Ushio Germany GmbH

Muenchener Strasse 10 85643 Steinhoering/Germany CSC Europe +49 8094 906 - 400 CSC Overseas +49 8094 906 - 410 Fax +49 8094 906 - 164 sales@ushio.de

www.blv-licht.com





Member of







SPORTS FACILITY LIGHTING Training. Competition. Championship

Lighting concepts & solutions for professional sports facilities









More than light! We evaluate your specific needs to provide the best individual lighting solution for your sports facility. Just give us a call, we will be glad to become your partner: \$\infty +49 8094 906 400.

BLV is a brand of the Ushio Group and is distributed by Ushio Germany GmbH

PREFACE

No more irritation about the potential use of conventional metal halide lamps.

Our BLV STATURION® metal halide lamps are well-known worldwide, and are still manufactured at the headquarters in Germany and sold worldwide. These lamps are known for their high quality, excellent performance, and long lifetime.

Since the introduction of LED solutions, it has been falsely claimed time and time again by some market players that all metal halide lamps (HIT lamps for short), also known as HQI, HRI or HPI lamps, are banned by the EU under the EUP Directive VO 245/2009. This is in fact wrong and does not reflect current European legislation: On the one hand, this is confused with the general ban on mercury vapour lamps, better known as HQL lamps. On the other hand, the directive in question refers only to lamps that do not comply with certain requirements, e.g. with regard to energy efficiency. BLV STATURION® lamps are not affected by both the current regulation and the new regulation (EU) 2019/2020, which will replace the current regulation with effect from 1 September 2021.

Metal halide lamps have been in use since the mid 1960s and are still widely used today, belonging to the group of high-pressure discharge lamps. Their continued high popularity is due in particular to their outstanding photometric performance: They offer an extremely high luminous flux of up to 230,000 lm, a highly economical luminous efficacy of up to 115 lm/watt, and an excellent colour rendering index (Ra / CRI) of up to 90 compared to other discharge lamps.

All this makes them a perfect alternative to LED lighting for sports facilities that need, for example, shorter lighting times or high quality lamp replacement for existing installations.

BLV STATURION®

50 years of experience in the lighting business

HISTORY

BLV STATURION® is a brand of the Ushio Group, distributed by Ushio Germany, formerly BLV Licht- und Vakuumtechnik. The company, known for high quality lamps, with its own on-site production, was founded in Steinhöring, Bavaria, in 1968. Today, it enjoys a worldwide reputation as a leading manufacturer of specialist lighting solutions.

GLOBAL SCALE

With the BLV STATURION® series, we have established ourselves as worldwide player in sports facility lighting, and have supplied our solutions across more than 40 countries for over a decade.

UNIQUENESS

As one of the major players in the market, we continue to offer high quality conventional metal halide (MH) lamps alongside our LED lighting solutions. With this portfolio, we are able to consult and respond to a vast array of different requirements, ranging from amateur sports clubs to international stadia.

EVERYTHING YOU NEED

We are much more than just a lighting solution provider. Having retained our character as a mid-sized company, we are able to anticipate individual customer demands. This includes economical advice, scenario comparison, light calculations, project installations, and sustained after-sales service.

GERMAN ROOTS, GLOBAL PRESENCE

Besides our development, production, and sales sites in Germany and Poland, we have a sales team prepared to travel to our clients anywhere in the world.

STRONG BACKING

BLV STATURION® is distributed by Ushio Germany. The company is member of the Ushio Group, a world player for special lighting with a yearly revenue of about 1.5 billion Euros.

STATURION® LED forum

The new STATURION® LED forum is powerful yet energy efficient floodlight for large sports facilities, stadiums, and bigger outdoor areas. Its modular design allows flexibility to meet the various lighting requirements of our clients, and caters for installations within a multitude of applications and locations.







STATURION® LED forum. Various modules from 257 W up to 1386 W

STATURION® LED forum:

- Modular design with 1, 2 or 3 LED modules
- Robust aluminium die-cast housing, powder coated and resistant to corrosion
- Precise reflector optics, metallised for high LOR and visual comfort (low glare)
- Virtually flicker-free (FF ≤3%)
- 4 mm protection glass, tempered and resistant to thermal shocks and impacts
- Mounting bracket with graduated scale goniometer for accurate adjustment
- LED modules individually adjustable within the housing frame (5° steps)
- \bullet Thermal separation of LED modules and power supplies



Technical data on page 16 STATURION® LED forum for lighting classes I and II 5

STATURION® LED play

The STATURION® LED play is the latest addition to the STATURION® series. It is a powerful yet energy efficient floodlight for bigger training grounds, football and hockey fields, golf courses etc.







