

LED Signalheads from Technology Leader

www.yunextraffic.com

YUNEX
TRAFFIC

Safety, optical brilliance, efficiency

Our signalhead combine proven technology with the latest LED technology. This makes them even safer, more reliable and more efficient.

New: High-quality Alulight signalhead with an elegant design.

Yunex Traffic Signalhead - world's lowest energy consumption

Yulux2 VLP LED technology consumes only 1-2 watts of energy. The digital technology enables dual-channel monitoring (electrical and optical) and thus achieves SIL3 certification as the world's first 1-watt traffic light. The ability to combine this technology with normal standard cabling (24V DC) makes this solution accessible to many existing systems in cities.

Perfect optical performance - even in high ambient light

Yunex Traffic signalhead are characterized by consistently excellent optical properties. Particular attention has been paid to the luminous intensity distribution and the uniformity of the luminance of the signalheads.

This makes our signalhead easier to recognize - for more safety at the intersection. The Yulux2 LED technology eliminates the dangerous phantom light effect almost completely. This makes Yunex signalhead always very well visible even in low sun. Almost all variants of the Yunex Traffic signalhead achieve the highest phantom class 5.



Reability and Durability are paramount

Our signalhead family is equipped with particularly reliable and efficient driver boards from our own production. Durable and robust components, particularly reliable and stable operation of LED technology, as well as improved heat management ensure high operational readiness and a long service life.



Electronic monitoring function for maximum safety

Each Yunex Traffic LED light source is equipped with an electronic monitoring circuit designed for optimal interaction with Yunex Traffic control technology.

This circuit continuously monitors and controls the electrical performance of the LEDs. If a measurement value is exceeded or undershot, the input current is immediately interrupted to safely shut down the signalhead and report the fault to the monitoring module of the control unit.





Yunex Traffic Signalhead Variants

Our portfolio offers the right solution for every application purpose.



Ecolight

The universal housings made of polycarbonate - best workmanship, proven over many years, and inexpensive for all applications.

Details on page 8-9



Alulight

Appealing flat design. Very high housing stability - can be used in all regions and wind load areas. Powder coating for extremely long service life.

Details on page 10



Mini

Small signalheads (100mm) are the addition to the Yunex Traffic portfolio for cyclists. They have a lightweight yet robust construction with a high safety standard in a modern design.

Yunex Traffic Ecolight

Proven plastic housing
 Easy installation
 Easy handling through door insert
 Robust




 Our proven plastic housing. Functional, slim and environmentally friendly

Compact and lightweight plastic housing - easy to install. The large nut and the associated large diameter in the cable channel of the holder allow for particularly easy cable routing

 **Robust - under all environmental conditions**

Yunex Traffic Ecolight housings are particularly robust and have been thoroughly tested for their resistance to vibrations and shocks. Wind tunnel tests with **wind speeds of up to 200 km/h** have shown that the strength and stability of our Ecolight housings are significantly above the requirements of the applicable standard. The use of a particularly durable plastic ensures a very long service life of the housings and low costs for the municipality.

 **Low costs due to easy installation**

Our cost-effective Yunex Traffic Ecolight housings are compatible with all Yulux2 LED signal inserts, so only a minimal number of variants and a correspondingly limited stock of spare parts are required. Clever housing details such as the practical door design, the large cable ducts, the “Fast-on” clamp, and the comfortable screw system for combining multiple chambers make **installation and service costs minimal and facilitate repairs in case of damage.**

 **Impressive ecological**

Components that are not needed do not have to be manufactured, transported, and stored. Yunex Traffic Ecolight housings are built from relatively few basic components. **Less material means less crude oil as a raw material and a greatly reduced CO2 footprint in production and transport.** In combination with the additional energy savings achieved through the use of modern LED light sources, Yunex Traffic Ecolight systems are an outstanding example of energy-efficient and environmentally friendly traffic technology.

