LightSKIN

2025-2026

Integration technology

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www.lightskin.co.kr

LightSKIN e-trimm

The LightSKIN e-trimm is an innovative smart integration technology designed for e-bikes, offering a compact and optimized solution for both hardware and software. It provides a wide range of features while maintaining a lightweight and efficient design.

e-bike controller

The e-trimm controller, integrated with a touch screen, offers an intuitive interface for e-bikes. It provides real-time information on battery level, speed, and pedal assist level, all displayed clearly on a high-resolution screen. The touch screen is responsive even with gloves, allowing easy adjustments during rides.

This device consolidates multiple functions, including light control, navigation, and ride data logging, into a single unit. Riders can customize the display to prioritize their most needed information, enhancing their overall cycling experience. By streamlining control and information access, the e-trimm controller makes e-bike riding safer and more enjoyable.

Cycling Computer

The e-trimm system offers functionality comparable to high-end cycling computers while enabling further feature expansion through smartphone connectivity, ensuring riders have access to essential information during their ride.

By connecting with smartphones, e-trimm enhances its capabilities, allowing for GPS navigation, ride data analysis, and notifications for calls and messages. This connectivity supports apps like Strava and TrainingPeaks, enabling users to sync ride records and access advanced metrics. Additionally, the customizable interface lets riders tailor their display to prioritize specific data.

Smart Light Control

The e-trimm system features a smart light control function that optimizes lighting based on external conditions and riding situations, significantly enhancing safety and efficiency. It automatically switches between day and night modes, ensuring the appropriate lighting for different environments. Additionally, it adjusts brightness dynamically based on the bike's speed, providing optimal visibility while conserving energy.
Users can also control or customize the brightness levels for each mode, tailoring the lighting to their specific preferences or needs. when connected to LightSKIN's latest U1 front-light, the system delivers even more powerful and precise light management, maximizing its functionality.

Navigation

e-trimm provides a powerful offline navigation system based on OpenStreetMap™, designed to enhance the cycling experience with advanced features and smartphone integration. It allows users to plan complex routes with up to 30 waypoints, making it ideal for long-distance rides or multi-destination trips. Offline map storage ensures that riders can navigate confidently even in areas without network connectivity, such as remote regions or during international travel.

The system integrates with a smartphone app, enabling users to plan routes conveniently on their phone and synchronize them in real-time with the e-trimm device. If a rider deviates from the planned route, e-trimm can automatically suggest a new path when connected to the smartphone. Additionally, it offers turn-by-turn navigation and voice guidance, allowing cyclists to stay focused on the road without needing to frequently check the screen.

Smart Alarm

The e-trimm smart alarm function is designed to enhance safety and convenience for cyclists by integrating smartphone notifications into the device. When a call, text message, or notification from apps such as WhatsApp, wehat, Instagram, Facebook and KakaoTalk is received on the smartphone, the e-trimm device displays the alert on its screen and provides an audible signal to notify the rider.
This feature eliminates the need for cyclists to handle their smartphones while riding, reducing distractions and ensuring a safer cycling experience. The e-trimm connects to smartphones via low-energy Bluetooth, ensuring efficient communication without excessive battery consumption.

LightSKIN e-trimm

smart all-in-one

Combining LightSKIN's high-performance bicycle headlight U1 with Etrimm makes the lighting even smarter.

Automatic Lighting Adjustment

Auto DRL DRL automatically turns on during the day or in bright environments. When this function is enabled, the light mode remains fixed. Disable Auto DRL to change the light mode.

Auto Lighting

The last used light mode automatically turns on at night or in dark environments. You can still change the light mode while this function is active.

Speed-Adaptive Lighting

This function is designed to save external battery life by adjusting the light brightness based on bicycle speed – dimmer at lower speeds and brighter at higher speeds.

Light SKIN e-trimm

Smart Light Control

+

U1

Neo Ultra Light

E-bike

* Actual size

Lightskin e-trimm ●

etrimm / etrimm-G / etrimm-C

eTrimm comes in three versions: the standard eTrimm, which shares GPS with mobile devices; the eTrimm-G, which has built-in GPS; and the eTrimm-C, which supports CAN Bus for electric bicycles.

Features

Dimensions	35.9mm x 44.7mm x 12.8mm without mount	
Display	1.69" Touch color TFT LCD	
Communications	Bluetooth, Ant+, UART	
Voltage	5V ~ 48V	
GPS	**etrimm**	Sharing mobile GPS
	etrimm-G	Built-in GPS
	etrimm-C	Sharing mobile GPS

Functions

ebike control	PAS, battery, speed, distance
Cycling computer	data customization, sensor integration, cycling data analysis
Smart light control	auto DRL, auto Light, brightness adjustment by speed
Navigation	open street map, route rerouting, real-time Navigation
Smart Alarm	phone alarm, message alarm
OTA	over-the-air update

Protections

Compliant with standard or directive	Waterproof: IPX6 ESD protections

L- Handlebar Achieving right angles for a perfect flush fit

Lightskin creates a new handlebar shape with a neat look while perfectly integrating various bicycle parts.
The shape of the handlebar, which is at a right angle between the 31.8mm main tube and the 22.2mm grip tube, allows the parts and handlebar to be combined without steps, creating a bicycle handlebar that is perfectly integrated in design.
LightSKIN's latest front light, H1 front light, and e-trimm can be applied to the L-handlebar.