Also available as RegiTower ULTRA in cooperation with our partner

STATURION® LED play:

- Robust aluminium die-cast housing, resistant to corrosion, with high degree of ingress protection (IP66) and impact resistance
- UV-resistant lens optics from polycarbonate (PC) for uniform and precise illumination
- Asymmetrical light distribution with maximum at approx. 60°
- Mounting bracket with 360° swivel range for high flexibility
- Efficient passive cooling
- High system efficiency of up to 120 lm/W



Technical data on page 17 STATURION® LED play for lighting classes II and III

STATURION® LED astro

The new STATURION® LED astro is a precise and energy-efficient illumination source for smaller outdoor sports facilities such as tennis courts, skate parks, running tracks, athletics fields etc. as well as indoor venues such as tennis, (ice) hockey, soccer, paddle tennis, speed-skating, velodromes etc.



STATURION® LED astro



Also available as RegiTower LED in cooperation with our partner

STATURION® LED astro:

- Series of stylish LED floodlights with various light output levels and light distributions
- Robust aluminium die-cast housing with integrated cooling fins
- Polyester powder coating, UV-stabilised, resistant to corrosion and salt
- Highly efficient LEDs combined with UV resistant PMMA lens optics
- 4 mm protection glass, tempered and resistant to thermal shocks and impacts
- Mounting bracket with graduated scale goniometer for accurate adjustment



Technical data on page 17 STATURION® LED astro for smaller outdoor facilities

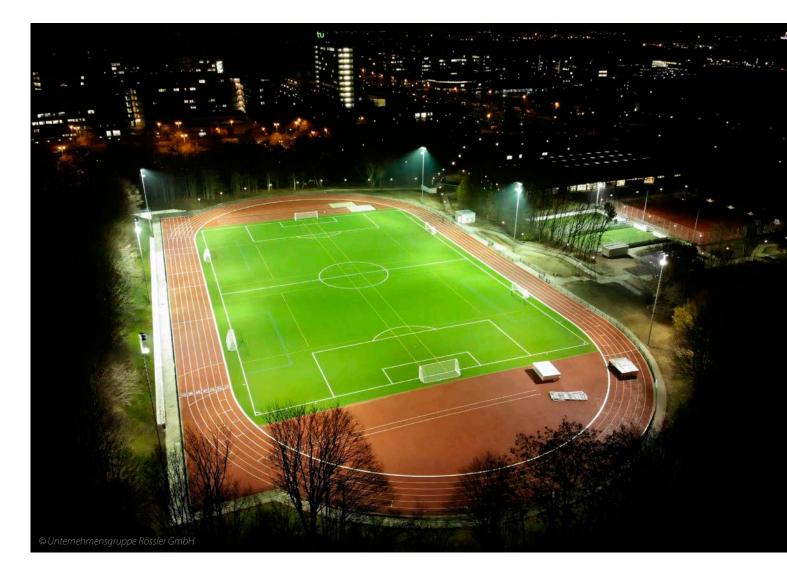
STATURION® MH lamps

The STATURION® MH series consists of long arc and short arc versions. From the very beginning, they have been produced at the company's location in Germany, contributing to BLV's reputation as a producer of lamps of highest quality.



STATURION® MH series:

- Very high efficiency / luminous efficacy
- High luminous flux and constancy of light colour throughout the lifetime
- Hot re-ignition
- The highly efficient 1000 W and 2000 W STATURION® metal halide lamps are not affected by the current EU regulations and may continue to be manufactured, sold and used in the European Economic Area (EEA), even after September 1, 2021.



Light planning for sports facilities

Careful preparation for best results

Optimum visibility is essential in sports. Therefore, some clear standards for luminosity, uniformity, glare limitation, and colour rendering have been defined in the European Sports Lighting standard DIN EN 12193. This directive defines lighting requirements for the most frequently practised sports. Generally, there are three main categories of lighting classes:

Lighting class I

- High-performance competitions, such as international and national competitions, which are generally attended by large numbers of spectators. and great distances of sight are connected
- High-performance training

Lighting class II

- Medium-level competitions, such as regional or local competitions, which are generally associated with medium numbers of spectators and medium viewing distances
- Performance training

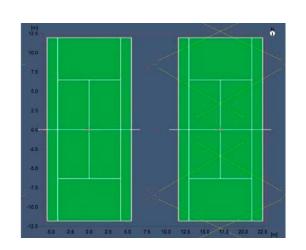
Lighting class III

- Simple competitions, such as local or small club competitions, generally without spectator participation
- General Training
- School sport
- Recreational sport

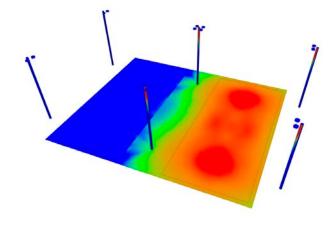
We will advise you in detail on all the requirements of the specific lighting class for your sports facility, including possible future upgrades if desired.

