



LaneLED INOX42

Hand rails with LED lighting: Increased safety in a sophisticated design

Utilising synergies - creating safety

As an established manufacturer of emergency lights for road and rail tunnels using LED technology, we have accumulated a wealth of knowledge and know-how. Based on this experience, we are taking another step towards providing safety everywhere people go with our LED-illuminated hand rails.

In general

A hand rail is a rail within easy reach that people can hold on to or allow themselves to be guided by. Most hand rails come in the form of posts, rails or bars. Common materials used are metal, wood, wood composites or plastic. A hand rail can be the upper part of a balustrade or railing. It can also be attached directly to a wall.

Requirements

A «fixed» hand rail is required by law. «Rigging», meaning hand rails made with rope, are only intended as decoration since they could give way in case of a fall. They should be continuous and ideally extend past the first and last steps of stairs.

This innovation is based on different directives, such as DIN 18065, information from the Swiss Competence Centre for Accident Prevention (bfu) and SUVA recommendations.

Applications

- underpasses and overpasses in railway stations
- escape route and emergency staircases
- decorative applications in office or exhibition wings
- hospitals and nursing homes
- schools and day care centres
- shopping and meeting areas
- hotels and restaurants
- private and public roads and pathways
- staircases

Our services

All of our calculations and drawings are prepared in close cooperation with planers. This guarantees that the LaneLED INOX42 handrail is implemented according to customer specifications.

GIFAS also offers the following services:

- planning and concept development as per specifications
- relux lighting calculation
- consultation and bracket through our field service
- creation of object-specific plans and documents
- mutual bracket among the partner companies, contact mediation

The following pages provide an overview of how the system works and details of the individual components.

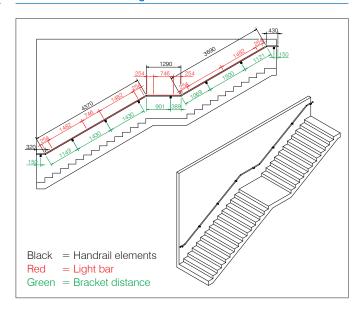
We are always very happy to answer any of your questions.

Product documentation

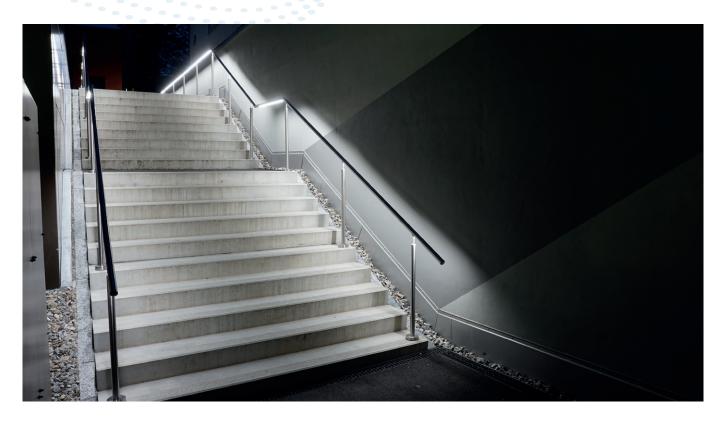


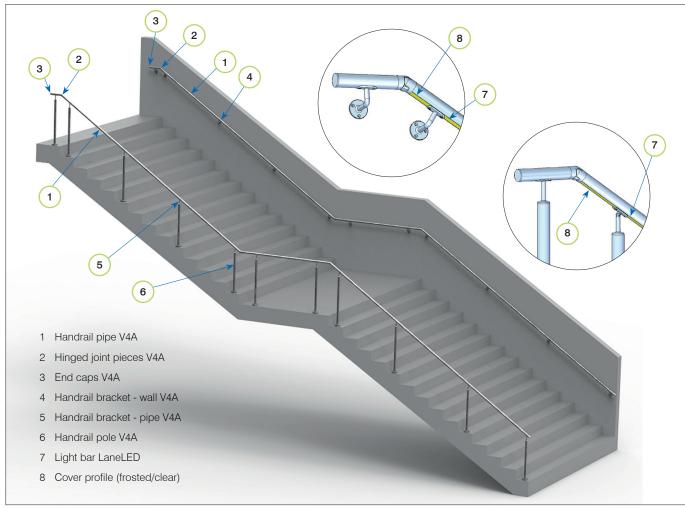
√ from stock, offer subject to prior sale