Next generation of built-in light seatpost

SF

SFB : Rechargeable with C-type Direct Charging

LightSKIN has expertise in embedding lights into seatposts. This time, it introduces a completely new approach. LightSKIN has developed a technology that utilizes COB strips to emit light in a continuous line. To achieve this, it designed a uniquely structured seatpost that seamlessly connects the interior and exterior, allowing the COB strip to be securely mounted. At the top of the SF, a specialized lighting module meets StVZO standards. Beneath this module, a built-in COB strip further enhances visibility and safety for riders.

SF-Basic

SFE-S

SFE-C.4

SFE-C.9

SFE-SC.9

SFB-SC.5
SFD-SC.5

E-bike

StVZO ZUGELASSEN

110 ° back side

SFE - SC ●

K 2532

SFE - SC is a product of StVZO rear lighting modules and red COB lighting strips and complies with StVZO certification. The StVZO module at the top is a technology from the automobile industry and has a size of 17 mm width and a height of 5 mm. With a total COB length of 225mm, it is a complete product with perfect light performance and design elements.

Features

Diameter	27.2 / 30.9 (mm)
Length	D27.2mm(350mm) / D30.9mm(350, 400mm)
color surface finish	Matt Black
Seatpost Type	2 bolt clamp offset 9㎜ mechanical stopper 14㎜ from top
Seapost material	Aluminum 6061 T6

Light unit

Light Module	high brightness StVZO rear light module Red COB light strip
Power Source	The on-board battery of the e-bike
Nominal voltage	DC 12V (6V-24V)
Power consumption	2w

ETC

K-number	K 2532
Seatpost test standard	EN15194, EN17404, ISO-M
Compliant with standard or directive	CE, RoHS, StVZO §22a TA Nr.14b (Rear lights fot bicycles), IPX6
Package Contents	rear light seatpost

E-bike

StVZO ZUGELASSEN

110 ° back side

SFE - S ●

K 2532

SFE-S is a derivative product for cases where it is hard to provide sufficient height for COB strip, and is characterized by low power consumption while complying with the StVZO standard. This product satisfies sufficient light standards with a minimal design.

Features

Diameter	27.2 / 30.9 (mm)
Length	D27.2mm(350mm) / D30.9mm(350, 400mm)
color surface finish	Matt Black
Seatpost Type	2 bolt clamp offset 9㎜ mechanical stopper 14㎜ from top
Seapost material	Aluminum 6061 T6

Light unit

Light Module	high brightness StVZO rear light module
Power Source	The on-board battery of the e-bike
Nominal voltage	DC 12V (6V-24V)
Power consumption	0.48w

ETC

K-number	K 2532
Seatpost test standard	EN15194, EN17404, ISO-M
Compliant with standard or directive	CE, RoHS, StVZO §22a TA Nr.14b (Rear lights fot bicycles), IPX6
Package Contents	rear light seatpost

E-bike

90 ˚ side view

SFE - C ●

SFE-C is a product with only COB strip applied, and the length of COB strip can be manufactured in 25mm increments from 25mm to 225mm. For the rider's safety, a side view is still provided from the side groove.

Features

Diameter	27.2 / 30.9 (mm)
Length	D27.2mm(350mm) / D30.9mm(350, 400mm)
color surface finish	Matt Black
Seatpost Type	2 bolt clamp offset 9㎜ mechanical stopper 14㎜ from top
Seapost material	Aluminum 6061 T6

Light unit

Light Module	Red COB light strip
COB length	25㎜(Min, 1unit) to 225㎜(Max, 9units) SFE-C.4 100㎜ COB (4units) SFE-C.9 225㎜ COB (9units)
Power Source	The on-board battery of the e-bike
Nominal voltage	DC 12V (6V-24V)
Power consumption	SFE-C.4 0.6W (100㎜ COB) SFE-C.9 1.4W (225㎜ COB)

ETC

Seatpost test standard	EN15194, EN17404, ISO-M
Compliant with standard or directive	CE, RoHS, StVZO §22a TA Nr.14b (Rear lights fot bicycles), IPX6
Package Contents	rear light seatpost

Battery

StVZO ZUGELASSEN

C-type charging

90 ˚ side view

SFB - SC ●

The SFB is a new product launched as the rechargeable battery type of the SF series. It combines the StVZO rear module with a red COB strip, maintaining the built-in light's uniqueness, and design excellence, while being compatible with standard bicycles. It features direct C-type charging, a low voltage alarm, and an automatic light on-off function controlled by a vibration sensor. A version with a stop light function activated by the sensor is available (Non-StVZO).