Signalhead dimension								
(mm)	H	h	B	W	L	d	S	D
200	896	798	266	266	110 / 165 / 250	130	848	214
300	1196	1098	366	366	110 / 165 / 250	160	1148	323

Advantageous details of Ecolight housing



LED signal head door insert with quick locking

Easy installation, easy maintenance, compatible with all Yunex LED inserts



Housing's side view

Slim design and large cable ducts make the 200-mm and 300-mm housing units particularly attractive



Modular Concept

The modular concept ensures maximum flexibility, easy expansion, and quick installation



Easy Installation

Bund screw, bund nut, and fastening part for easy installation and reliable, firm fixation



Robust fastening

Solid fastening through massive brackets directly attached to the mast

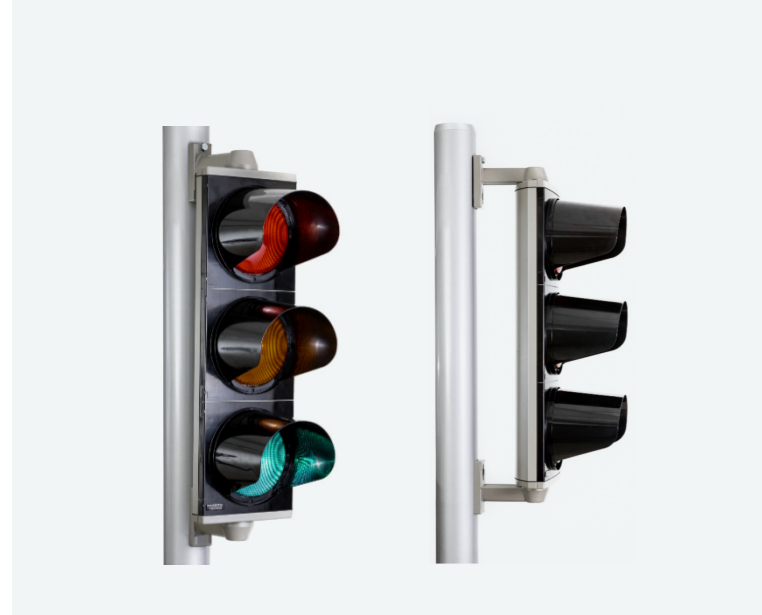


Slim Design

the slim design ensures the elegant profile of signal housing

Yunex Traffic Alulight

Our new aluminum housing
Particularly flat modern design
Extremely stable and durable



Product Description

- Flat aluminum housing
- Proven Yulux2 LED technology - for highest energy efficiency
- Light field diameter 200 or 300 mm
- Various mounting options
- Optimized strength and stability
- Housing made of high-quality aluminum, fronts made of polycarbonate
- High stability against vandalism
- Stylish and modern design



Modern Technology and Design

The Alulight housing features the proven **Yulux2 LED technology**. The excellent optical properties, low maintenance costs, and very low power consumption ensure high reliability and product efficiency.

Combined with the aesthetic and flat housing design, the Yulux2 Alulight is perfectly suited to integrate into the urban environment of tomorrow. To perfect the appearance, the powder-coated aluminum parts are available in several colors.



High safety standards

The Alulight housing is designed to withstand environmental requirements. The testing of the components **exceeds the prescribed guidelines to ensure an even more reliable and durable signal transmitter**. It has undergone several mechanical and chemical tests to confirm the functional safety of the Alulight series



Durability

To ensure a long product life, the housing of Alulight is made entirely of high-strength aluminum that can be used in all regions. The special powder coating **ensures high resistance to chemical influences and corrosion**.

Signalhead dimension

(mm)	H	h	B	W	L	d	S	D
200/3	1009	842	266	265	110	108.5	779	201
300/3	1309	1146	366	385	170	134	1079	300



Yulux2 LED Inserts

- The Yulux2 LED technology has proven itself in millions of signal transmitters in daily use
- They have demonstrated their abilities in many different countries under the most adverse environmental conditions
- They fit very well into any urban situation and have been awarded the seal

Perfect compability with Yutrafic control unit family

Yulux LED technology is designed for optimal compability with Yutrafic control unit family.