Detailed technical drawing of a LaneLED INOX42 handrail

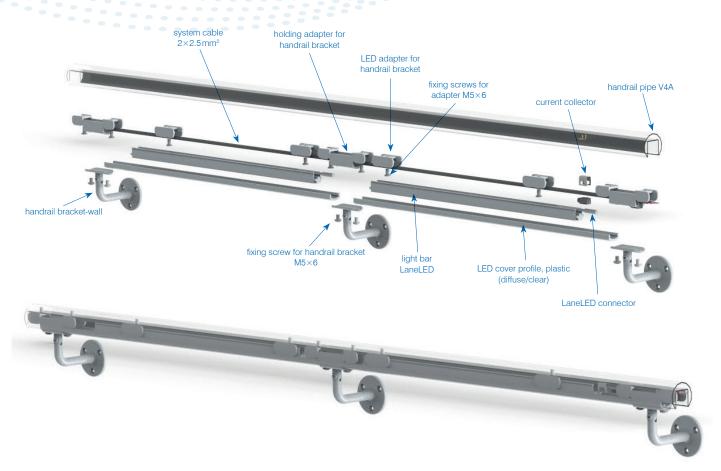


System components of the LaneLED INOX42





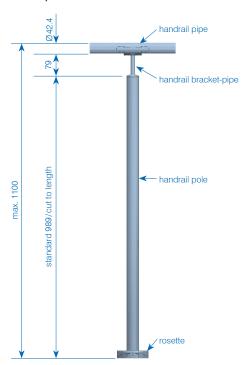
Handrail systems with LED lighting



Handrail system pole

LED-equipped handrails for outdoor and indoor applications (balcony handrails, stairway handrails and terrace handrails) which can very easily be assembled on classic handrail posts using special pipe sections. The pipe brackets and adapters allow an inner cable guide with the GIFAS-developed connection cabling. All metal components are V4A-quality, with a protection class of IP66/69K.

Set up hand rail pole



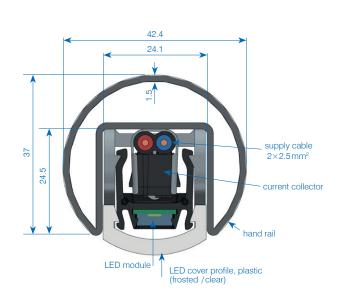
Handrail system wall

LED-equipped handrails for outdoor and indoor applications as anti fall guard and guide bracket on stairways with functional, accent or path lighting. A multitude of individual elements allows the needs-based supply of all kinds of wall handrails.

All metal components are V4A-quality, with a protection class of IP66/69K.

Handrail LaneLED INOX42

The GIFAS handrail profile is the carrier element for the LaneLED INOX42. The profile and the various fastening and connecting items are designed and coordinated in a way that ensures the electric supply with the cable.



Fixing, transition and end pieces

The basic product range already covers a multitude of requirements. The product range listed here is not complete. Just ask us, we will provide the ideal solution.