Features

Diameter	27.2 / 30.9 (mm)
Length	D27.2mm(350mm) / D30.9mm(350, 400mm)
color surface finish	Matt Black
Seatpost Type	2 bolt clamp offset 9㎜ mechanical stopper 14㎜ from top
Seapost material	Aluminum 6061 T6

Light unit

Light Module	high brightness StVZO rear light module Red COB light strip
COB length	125㎜ COB (5units)
Power Source	Lithium-polymer battery 3.7V, 2000mAh, 8018120 with protection
Mode	4 light modes

ETC

Seatpost test standard	ISO 4210-City, Mountain
Compliant with standard or directive	CE, RoHS, StVZO §22a TA Nr.14b (Rear lights fot bicycles), IPX6
Package Contents	rear light seatpost USB charge cable (200cm)

S311

Rearlight for bicycles integrated in the seatposts

K 1595

Battery

StVZO ZUGELASSEN

reddot winner 2020

S311

K 1595

Patented seatpost with an integrated seat rail clamp. The seatpost tube features 5 holes in which the LEDs are enclosed. The USB 2.0 charging port is located in the lower section of the seat rail clamp. The port is accessible from the outside and can be closed using a transparent silicone cover.

Features

Diameter	25.4 / 27.2 / 30.9 / 31.6 (mm)
Length	350mm / 400mm (30.9, 31.6mm)
color surface finish	Polished Silver / Matt Black
Seatpost Type	2 bolt clamp, offset 9mm, mechanical stop
Seapost material	Aluminum 6061 T6

Light unit

Light Module	2 wide angle red LEDs, 3 high brightness red LEDs
Brightness	12cd
Power Source	Lithium-polymer battery 3.7V, 800mAh, 801473 with protection
Light Duration (fully charged battery)	5 LED: 10 hours 3 LED: 15 hours
Charging Time	2.5h

ETC

K-number	K 1595
Seatpost test standard	ISO 4210 City, Mountain
Compliant with standard or directive	CE, RoHS, UN3481, StVZO §22a TA Nr.14b (Rear lights fot bicycles), IPX5
Package Contents	rear light seatpost USB charge cable (200cm)

E-bike

StVZO ZUGELASSEN

reddot winner 2020

S311E

K 1595

Patented seatpost with an integrated seat rail clamp. The seatpost tube features 5 holes in which the LEDs are enclosed. A cable with a connector extends out of the lower end of the seatpost tube for connection to the electrical system of the e-bike.

Features

Diameter	27.2 / 30.9 / 31.6 (mm)
Length	D27.2mm(350mm) / D31.6mm(350, 400mm)
color surface finish	Polished Silver / Matt Black
Seatpost Type	2 bolt clamp, offset 9mm, mechanical stop
Seapost material	Aluminum 6061 T6

Light unit

Light Module	2 wide angle red LEDs, 3 high brightness red LEDs
Brightness	12cd
Power Source	The on-board battery of the e-bike
Nominal voltage	DC 6V (6V-12V)
Power consumption	0.3w

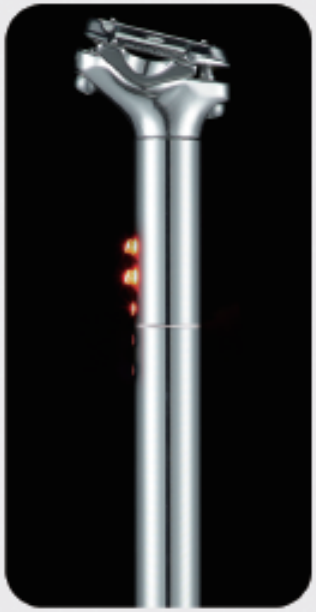
ETC

K-number	K 1595
Seatpost test standard	EN 15194
Compliant with standard or directive	CE, RoHS, StVZO §22a TA Nr.14b (Rear lights fot bicycles), IPX5
Package Contents	rear light seatpost

Dynamo

StVZO ZUGELASSEN

reddot winner 2020



S311D

K 1595

Patented seatpost with an integrated seat rail clamp. The seatpost tube features 5 holes in which the LEDs are enclosed. A cable with two open ends extends out of the lower end of the seatpost tube for connection to the bicycle dynamo.

Features

Diameter	27.2 / 30.9 / 31.6 (mm)
Length	D27.2mm(350mm) / D31.6mm(350, 400mm)
color surface finish	Polished Silver / Matt Black
Seatpost Type	2 bolt clamp, offset 9mm, mechanical stop
Seapost material	Aluminum 6061 T6

Light unit

Light Module	2 wide angle red LEDs, 3 high brightness red LEDs
Brightness	12cd
Power Source	AC 6V(3W) Bicycle Dynamo
Nominal voltage	AC 6V
Power consumption	0.5w
Surge Protection	A zener diode prevents damage to the electonics or the LEDs from voltage surges.

