



# FUTURLED6 – 230V AC

## The standard for highest optical performance

From LED pioneer to global player; benefit from our extensive experience and expertise in LED signaling technology, with over 5 million LED modules sold worldwide. Besides the brilliant light output and consistent illumination from the central light source, investment is justified by the improved service life and several years of maintenance-free operation. Reconfigure your existing traffic lights quickly and costeffectively to modern LED technology.

Due to different local requirements of each country SWARCO offers a wide range of FUTURLED LED units adapted to local specifications or special customers' need.



**Dimming  
Function**



**Central Light  
Source**



**Energy-  
Efficient**



**Customised  
Symbols**

### MORE BENEFITS

- no LED dots visible, very uniform signal glow – central light source
- highest anti-phantom performance (class 5)
- lowest power consumption and brilliant light output
- all products traceable by serial number
- custom-made masks allow any symbol display
- life cycle > 5 years
- optimal thermal concept reduces degradation to a minimum
- automatic light compensation in case of diode failure
- proven technology
- dimming function available
- DIN VDE0832-compliant FUTURLED6 modules available
- also available with uncolored lens
- optional: optical monitoring available
- available with white LEDs for public transport
- available in diameter 100 / 200 / 300 mm

**For more technical details please don't hesitate to contact us.**

The values shown are nominal for the FUTURLED6 product. SWARCO design and manufacture variations of the FUTURLED6 module to comply with local in country standards. Local in country models of the FUTURLED6 family may exceed the stated values.

Customer-specific versions are available on request.



### TECHNICAL DETAILS

<b>Optical performance</b>	meet EN 12368 and local requirements or even surpass them
<b>EMC</b>	acc. EN 50293
<b>Ambient temperature range</b>	Class A, B, C
<b>acc. to EN12368</b>	(-40°C to +60°C)
<b>Protection class</b>	Safety Class II acc. to EN 61140
<b>Tightness</b>	IP 65 acc. to EN 60529
<b>Impact resistance</b>	Class IR3; acc. to EN 60598-1
<b>Material of lens / housing</b>	UV-stabilized polycarbonate
<b>Weight</b>	100 mm: < 0.25 kg 200 mm: < 0.9 kg 300 mm: < 1.5 kg
<b>Cable</b>	2 x 0.75 mm <sup>2</sup> ; 1 m
<b>Dimensions (incl. front lens)</b>	100 mm: Ø 108 x 72 mm 200 mm: Ø 210 x 117 mm 300 mm: Ø 300 x 149 mm



# FUTURLED6 – 40/42/48V AC

## Low Voltage Safety

Low voltage safety systems have become an important issue in traffic signalling. Better monitoring and increased safety for the people directly working at the traffic signals on the street are the main reasons for this trend.

Due to different local requirements of each country SWARCO offers a wide range of FUTURLED LED units adapted to local specifications or special customers' need.



**Dimming Function**



**Central Light Source**



**Energy-Efficient**



**Customised Symbols**



## MORE BENEFITS

- ▶ no LED dots visible, very uniform signal glow – central light source
- ▶ highest anti-phantom performance (class 5)
- ▶ lowest power consumption and brilliant light output
- ▶ all products traceable by serial number
- ▶ custom-made masks allow any symbol display
- ▶ life cycle > 5 years
- ▶ optimized thermal concept reduces degradation to a minimum
- ▶ automatic light compensation in case of diode failure
- ▶ proven technology
- ▶ dimming function available
- ▶ DIN VDE0832-compliant FUTURLED6 modules available
- ▶ FUTURLED6 available acc. to OCIT-, ASTRIN-, UK-specification
- ▶ also available with uncolored lens
- ▶ available with white LEDs for public transport
- ▶ available in diameter 100 / 200 / 300 mm

## TECHNICAL DETAILS

<b>Optical performance</b>	meet EN 12368 and local requirements or even surpass them
<b>EMC</b>	acc. EN 50293
<b>Ambient temperature range</b>	Class A, B, C
<b>acc. to EN12368</b>	(-40°C to +60°C)
<b>Protection class</b>	Safety Class II acc. to EN 61140
<b>Tightness</b>	IP 65 acc. to EN 60529
<b>Impact resistance</b>	Class IR3; acc. to EN 60598-1
<b>Material of lens / housing</b>	UV-stabilized polycarbonate
<b>Weight</b>	100 mm: < 0.25 kg 200 mm: < 0.9 kg 300 mm: < 1.5 kg
<b>Cable</b>	2 x 0.75 mm <sup>2</sup> ; 1 m
<b>Dimensions (incl. front lens)</b>	100 mm: Ø 108 x 72 mm 200 mm: Ø 210 x 117 mm 300 mm: Ø 300 x 149 mm

**For more technical details please don't hesitate to contact us.**

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# FUTURLED6 – 12V DC / 24V AC/DC

## Alternative Power Supplies

SWARCO recognizes the increasing importance of alternative power supplies such as solar panels and fuel cells and therefore designed its high performance LED modules to comply with these new applications.

Due to different local requirements of each country SWARCO offers a wide range of FUTURLED LED units adapted to local specifications or special customers' need.



**Dimming Function**



**Central Light Source**



**Energy-Efficient**



**Customised Symbols**



### MORE BENEFITS

- no LED dots visible, very uniform signal glow – central light source
- high anti-phantom performance
- lowest power consumption and brilliant light output
- all products traceable by serial number
- custom-made masks allow any symbol display
- life cycle > 5 years
- optimum heat balance reduces degradation to a minimum
- proven technology
- also available with uncolored lens
- compatible with standard-conforming signal head housings
- available with white LEDs for public transport
- 12V DC: available in diameter 100 / 200 / 300 mm
- 24V AC/DC: available in diameter 200 / 300 mm

### TECHNICAL DETAILS

<b>Optical performance</b>	meet EN 12368 (if applicable) and local requirements or even surpass them
<b>EMC</b>	acc. EN 50293
<b>Ambient temperature range</b>	Class A, B, C
<b>acc. to EN12368</b>	(-40°C to +60°C)
<b>Protection class</b>	Safety Class II acc. to EN 61140
<b>Tightness</b>	IP 65 acc. to EN 60529
<b>Impact resistance</b>	Class IR3; acc. to EN 60598-1
<b>Material of lens / housing</b>	UV-stabilized polycarbonate
<b>Weight</b>	100 mm: < 0.25 kg (only for 12V DC) 200 mm: < 0.9 kg 300 mm: < 1.5 kg
<b>Cable</b>	2 x 0.75 mm <sup>2</sup> ; 1 m
<b>Dimensions (incl. front lens)</b>	100 mm: Ø 108 x 72 mm (only for 12V DC) 200 mm: Ø 210 x 117 mm 300 mm: Ø 300 x 149 mm

**For more technical details please don't hesitate to contact us.**

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