Example of a light plan for a tennis field

- Definition of requested light level category and lux levels per area
- Set-up of spotlight positioning depending on local requirements and number of available poles
- Calculation of number and type of luminaires
- Simulation of different beam angles and light intensities
- Definition of ideal lighting control via integrated light management system



Court layout and positioning of floodlights



Simulation of light levels and uniformity

Installation

As light is just one component of a lighting system, we help you to find a regional installer to set up the entire system, including ground, founding, vegetation, and installation work. All depending on your specific needs.

Product overview

BLV STATURION® LED and MH lamps



BLV STATURION® around the globe



Worldwide reputation of BLV STATURION®:

Since the company was founded more than 50 years ago, all departments including R&D and production have been under one roof – the key to our success!

The construction of a high performance lamp for sports facility lighting places very special demands on the developers: In addition to creating the optimum chemical composition, the development of outstanding stability even at extremely high temperatures is crucial. A lamp product with such a high performance operates close to the physical limits of the materials. When manufacturing this type of lamp, precise work within very narrowly defined limits is an indispensable component for high product quality. Therefore a high level of technical expertise and craftsmanship is needed – which is why we manufactured and still manufacture the STATURION® MH lamps exclusively in Germany.

In recent years, the demand for LED lighting is constantly increasing. In this field, we are working together with partners who share our highest quality standards for best lighting solutions for your facilities.

STATURION LED forum floodlights

Article no.	Designation	No. of LED modu- les	LED cur- rent [mA]		Beam angle	Luminous flux [lm] @ Ta 25°	Flicker Factor FF [%]	Dimensions with brackets W x D x H [mm]	Windage area [m²]	
STATURION	LED forum floodlights									
111504	STATURION LED forum 2187-400	1	1 050	396	17° sym.	37 087	~ 8%	642 x 228 x 281	0.028 - 0.133	9.0
111505	STATURION LED forum 2180-450	1	1 200	462	30° sym.	47 954	~ 8%	642 x 228 x 281	0.028 - 0.133	9.0
111506	STATURION LED forum 2183-250	1	700	257	120° sym.	36 300	~ 8%	642 x 228 x 281	0.028 - 0.133	9.0
111507	STATURION LED forum 2183-400	1	1 050	396	120° sym.	32 350	~ 8%	642 x 228 x 281	0.028 - 0.133	9.0
111508	STATURION LED forum 2185-400	1	1 050	396	50° asym.	39 606	~ 8%	642 x 228 x 281	0.028 - 0.133	9.0
111509	STATURION LED forum 2185-450	1	1 200	462	50° asym.	43 545	~ 8%	642 x 228 x 281	0.028 - 0.133	9.0
111510	STATURION LED forum 2196-800	2	1 050	800	8° sym.	80 964	≤ 3%	698 x 303 x 673	0.104 - 0.463	28.0
111511	STATURION LED forum 2192-500	2	700	514	60° sym.	61 779	≤ 3%	698 x 303 x 673	0.104 - 0.463	28.0
111512	STATURION LED forum 2192-800	2	1 050	800	60° sym.	82 580	≤ 3%	698 x 303 x 673	0.104 - 0.463	28.0
111513	STATURION LED forum 2195-800	2	1 050	800	50° asym.	79 959	≤ 3%	698 x 303 x 673	0.104 - 0.463	28.0
110469	STATURION LED forum 2195-900	2	1 200	914	50° asym.	88 367	≤ 3%	753 x 304 x 494	0.090 - 0.309	28.0
111514	STATURION LED forum 3192-1400	3	1 200	1 386	60° sym.	136 889	≤ 3%	757 x 303 x 673	0.104 - 0.463	30.0
103948	STATURION LED forum 3195-1400	3	1 200	1 386	50° asym.	120 487	≤ 3%	757 x 303 x 673	0.104 - 0.463	30.0

Further models on request

Colour temperature 4000 K • Colour rendering index CRI 70 • Housing colour graphite-grey • IP class/Impact resistance IP66/IK08

Article no.	Designation

STATURION LE	D forum – accessories
111515	LED Driver Box forum 700 mA, 700 W, IP20
111516	LED Driver Box forum 1200 mA, 1300 W, IP20
111517	LED Driver Box forum 700 mA, 700 W, IP66
104127	LED Driver Box forum 1200 mA, 1300 W, IP66