ETC

K-number	K 1595
Seatpost test standard	ISO City
Compliant with standard or directive	CE, RoHS, StVZO §22a TA Nr.14b (Rear lights fot bicycles), IPX5
Package Contents	rear light seatpost

Battery

reddot design award
winner 2010

S341

Patented seatpost with an integrated seat rail clamp. The seatpost tube features 5 holes in which the LEDs are enclosed. The USB 2.0 charging port is located in the lower section of the seat rail clamp. The port is accessible from the outside and can be closed using a transparent silicone cover.

Features

Diameter	27.2 / 30.9 / 31.6 (mm)
Length	350mm(D27.2mm) / 400mm(D30.9, D31.6mm)
color surface finish	Polished Silver / Matt Black
Seatpost Type	2 bolt clamp, offset 9mm
Seapost material	Aluminum 6061 T6

Light unit

Lens Type	Non Protruding
Light Module	5 high brightness red LEDs, Non protruding LED Lens
Brightness	15cd
Power Source	Lithium-polymer battery 3.7V, 800mAh, 801473 with protection
Mode Change	On → Chase → flashing → pulse → continuous → Off

Light Duration (fully charged battery)

	Chase	flashing	pulse	continuous
5LEDs	20h	20h	50h	10h
3LEDs	30h	30h	100h	15h

5 LED/contiuous: 10 hours
3 LED/sparking: 100 hours

Charging Time	2.5h

ETC

Seatpost test standard	ISO 4210 City(27.2), Mountain(30.9, 31.6)
Compliant with standard or directive	CE, RoHS, UN3481, IPX5
Package Contents	rear light seatpost USB charge cable (200cm)

E-bike

reddot design award
winner 2010

S341E

5 Flush LED make bike look neat and simple, patented seatpost with an integrated seat rail clamp. The seatpost tube features 5 holes in which the LEDs are enclosed. A cable with a connector extends out of the lower end of the seatpost tube for connection to the electrical system of the e-bike.

Features

Diameter	27.2 / 30.9 / 31.6 (mm)
Length	350mm(D27.2mm) / 400mm(D30.9, D31.6mm)
color surface finish	Polished Silver / Matt Black
Seatpost Type	2 bolt clamp, offset 9mm
Seapost material	Aluminum 6061 T6

Light unit

Lens Type	Non Protruding
Light Module	5 high brightness red LEDs, Non protruding LED Lens
Brightness	15cd
Power Source	The on-board battery of the e-bike.
Nominal voltage	DC 6V (5V -12V)
Power consumption	0.3w

ETC

Seatpost test standard	EN 15194
Compliant with standard or directive	CE, RoHS, IPX5
Package Contents	Rear light seatpost

High performance built-in light handlebar.

H1

The LightSKIN built-in light handlebar has undergone further evolution with the introduction of H1.
H1 represents a complete redefinition of optical technology in bicycle lights, offering users an unparalleled experience. Experience the new lens from LightSKIN, achieved through highly precise optic technology.

E-bike

StVZO ZUGELASSEN

H1E DROP ●

To pass the ISO-R, The H1E Dropbar has a light hole in the center and its shape is symmetrical . The same high performance light module as the H1E Flat bar is applied to the H1E Dropbar. A handlebar stem that does not cover the light hole in the center is required.

Features

Diameter	Center 31.8mm
Handlebar Widths	420 / 440 (mm)
Bar Type	Reach 80mm, Out sweep 3 ° 16 ° , Drop 121mm
Handlebar color and surface finish	Anodized black
Handlebar material	Aluminum 6061 T6

