
Luminous flux [lm]	55 300 lm	73 150 lm	85 020 lm	96 510 lm	110 020 lm	121 780 lm			

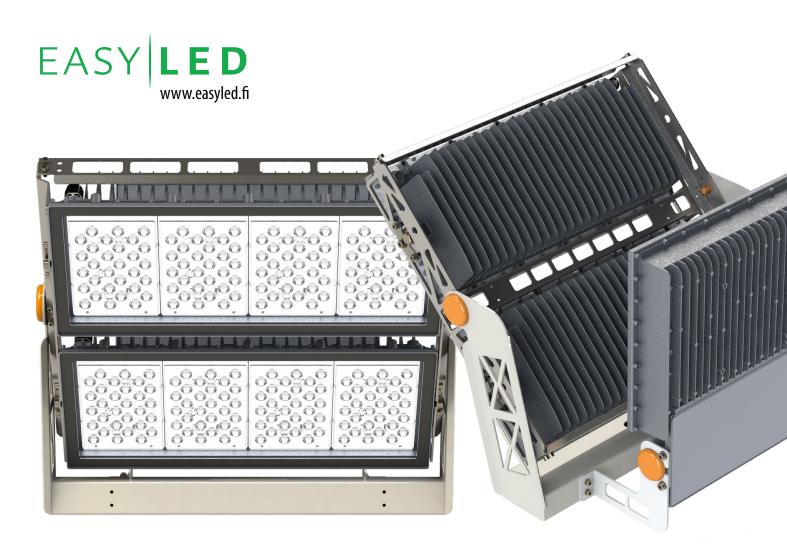
Model B3

Version	500	700	850	1000	1200	1400			
LEDs		360							
Input power [W]	540 W	753 W	915 W	1 080 W	1 310 W	1 540 W			
Luminous flux [lm]	82 950 lm	109 550 lm	127 320 lm	144 280 lm	164 200 lm	181 900 lm			









BUBC 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). DMX/RDM available. 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)

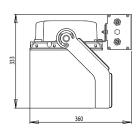
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AREA								
Version	360-500	360-700	360-850	360-1000	360-1200	360-1400		
LED Module CRI72 and CRI82 L95 , C10 [h]		>100 (000		90 000	50 000		
LED Module CRI72 and CRI82 L90 , C10 [h]			>150 000			100 000		
BUBO® -LIGHTNING SYSTEM LUMINAIRE AMBIENT	TEMPERATUR	RE WITH GEA	ıR UNIT (sta	ındard)				
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		

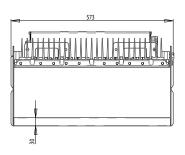
BUBO® -LIGHTING SYSTEM LIFESPAN WITH GEAR UNIT (standard)

STADIUM								
Version	360-500	360-700	360-850	360-1000	360-1200	360-1400		
LED Module CRI72 and CRI82 L95 , C10 [h]		>100 000 90 00						
LED Module CRI72 and CRI82 L90 , C10 [h]			>150 000			100 000		
BUBO® -LIGHTNING SYSTEM LUMINAIRE AMBIENT TEMPERATURE WITH GEAR UNIT (standard) Max Temperature outdoors +65°C +60°C +55°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: $+30^{\circ}$ C outside and $+25^{\circ}$ C inside.

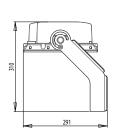
Bubo® B1G

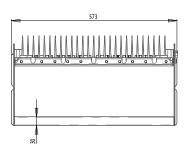




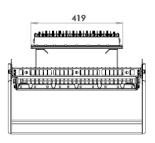


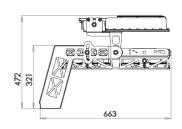
Bubo® B1

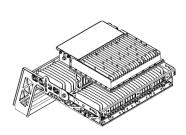




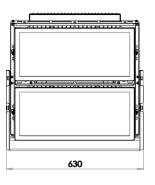
Bubo® B2 area



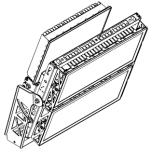




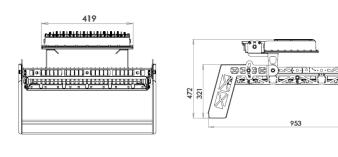
Bubo® B2 stadium

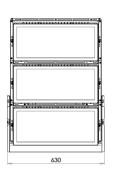




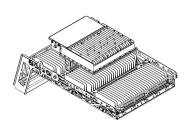


Bubo® B3 stadium



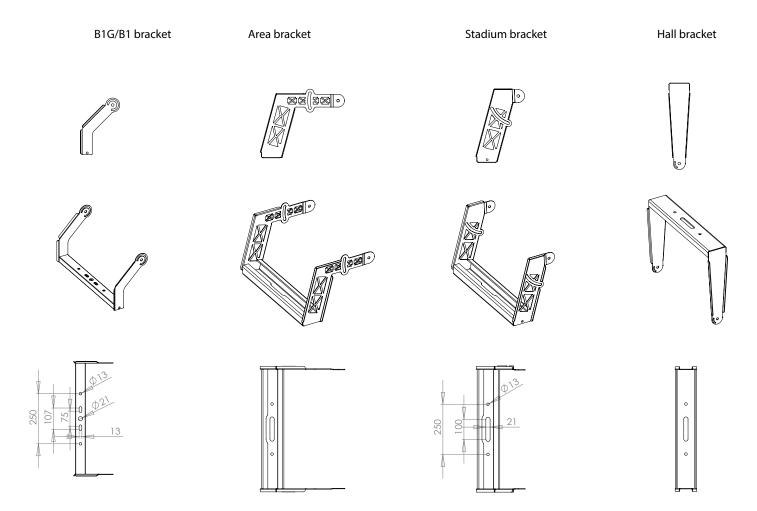








Bubo® brackets





BUBBC® 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.





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easyled.fi