Handrail brackets

LED	handrail	pipes

177071	LaneLED INOX42, LED handrail pipe, V4A-1.4401, Ø42.4×1.5 mm, length 1'000 mm, brushed	
168078	LaneLED INOX42, LED handrail pipe, V4A-1.4401, Ø42.4×1.5 mm, length 2'500 mm, brushed	
177070	LaneLED INOX42, handrail pipe round, V4A-1.4401, Ø 42.4×1.5 mm, length 2'500 mm, brushed	
168087	LaneLED INOX42, handrail pipe round, V4A-1.4401, Ø42.4×2 mm, length 2'500 mm, brushed	
D:		

Pipe connectors

	ce, V4A-1.4401, Ø42.4×1.5 mm, 25-55° downwards, brushed	
860418	LaneLED INOX42, LED hinged joint piece, V4A-1.4401, Ø 42.4×1.5 mm, 25-55° upwards, brushed	
860427	LaneLED INOX42, LED pipe connector, V4A-1.4401, Ø42.4×1.5 mm, B=6 mm, brushed	
860424	LaneLED INOX42, Pipe hinged joint piece, V2A-1.4301, Ø42.4×1.5 mm, 0-70°, H=30 mm, brushed	

860417 LaneLED INOX42, LED hinged joint pie-

End pieces

860419	LaneLED INOX42, LED end cap, V4A-1.4401, Ø 42.4×1.5 mm, H=4 mm, brushed	
860425	LaneLED INOX42, end cap, V4A-1.4401, Ø42.4×2.0mm, H=4mm, brushed	
860620	LaneLED INOX42, curved end, V4A-1.4401, Ø42.4×2.0 mm, 90°, L=81 mm, brushed	

Wall flange

860428	LaneLED INOX42, LED wall flange, V4A-1.4401, Ø 42.4/ D=90/
	H=30 mm, brushed

860450	LaneLED INOX42, wall handrail support system cable, V4A-1.4401, Ø 42.4/ W=75/ H=50 mm, brushed	ل		
860426	LaneLED INOX42, wall handrail support, V4A-1.4401, Ø 42.4/ W=75/ H=50 mm, brushed	eJ		
860434	LaneLED INOX42, wall handrail support joint, V4A-1.4401, Ø 42.4/ W=75/ H=50 mm, brushed	et.		
860449	LaneLED INOX42, pipe handrail support system cable, V4A-1.4401, Ø42.4/ H=79 mm, brushed	I		
860432	LaneLED INOX42, pipe handrail support, V4A-1.4401, Ø42.4/ H=79 mm, brushed	I		
860433	LaneLED INOX42, pipe handrail support joint, V4A-1.4401, Ø 42.4/ H=79 mm, brushed	T*		
860430	LaneLED INOX42, handrail post, V4A-1.4401, Ø42.4×2.0 mm, H=989 mm, incl. flange, brushed,			
860431	LaneLED INOX42, rosette for posts, V4A-1.4401, Ø 110 mm, H=27 mm, brushed			
* Other versions on request				

Other versions on reque

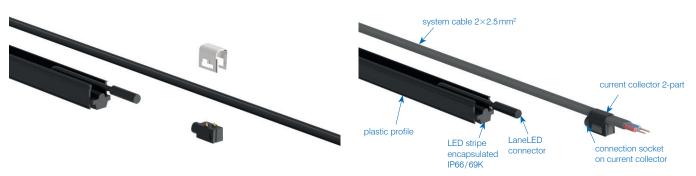
Covers

860557	LaneLED INOX42, LED cover profile clear, plastic, length 1'600 mm	
860558	LaneLED INOX42, cover profile frosted, plastic, length 1'600 mm (45% reduction in luminous flux)	
Adapters		

Adapters		
860411	LaneLED INOX42, adapter LED, V4A-1.4401, 23.5×50 mm, frosted	
860410	LaneLED INOX42, holding adapter, V4A-1.4401, 23.5×114 mm, frosted (fixing holes in line)	
860572	LaneLED INOX42, holding adapter, V4A-1.4401, 23.5×114 mm, frosted (fixing holes diagonal)	

LED-light bar LaneLED

Set up/Components



GIFAS LaneLED

The LaneLED light bar from GIFAS is the base element for the illuminated Handrail Lighting System. The appropriate type is selected depending on the requirements of the operator, whereas the desired lighting strength is the most important specification.

The carrier profile of the LaneLED light strip consists of a special coated plastic profile.