STATURION LED play floodlights

Article no.	Designation	System wattage [W]	Beam angle [°]	Luminous flux [lm] @ Ta 25°	Colour tem- perature [K]	Colour rendering index Ra	Dimensions w/o bracket W x D X H [mm]	Max. windage area [m²]	Weight [kg]
STATURION I	.ED play floodlights								
111192	STATURION LED play 1000	1 000	asym. 52°	120 000	5 700	70	710 x 191 x 508	0.319	24,0

Housing colour white aluminum • IP class/Impact resistance IP66/IK08

STATURION LED astro floodlights

Article no.	Designation	Number of LEDs	System wattage [W]	Beam angle	Luminous flux [lm] @ Ta 25°	Flicker Factor FF [%]	Dimensions w/o bracket Ø x D [mm]	Windage area [m²]	Weight [kg]
STATURION	LED astro floodlights								
111496	STATURION LED astro 1785-100 TM	12	101	sym. 60°	11 068	4 %	462 x 100	0.055 - 0.172	12.3
111497	STATURION LED astro 1785-250 TM	32	235	sym. 60°	26 357	< 1%	512 x 100	0.061 - 0.210	14.0
111498	STATURION LED astro 1785-400 TM	28	381	sym. 60°	37 259	8 %	512 x 184	0.085 - 0.210	17.2
111499	STATURION LED astro 1794-250 PM	32	270	asym. 30°	24 203	< 1%	512 x 100	0.050 - 0.223	15.1
111500	STATURION LED astro 1794-400 PM	28	395	asym. 30°	29 493	8 %	512 x 184	0.081 - 0.223	18.1
103851	STATURION LED astro 1787-250 TM	32	235	asym. 50°	24 717	< 1%	512 x 100	0.061 - 0.210	14.0
111501	STATURION LED astro 1787-400 TM	28	378	asym. 50°	36 000	8 %	512 x 184	0.085 - 0.210	17.2

Further models on request

Colour temperature 4000 K • Colour rendering index CRI 70 • Housing colour silver-grey • IP class/Impact resistance IP66/IK08

Article no.	Designation	Weight [kg]
STATURION L	ED astro – accessories	
111502	SAFETY GUARD astro 12	0.23
111503	SAFETY GUARD astro 28-36	0.69

STATURION MH lamps

Article no.	Designation	Base	Ø [mm]	Length [mm]	Burning position	lgnition voltage [kV]	Lamp current [A]	Nominal lamp power [W]	Rated lamp power [W]	Nominal luminous flux [lm]	Rated luminous flux [lm]		Rated lamp efficiency [lm/W]	Mercury content [mg]	Colour temperature [K]	Colour temperature [descr.]	Colour rendering index Ra / Colour rendering level		Weighted energy consumption [kWh/1 000 h]	
STATURION N	MH K12s																			
103112	HIT-DE sa 1000 dw	K12s	28.0	187.0	p15	4.0	10.3	1 000	1 000	90 000	90 000	25°C	90.0	365.0	6 300	daylight white	Ra>90/1A	8 000	1 100	A+
103113	HIT-DE sa 2000 dw	K12s	40.0	187.0	p15	4.0	10.3 11.3	2 000	2 000	200 000 215 000	200 000 215 000	25°C	100.0 108.0	365.0	6 300	daylight white	Ra>90/1A	6 000	2 200	A+
103118	HIT-DE sa 2000 dw supra	K12s	40.0	187.0	p15	4.0	12.2	2 000	2 000	230 000	230 000	25°C	112.0	365.0	6 200	daylight white	Ra80-89/1B	4 500	2 200	A+
103119	HIT-DE sa 2000 dw arena	cable	40.0	247.0	p15	4.0	11.3	2 000	2 000	215 000	215 000	25°C	108.0	365.0	6 300	daylight white	Ra>90/1A	5 000	2 200	A+
103116	HIT-DE la 2000 nw	K12s	30.0	274.0	p15	4.0	10.3	2 000	2 000	230 000	230 000	25°C	115.0	160.0	4 400	neutral white	Ra60-69/2B	8 000	2 200	A+
103120	HIT-DE la 2000 nw arena	cable	30.0	313.0	p15	4.0	10.3	2 000	2 000	230 000	230 000	25°C	115.0	160.0	4 400	neutral white	Ra60-69/2B	5 000	2 200	A+
MH E40																				
111997	HIT 2000 E40 nw	E40	106.0	430.0	p30	0.2	8.6	2 000	1 960	205 000	205 000	25°C	102.0	243.0	4 300	neutral white	Ra 60	9 000	2 151	A+