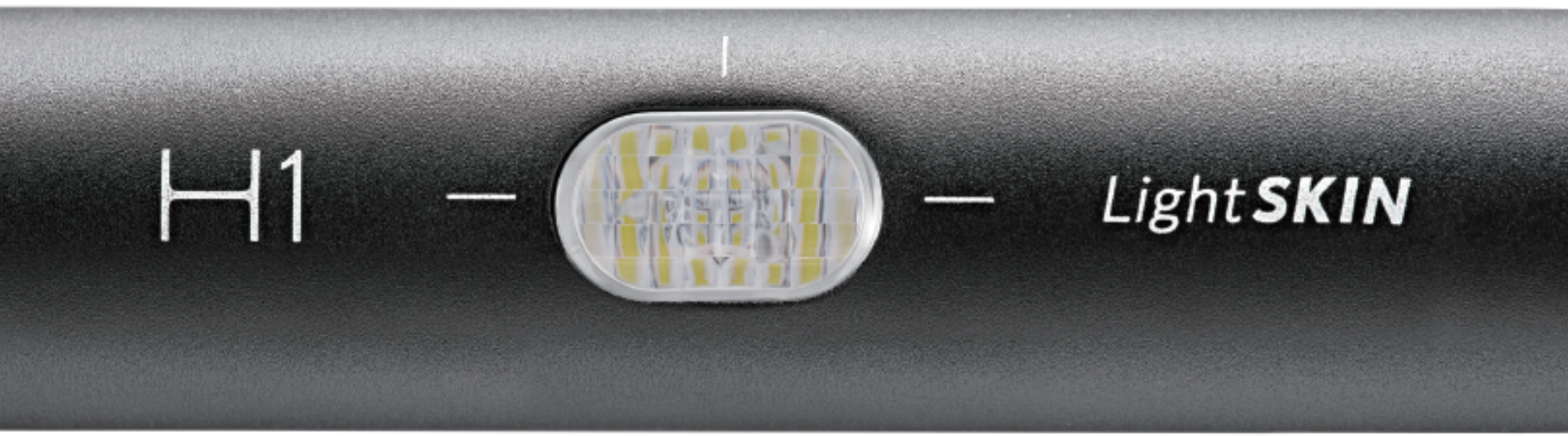
Light unit

Light Module	LightSKIN V1 lens, 1 high-brightness LED
Luminous flux	400 lm
Power Source	On-board battery of the e-bike or other devices
Nominal voltage	DC 12V (6V-24V)
Power consumption	5w

ETC

Handlebar test standard	ISO-R
Compliant with standard or directive	CE, RoHS, UN3481, StVZO §22a TA Nr.23 (Headlights for bicycles), IPX4
Package Contents	Front light handlebar

Experience the dazzling brilliance of the H1 lens



Put the H1 lens at the center of your design with dramatically improved brightness and performance.
Our innovative front light is perfectly positioned in the center of your bike's stem, providing flexibility for a variety of bike designs.
Enjoy the comfort of a symmetrical layout and the incredible performance of the H1 Hyper Lens.

E-bike

StVZO ZUGELASSEN

Features D31.8 / W700

Diameter	Center 31.8mm / Grip 22.2mm
Handlebar Widths	600 / 620 / 640 / 660 / 680 / 700 (mm)
Bar Type	Back sweep 9 ° , Up sweep 0 ° , Rise ±5mm
Handlebar color and surface finish	Anodized black / Polished silver
Handlebar material	Aluminum 6061 T6

Features D35.0 / W800

Diameter	Center 35.0mm / Grip 22.2mm
Handlebar Widths	700 / 800 (mm)
Bar Type	Back sweep 9 ° , Up sweep 0 ° , Rise ±5mm
Handlebar color and surface finish	Anodized black / Polished silver
Handlebar material	Aluminum 6061 T6

H1E FLAT

H1E is a high-performance version of H2E.
H1 is almost three times brighter than H2 and offers better waterproof performance through an independent lighting module.

Light unit

Light Module	LightSKIN V1 lens, 1 high-brightness LED
Luminous flux	400 lm
Power Source	On-board battery of the e-bike or other devices
Nominal voltage	DC 12V (6V-24V)
Power consumption	5 W

ETC

Handlebar test standard	EN17404, ISO 4210-Mountain, City
Compliant with standard or directive	CE, RoHS, StVZO §22a TA Nr.23 (Headlights for bicycles), IPX5
Package Contents	Front light handlebar

E-bike StVZO ZUGELASSEN

H1E WIEN

Features

Diameter	Center 31.8mm / Grip 22.2mm
Handlebar Widths	640 / 680 (mm)
Bar Type	Back sweep 15 ° , Up sweep 0 ° , Rise 20mm
Handlebar color and surface finish	Anodized black / Polished silver
Handlebar material	Aluminum 6061 T6

E-bike StVZO ZUGELASSEN

H1E CITY

Features

Diameter	Center 31.8mm / Grip 22.2mm
Handlebar Widths	640 (mm)
Bar Type	Back sweep 38 ° , Up sweep 0 ° , Rise 40mm
Handlebar color and surface finish	Anodized black / Polished silver
Handlebar material	Aluminum 6061 T6

E-bike StVZO ZUGELASSEN

H1E MOON

Features

Diameter	Center 31.8mm / Grip 22.2mm
Handlebar Widths	620 (mm)
Bar Type	Back sweep 18 ° , Up sweep 0 ° , Rise 0mm
Handlebar color and surface finish	Anodized black / Polished silver
Handlebar material	Aluminum 6061 T6

H2

Headlight for bicycles integrated in the handlebars

K 1721

Battery

StVZO ZUGELASSEN

reddot winner 2020

H2B FLAT

K 1721

Headlight for bicycles integrated in the handlebars (with 1 LED).
The "LightSKIN H2B" version features an integrated rechargeable battery.
The battery can be charged via a micro-USB port.

Features

Diameter	Center 31.8mm / Grip 22.2mm
Handlebar Widths	620 / 640 / 660 / 680 / 700 (mm)
Bar Type	Flat, Back sweep 9 ° , Up sweep 0 ° , Rise ±5mm
Handlebar color and surface finish	Anodized black / Polished silver
Handlebar material	Aluminum 6061 T6

Light unit

Light Module	LightSKIN V2 Lens
Luminous flux	150 lm
Power Source	Lithium-polymer battery 3.7V, 2000mAh, 8018120 with protection
Light Duration (fully charged battery)	Extra bright: 4h Bright: 6h
Charging Time	5h

ETC

K-number	K 1721
Handlebar test standard	ISO 4210 Mountain
Compliant with standard or directive	CE, RoHS, UN3481, StVZO §22a TA Nr.23 (Headlights for bicycles), IPX4
Package Contents	Front light handlebar USB charge cable (200cm)

StVZO ZUGELASSEN

reddot winner 2020

Light unit **E-bike**

Light Module	LightSKIN V2 Lens
Luminous flux	150 lm
Power Source	On-board battery of the e-bike
Nominal voltage	DC 6V (5V-24V)
Power consumption	1.3w

Light unit **Dynamo**

Light Module	LightSKIN V2 Lens
Luminous flux	150 lm
Power Source	AC 6V(3W) Bicycle Dynamo
Nominal voltage	AC 6V
Power consumption	2.4w

H2E / H2D FLAT

K 1721

Headlight for bicycles integrated in the handlebars (with 1 LED).