A flexible and separable LED strip is inserted from below and incorporated into the plastic profile with 2K casting compound. The encapsulation leads to the high protection class of IP66/69K.

There is room for the cable guide and the current collector in the upper part of the profile (in between the flanks).

Technical Data

Light colour: $\sim 3'000 \, \text{K}/\sim 4'400 \, \text{K}/\sim 5'800 \, \text{K}$

Voltage LED modules: 21-32VDC Beam angle: 120°

Operating life: L90/B10 100'000 h +25° C

Protection category: IP66/69K Impact resistance: IK10

Operating range of temperature: -25° C to $+45^{\circ}$ C Dimensions: $\sim 19 \times 18 \times 1'482 \text{ mm}$

Current collector

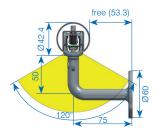
Each LaneLED is connected to the power supply via the current collector and is freely attachable to the flat cable 2×2.5 mm².

The connection socket serves as the interface to the current collector and the connection cable with plug of the LaneLED (IP66/69K connection).





Illumination/Cone of light when in use



Accessories

 860120 Current collector SNAP 2P, 42V-5A, V2A 1.4310 (requires special pliers Item no. 860565)
 209768 System cable black 2×2.5 mm², flat cable CPR B2ca XLPO/XLPO, B2ca-s1-d0-a1

Assembly aids (provided on loan)

860565 Crimping tool (mechanical) for current collector
179280 Battery pack 24 V, 7.2 Ah









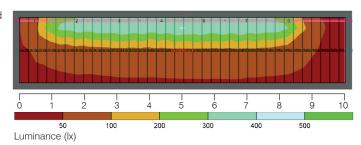
LED-light bar LaneLED

Perfect light for each application! An overview of the values that can be achieved with the LaneLED light bars.

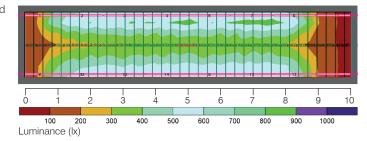
Illuminance levels

Hand rail height 100 cm, stair case width 2 m, beam angle hand rail 0°:

One-sided



Two-sided



Assortment (standard; further versions on request)

LaneLED light bar type 11, $3'000\,\mathrm{K}$, IP66/69K, $21-28\,\mathrm{VDC}$, $400\,\mathrm{Lux}-95\,\mathrm{cm}$

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860550	190	6	2	80	120
860551	560	18	6	240	360
860552	928	30	10	400	600
860553	1'482	48	16	640	960

LaneLED light bar type 11, 4'400 K, IP66/69K, 21-28 VDC, 400 Lux-95 cm

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860445	190	6	2	80	120
860446	560	18	6	240	360
860447	928	30	10	400	600
860448	1'482	48	16	640	960

LaneLED light bar type 11, $5'800\,K$, IP66/69K, $21-28\,VDC$, $400\,Lux-95\,cm$

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860388	190	6	2	80	120
860389	560	18	6	240	360
860390	928	30	10	400	600
860420	1'482	48	16	640	960

Maximum length with LaneLED type 11 to 36 m per 28 VDC infeed is possible.

Dimming function

The LaneLED INOX42 light bars can be dimmed – using a regular 1-10 VDC rotary dimmer, their brightness is freely adjustable.



Assortment

104780 Recessed rotary dimmer 1-10 VDC Edizio, white

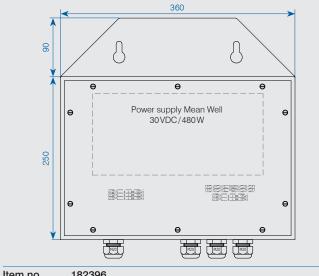
System components power supply

The electric power supply of the LaneLED light bar is ensured through power supplies that are individually installed into the main or sub-distribution or that are directly built into the housing on site (housing hard rubber or in polycarbonate housing).