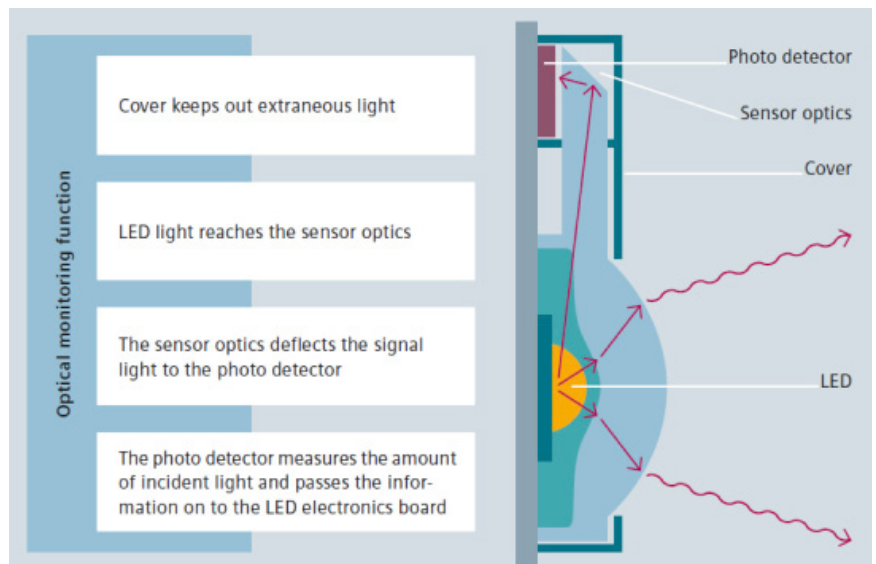


Yulux2 24V DC VLP – 1 Watt Technology, SIL3 certified

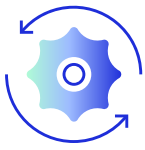
Yulux2 Very Low Power (VLP) is LED technology with a power consumption of only 1 to 2 watts - with the latest and most reliable signal monitoring functionality. This is a further reduction of up to 80% compared to the older 230V LED signal generation.

Detail of 1-Watt Technique

Yulux2 Very Low Power (VLP) is LED technology with a power consumption of only 1 to 2 watts - with the latest and most reliable signal monitoring functionality. This is a further reduction of up to 80% compared to the older 230V LED signal generation.



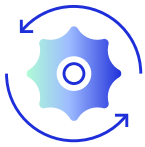
Additional Variants & Features



Dimmable versions allow for additional power savings and prevent glare effects at night

The dimmable versions can be dimmed for night operation. In addition to further energy savings, the reduced light intensity prevents blooming effects on the symbols and glare effects that would impair the driver's vision.

The use of dimmable Yulux signal heads requires that the control units be equipped with specially developed LED dimming modules. The dimmable Yulux signal heads are suitable for worldwide use, unless the requirements of the VDE 0832 series apply.



Easy replacement of symbol masks

All Yunex Traffic LED signal heads can be equipped with various removable symbol inserts. These are designed as masks that can be easily attached to the inside of the removable front lens. Non-standardized symbols are also available on request.



PLUS Technology

In signal heads with PLUS technology, the LED circuits are switched decentrally in the signal heads themselves. This significantly reduces the wiring effort and commissioning. The PLUS technology is available for 24V and 40V LED technology.

Overview of Yulux2 electronic variants

Yulux2.40	LED Signalhead for 40V system
Yulux2.40D	LD Signalhead for 40V System with dimming function
Yulux2.230LPD	LED signal transmitters for 230 V systems with dimming function and low power consumption of only 3.5 to 5 watts; for connection to the new Yutrafic control units sX-H and sX-HC
Yulux2.230LP	LED signal heads for 230V systems with a low power consumption of only 5 watts; for connection to the new Yutrafic control units sX-H and sX-HC.
Yulux2.230	LED signalheads for 230 V systems with connection to the new Yutrafic sX-H and sX-HC as well as all control units of the Yutrafic C900 series
Yulux2.230D	LED Signalheads for 230V System with dimming function
Yulux2 VLP	LED signalheads with a very low power consumption of only 1-2 watts per signal transmitter image, compatible with Yutrafic sX-V, sX-VC and C920ES control units