Features

Diameter	Center 31.8mm / Grip 22.2mm
Handlebar Widths	600 / 620 / 640 / 660 / 680 / 700 (mm)
Bar Type	Back sweep 9 ° , Up sweep 0 ° , Rise ±5mm
Handlebar color and surface finish	Anodized black / Polished silver
Handlebar material	Aluminum 6061 T6

ETC

K-number	K 1721
Handlebar test standard	EN15194, EN17404 ISO 4210-Mountain, city
Compliant with standard or directive	CE, RoHS, StVZO §22a TA Nr.23 (Headlights for bicycles), IPX5
Package Contents	Front light handlebar

StVZO ZUGELASSEN

reddot winner 2020

Light unit **E-bike**

Light Module	LightSKIN V2 Lens
Luminous flux	150 lm
Power Source	On-board battery of the e-bike
Nominal voltage	DC 6V (5V-24V)
Power consumption	1.3w

Light unit **Dynamo**

Light Module	LightSKIN V2 Lens
Luminous flux	150 lm
Power Source	AC 6V(3W) Bicycle Dynamo
Nominal voltage	AC 6V
Power consumption	2.4w

H2E / H2D WIEN

K 1721

Headlight for bicycles integrated in the handlebars (with 1 LED).

Features

Diameter	Center 31.8mm / Grip 22.2mm
Handlebar Widths	640 / 680 (mm)
Bar Type	Back sweep 15 ° , Up sweep 0 ° , Rise 20mm
Handlebar color and surface finish	Anodized black / Polished silver
Handlebar material	Aluminum 6061 T6

ETC

K-number	K 1721
Handlebar test standard	EN15194, ISO 4210-Mountain, city
Compliant with standard or directive	CE, RoHS, StVZO §22a TA Nr.23 (Headlights for bicycles), IPX5
Package Contents	Front light handlebar

StVZO ZUGELASSEN

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Light unit **E-bike**

Light Module	LightSKIN V2 Lens
Luminous flux	150 lm
Power Source	On-board battery of the e-bike
Nominal voltage	DC 6V (5V-24V)
Power consumption	1.3w

Light unit **Dynamo**

Light Module	LightSKIN V2 Lens
Luminous flux	150 lm
Power Source	AC 6V(3W) Bicycle Dynamo
Nominal voltage	AC 6V
Power consumption	2.4w

H2E / H2D CITY

K 1721

Headlight for bicycles integrated in the handlebars (with 1 LED).

Features

Diameter	Center 31.8mm / Grip 22.2mm
Handlebar Widths	640 (mm)
Bar Type	Back sweep 38 ° , Up sweep 0 ° , Rise 40mm
Handlebar color and surface finish	Anodized black / Polished silver
Handlebar material	Aluminum 6061 T6

ETC

K-number	K 1721
Handlebar test standard	EN15194, ISO 4210-Mountain, city
Compliant with standard or directive	CE, RoHS, StVZO §22a TA Nr.23 (Headlights for bicycles), IPX5
Package Contents	Front light handlebar

StVZO ZUGELASSEN

reddot winner 2020

Light unit — E-bike

Light Module	LightSKIN V2 Lens
Luminous flux	150 lm
Power Source	On-board battery of the e-bike
Nominal voltage	DC 6V (5V-24V)
Power consumption	1.3w

Light unit — Dynamo

Light Module	LightSKIN V2 Lens
Luminous flux	150 lm
Power Source	AC 6V(3W) Bicycle Dynamo
Nominal voltage	AC 6V
Power consumption	2.4w

H2E / H2D MOON

K 1721

Headlight for bicycles integrated in the handlebars (with 1 LED).

Features

Diameter	Center 31.8mm / Grip 22.2mm
Handlebar Widths	620 (mm)
Bar Type	Back sweep 18 ° , Up sweep 0 ° , Rise 0mm
Handlebar color and surface finish	Anodized black / Polished silver
Handlebar material	Aluminum 6061 T6

ETC

K-number	K 1721
Handlebar test standard	ISO 4210-Mountain, city
Compliant with standard or directive	CE, RoHS, StVZO §22a TA Nr.23 (Headlights for bicycles), IPX5
Package Contents	Front light handlebar

U1

Neo Ultra Light

Neo Ultra Light is a high-powered variant of the Ultramini light.
Although slightly larger in size, it delivers over three times the power.
For bicycle manufacturers and consumers seeking a combination of compactness and superior illumination,
the Neo Ultra Light stands out as the obvious choice.