The supply voltage is 24VDC and it is generated with a power pack 230VAC – different output sizes are available. In each case depending on the total lighting length and the performance of the desired LED light output.

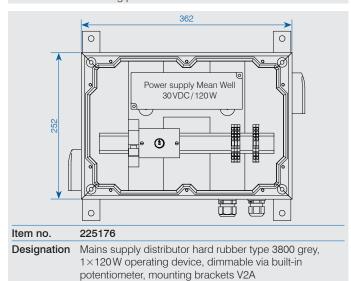
A simple 230 VAC/240 VDC (21-32 VDC) power supply is required. According to customer requirements, it can also be installed anywhere in the distributor or in the socket.

Mains supply distributors



Item no. 182396

Designation Mains supply distributor hard rubber type 3800 grey, 1×480 W operating device, dimmable, mounting plate V2A



Power supply Mean Well
30VDC/320W
DALL PWM I

Item no. 197108

Designation Mains supply distributor hard rubber type 7750 grey, 1×320W operating device, with DALI and PWM for dimming, handle, mounting brackets V2A

System components power supply

The INOX42 system can be operated via a power supply (24-32VDC) or a similar DC supply. Power supplies and operating units are available in various power outputs and sizes.

The power supply can be installed in surface mounted or recessed mounted cabinets in different sizes. The INOX42 system can be dimmed via a pulse width modulation module.

Power supplies



 Item no.
 196048

 Designation
 Power supply 230 VAC/24 VDC-5A/120 W IP67, DALI, 191×63×37.5 mm, dimmable



 Item no.
 207188

 Designation
 Power supply 230VAC/24VDC-2.5A/60W IP67, DALI 2, 150×53×35mm, dimmable



 Item no.
 198788

 Designation
 Power supply 230 VAC/24 VDC - 250 W, IP67, 252 × 90 × 44 mm, dimmable



Item no.179378 √DesignationPower supply 230 VAC/30 VDC-8A/240 W
metal case 244×68×39 mm, IP65



Item no. 199429

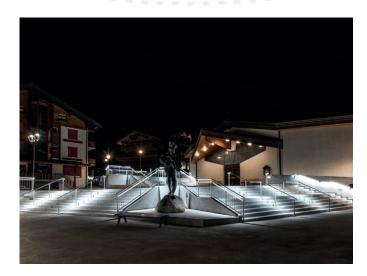
Designation Power supply LED 230 VAC/24 VDC-5A/120 W IP67, plastic case 191×63×37.5 mm, dimmable

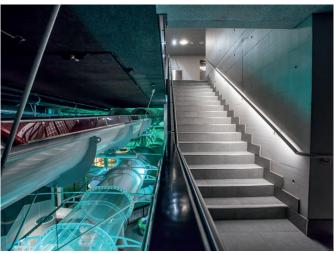


Item no. 190156

Designation Power supply LED 230 VAC/24 VDC-2.5A/60 W IP67, plastic case 150×53×35 mm, dimmable

Applications





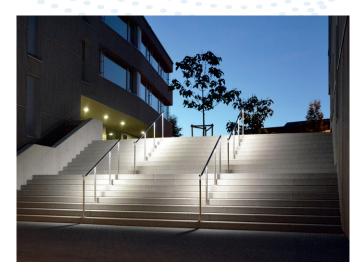


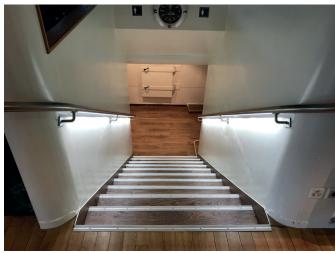


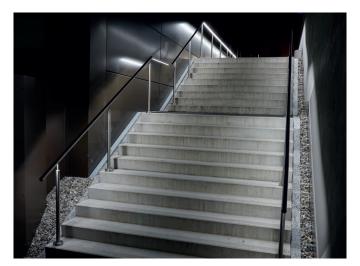




Applications

















THE SOLUTION PARTNER

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