Technical Data

	Yulux2.40		Yulux2.40D		Yulux2.230LPD	
	200 mm	300 mm	200 mm	300 mm	200 mm	300 mm
Optical properties according to DIN EN 12368						
Distribution of light intensity	A3/1, B2/2	A3/1, B3/2	A3/1, B2/2	A3/1, B3/2	A3/1, B2/2	A3/1, B3/2
axial luminous intensity-typical value red, yellow, green	> 400 cd	> 400 cd	> 400 cd	> 400 cd	> 400 cd	> 400 cd
Relative intensity in dimmed mode (typical value)			50 %	50 %	50 %	50 %
Brightness properties	W	N	W	N	W	N
Uniformity of luminance	> 1:10	> 1:15	> 1:10	> 1:15	> 1:10	> 1:15
Color coordination acc. DIN EN 12368	<ul style="list-style-type: none"> • Red 613–631 nm • Yellow 585–597 nm • Green 489–508 nm 					
Symbol class	S1					
Electrical and mechanical properties						
Operating voltage	40 V/50 Hz		40 V/50 Hz		230 V/50 Hz	
Power consumption	7 W		not dimmed 7 W dimmed 3 W		not dimmed 5 W dimmed 3.5 W	
Red	7 W		not dimmed 7 W dimmed 3 W		not dimmed 5 W dimmed 3.5 W	
Yellow	7 W		not dimmed 7 W dimmed 3 W		not dimmed 5 W dimmed 3.5 W	
Green	7 W		not dimmed 7 W dimmed 3 W		not dimmed 5 W dimmed 3.5 W	
Power Factor	> 0.9		> 0.9		> 0.9	
EMC	according to EN 50293		according to EN 50293		according to EN 50293	
Lenses	system specific color or neutral lenses		system specific color or neutral lenses		system specific color or neutral lenses	
Standard Symbole	Symbol masks		Symbol masks		Symbol masks	
Protection class of the LED Inserts	IP65		IP65		IP65	
Resistance to mechanical stress	IR3		IR3		IR3	
Operating temperature	-40 °C to +60 °C		-40 °C to +60 °C		-40 °C to +60 °C	
Relative humidity	20 % to 95 %		20 % to 95 %		20 % to 95 %	
Housing color	black RAL 9005 fir green RAL 6009 pebble grey RAL 7032 aluminium grey RAL 9007		black RAL 9005 fir green RAL 6009 pebble grey RAL 7032 aluminium grey RAL 9007		black RAL 9005 fir green RAL 6009 pebble grey RAL 7032 aluminium grey RAL 9007	
Compability with controllers						
	Yutrafic sX-L, sX-LC, C940V/VP, C940ES		Yutrafic sX-L, C940ES, each with LED modules		Yutrafic sX-H, sX-HC, ST950, each with LED modules	

Yulux2.230LP		Yulux2.230		Yulux2.230D		Yulux2 VLP	
200 mm	300mm	300 mm	300 mm	200 mm	300 mm	200 mm	300 mm
Optical properties acc. DIN EN 12368							
A3/1, B2/2	A3/1, B3/2	A3/1, B2/2	A3/1, B3/2	A3/1, B2/2	A3/1, B3/2	B2/2	B3/2
> 400 cd	> 400 cd	> 400 cd	> 400 cd	> 400 cd	> 400 cd	> 200 cd	> 400 cd
				50 %	50 %		
W	N	W	N	W	N	W	N
> 1:10	> 1:15	> 1:10	> 1:15	> 1:10	> 1:15	> 1:10	> 1:15

- Red 613–631 nm
- Yellow 585–597 nm
- Green 489–508 nm

S1

Electrical and mechanical properties

230 V/50 Hz	230 V/50 Hz	230 V/50 Hz	24 V DC
5 W 5 W 5 W	14 W 13 W 13 W	not dimmed 17 W dimmed 12 W not dimmed 14 W dimmed 11 W not dimmed 14 W dimmed 11 W	1–2 W 1–2 W 1–2 W
> 0.9	> 0.9	> 0.9	> 0.9
according to EN 50293	according to EN 50293	according to EN 50293	according to EN 50293
system specific color or neutral lenses	system specific color or neutral lenses	system specific color or neutral lenses	system specific color or neutral lenses
Symbol masks	Symbol masks	Symbol masks	Symbol masks
IP65	IP65	IP65	IP65
IR3	IR3	IR3	IR3
–40 °C to +60 °C	–40 °C to +60 °C	–40 °C to +60 °C	–40 °C to +60 °C
20 % to 95 %	20 % to 95 %	20 % to 95 %	20 % to 95 %
black RAL 9005 fir green RAL 6009 pebble grey RAL 7032 aluminium grey RAL 9007	black RAL 9005 fir green RAL 6009 pebble grey RAL 7032 aluminium grey RAL 9007	black RAL 9005 fir green RAL 6009 pebble grey RAL 7032 aluminium grey RAL 9007	black RAL 9005 fir green RAL 6009 pebble grey RAL 7032 aluminium grey RAL 9007

Compatibility with controllers

Yutrafic sX-H, sX-HC, ST950	Yutrafic sX-H, sX-HC, C900V	Yutrafic sX-H, sX-HC, C900V, each with LED modules	Yutrafic sX-V, sX-VC, C920ES, SIL3-certified acc. EN 61508
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TRAFFIC

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