The U1E has much more powerful light performance while providing a flexible solution for controlling LEDs and other functions on electric bikes and other devices.
Dual control modes of UART communication and external switches, automatic mode conversion and various LED configurations allow it to adapt to different requirements.

Communication and Control

UART Communication

This allows external devices to transmit commands to the U1E.
UART (Universal Asynchronous Receiver-Transmitter) is a serial communication protocol used for data exchange between devices.

External Switch Control

The U1E can also be controlled via an external switch. This provides a manual method of control, which can be particularly useful in situations where simplicity and reliability are needed.

Automatic Mode Conversion

Shared Wire for Control Modes

Both UART communication and the external switch mode use the same wire.
The U1E automatically switches between these modes,
ensuring seamless operation without the need for additional wiring or manual switching.

E-bike | Flash | 3LEDs

* Actual size

U1E-3L ●

U1E-3L is a variant of the U1E, featuring three LEDs with advanced functionalities designed for a variety of visual signaling options. This unit is particularly suited for applications that require multiple light modes, such as e-bikes and other smart devices.

Features

Dimensions	36mm ×16mm ×52mm
Weight	43gram
Color and finish	Matt black
Housing material	Aluminum 6061 T6
Bracket	Dual position bracket

Light unit

Light module	LightSKIN V1 lens, 3 high-brightness LEDs
Power source	On-board battery of the e-bike or other devices
Brightness	800 lm
Voltage	DC 12V (5V - 18V)
Power consumption	10 W

Functions

Wired control	It can be turned on/off from other devices via UART communication
Control switch	Internal switch, External switch
Protection	Overheating protection sensor Reverse polarity protection
Modes	Super brightness mode, Low beam(Max), Low beam, Flash

ETC

Standard or directive	CE, RoHS StVZO §22a TA Nr.23(Headlights for bicycles) IPX5

E-bike

StVZO ZUGELASSEN

U1E-1L / U1E-1L-S (StVZO) ●

U1E-1L is a high-performance version of ultramini light.
It shares a bracket with U2 and can be controlled in various ways, such as UART communication and internal/external switches.

Features

Dimensions	36mm ×16mm ×52mm
Weight	43gram
Color and finish	Matt black
Housing material	Aluminum 6061 T6
Bracket	Dual position bracket

Light unit

Light module	LightSKIN V1 lens, 1 high-brightness LED
Power source	On-board battery of the e-bike or other devices
Brightness	400 lm
Voltage	DC 12V (5V - 18V)
Power consumption	5 W

Functions

Wired control	It can be turned on/off from other devices via UART communication
Control switch	Internal switch, External switch
Protection	Overheating protection sensor Reverse polarity protection
Modes	Low beam(Max), Low beam

ETC

Standard or directive	CE, RoHS StVZO §22a TA Nr.23(Headlights for bicycles) IPX5

U2

The smallest bike front light approved StVZO

K 1817

E-bike

StVZO ZUGELASSEN

* Actual size

U2E

K 1817

The smallest bike front light approved StVZO. In the "LightSKIN U2E" version, the light is powered via a cable connected to an external power source.

Features

Dimensions	34.7mm ×19mm ×28mm
Weight	20.5gram
Color and finish	Polished silver / Matt black
Housing material	Aluminum 6061 T6
Bracket	Dual position bracket

Light unit

Light Module	LightSKIN V2 Lens
Power source	On-board battery of the e-bike.
Brightness	150 lm
Voltage	DC 6V (5V - 12V)
Power consumption	1.3 W

ETC

K-number	K 1817
Standard or directive	CE, RoHS StVZO §22a TA Nr.23(Headlights for bicycles) IPX5

dynamo

StVZO ZUGELASSEN

U2D

K 1817

The smallest bike front light approved StVZO. In the "LightSKIN U2D" version, the headlight is powered by a dynamo hub

Features

Dimensions	39mm ×19mm ×28mm
Weight	22gram
Color and finish	Polished silver / Matt black
Housing material	Aluminum 6061 T6
Bracket	Dual position bracket

Light unit

Light Module	LightSKIN V2 Lens
Power source	AC 6V(3W) Bicycle Dynamo
Brightness	150 lm
Norminal voltage	AC 6V
Power consumption	2.3 W

ETC

K-number	K 1817
Standard or directive	CE, RoHS StVZO §22a TA Nr.23(Headlights for bicycles) IPX5

The development of the U8 bicycle headlight began with the question: "What would make the perfect bike front light that satisfies everyone?"
The U8's dual mount function allows it to be attached to various types of bicycles, including road, mountain, and city bikes.
With a 5000mAh high-capacity lithium-ion battery, it can be used with confidence even on long rides. Additionally, it provides both high and low beam options, making it suitable for a variety of environments, from complex urban settings to dark outdoor areas. The wireless controller allows the bike front light to be safely operated even while riding.

Battery

U8-433plus ●

High & Low beam
Wireless controller
Day flash mode
IPX6

3.4 ˚ Dual cut-off line
5,000mAh Li-Ion battery
Intelligent power saving
185g

Dual mount position
USB-C
Power bank function

Features

Dimensions	31mm x 31mm x 118 mm
Weight	183gram without mount

Light unit

Light Module	LightSKIN Low/High beam dual optic lenses
Power Source	Lithium-Ion 21700/5,000mAh
Mode	**Low beam** : Strong → Normal → Power saving → Low beam Flash(Night) **High beam** : Strong → Normal → Daylight Flash(Daylight)
Light Duration	8.5h(Low beam), 4h(High beam)
Charging Time	4h (USB type-C)

ETC

Compliant with standard or directive	CE, RoHS, UN3481 (Headlights fot bicycles), IPX6
Package contents	U8 Handlebar mount Bracket (For GoPro, Garmin) USB A to C cable, USB A to C gender Allen wrench
Wireless controller	433Hz 3 buttons * Not available in some countries.

NACA ROAD

The development of NACAROAD started with the question of an automotive lamp engineer. In particular, the headlight of a road bike, which travels at high speeds on roads, must illuminate farther and wider at night without dazzling the driver of oncoming vehicles. NACAROAD applied projection lens technology used in automobile headlights to achieve precise cut-off lines, a 72m irradiation distance, and a visibility of 52° at the level of automotive lights. Additionally, NACAROAD's aerodynamic lens design achieved a drag coefficient of 0.267, maximizing the road bike's performance.

EUROBIKE

WINNER

AWARD 2023

designed by

ETENDUE LIGHTING

ETENDUE LIGHTING is a company with the best automotive lens technology. Nacaroad is the essence of their technology. ETENDUE LIGHTING is trying to expand their advanced optical technology to the field of personal mobility.

K 2067

www.etendue-lighting.com

EUROBIKE
WINNER
AWARD 2023

Battery

StVZO ZUGELASSEN

NACAROAD

K 2067

NACAROAD is a battery integrated head lamp with
high performance projection lens according to automotive standards.

designed by
ETENDUE LIGHTING

Features

Incorporating automotive projection lens technology, the NACAROAD enables a very compact design while providing maximum performance. The light, which comes from only one LED, is optimally directed, refracted and distributed very efficiently as a homogeneous carpet of light on the road – scattering losses are thus reduced to a minimum. As a result, NACAROAD shines brighter than products from other manufacturers despite comparatively lower lumen/lux values. A sharp cut-off line prevents the glare of other people in traffic perfectly.

Dimensions	56.7 mm x 41.5mm x 103.6 mm
Weight	163gram without mount

Light unit

Light Module	Etendue lighting Projection Light module
Luminous flux	Max: 520lm/90lx, Min: 185lm/30lx
Power Source	Lithium-polymer battery 3.7V, 2700mAh,
Mode	Max power → Sports mode → Touring mode → City mode
Light Duration (fully charged battery)	Max brightness: 1.5h Min brightness: 7.3h
Charging Time	3h (USB type-C)

ETC

K-number	K 2067
Compliant with standard or directive	CE, RoHS, UN3481, StVZO §22a TA Nr.23 (Headlights fot bicycles), IP66
Package Contents	NACA ROAD C-type USB charge cable (100cm) Anti-glare cap
Mount	Go-pro mount compatiable * Mount not included

ZR

Curved fender reflector integrated rear light

The LightSKIN ZR is a curved reflector designed for bike fenders that integrates a rear light. The advantage of its curved design is that it perfectly matches the curved surface of the bicycle fender, greatly enhancing the bicycle's overall design. ZR almost does not protrude and adheres closely to the fender, so it is less likely to break, is safe and can be used for a long time. Existing reflectors have a flat shape to maximize reflection efficiency, but LightSKIN has created a rearlight integrated reflector with a curvature of 1.62/m through precise processing and clever optic design. The ZR has passed StVZO regulations for both reflectors and rear lights.

E-bike
Dynamo

StVZO
ZUGELASSEN

ZRE / ZRD

K 2135
K 2136

ZRE and ZRD are rear light integrated reflector for bike fender.

In the ZRE version, the light is powered via a cable connected to an external power source.
In the ZRD version, the light is powered by a hub dynamo.

Features

Dimension	128.2mm x 22.6 mm x 14.6mm
Material	Refelctor=PMMA
Weight	40gram

Light unit

ZRE	**Light Modul**	2 high bightness red leds
	Brightness	12cd
	Power Source	DC 5~24V
	Power consumption	0.4W
ZRD	**Light Modul**	2 high bightness red leds
	Brightness	12cd
	Power Source	AC6V
	Power consumption	0.3W

ETC

K-number	K 2135(Rearlight), K 2136(Reflector)
Compliant with standard or directive	CE, RoHS, UN3481, StVZO §22a TA Nr.14b(Rearlight) StVZO §22a TA Nr.18(Reflector) IP66
Contents	Rear light integrated reflector for bike fender * fender not included

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