

# **LaneLED WALL**

**LIGHTING SOLUTIONS** 

**V0725** 

#### Introduction





#### LaneLED WALL - the universally applicable lighting system

This GIFAS product is based on 20 years of know-how with LED guidance systems and our Lighting System GFK for railway tunnels. LaneLED WALL is a complete system that is easy to assemble. The range of applications is very diverse! Production is carried out to 100% in Rheineck, Switzerland.

The main feature of LaneLED WALL is its compact structure und the excellent luminous efficiency. Installation and assembly are carried out in tight spaces - wherever there is little space available. The smallest possible dimensions, and an inconspicuous installation as a result. LaneLED WALL is mounted on the wall or the ceiling, dependent on the situation. The installation can also be carried out in niches – in this case, the small dimensions will particularly help users.

#### Applications and areas of use

- emergency exit illumination in road, metro and railway tunnels
- illumination of railway stations, waiting halls or shelters
- marking of emergency exits (green LaneLED)
- ceiling mounting for power station, cavern tunnels and escape and working tunnels with low headroom
- bridge illumination
- walkway and cycle path lighting

#### Your advantages

- simple and fast assembly thanks to the practical clicking/connection system
- replacement of a LaneLED light bar in 2 minutes
- flame-retardent, halogen-free and self-extinguishing
- optional half-redundancy
- LED light colours white (standard 4'400 K) and green (528 nm)
- various lighting options thanks to different LED light bars
- individual and project-related consultation
- comprehensive support with light voltage drop calculations and planning documents
- high-quality, long-lasting materials
- safe operation due to safety-low voltage
- vandal-proof execution possible (by use of appropriate components)
- variable lighting via optional dimming function
- failure monitoring when switched-off (optional cold conductor monitoring possible)
- long segments even possible for high light outputs (eg. 200 m with type 4 redundant)

## **System components**

#### **Lighting components**

#### **Mechanical components**

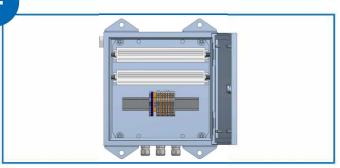
LaneLED light bar in special plastic profile incl. electrical supply

- carrier profile V4A
- wall mounting, bracket and accessories V4A
- connector and angle parts









**System components** 

**Supply components** 

- system cables
- current collector

- supply units
- mains units
- cables and wires

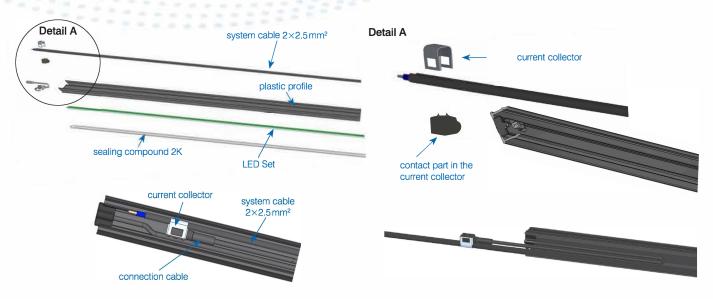


## A product that has come from successful GIFAS development **LaneLED WALL**

A highly attractive, easy-to-install lighting system



### **Light bar LaneLED**



#### **GIFAS-LaneLED**

The LaneLED light bar from GIFAS is the basic element for illuminated handrails and the LaneLED WALL lighting system. The appropriate type is selected depending on operators requirements, with the desired illuminance being the decisive factor. The other parameters of the LaneLED are carefully determined.

The carrier profile of the LaneLED WALL light bar consists of V4A 1.4404 profile with special characteristics for mechanical and chemical strains. A flexible and separable LED strip is inserted from below and incorporated into the 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). The light bar LaneLED completely ready for connection (pluggable), not including assembly materials (system cable and current collector).

Light colour standard: 4'400 K (3'000 K or 5'800 K on request)

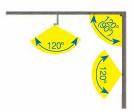
Beam angle: 120°

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

Protection category: IP66/69K
Operating range of temperature: -25°C to +45°C

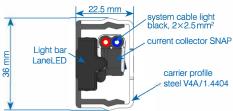
#### Illumination/light cone

Illumination depending on placement.



#### **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 (crimping tool for current collector).



View: cut proflie with current collector

#### Accessories

209768	System cable black 2×2.5 mm², flat cable CPR B2ca XLPO/XLPO
209769	System cable blue 2×2.5 mm², flat cable CPR B2ca XLPO/XLPO
209770	System cable red 2×2.5 mm², flat cable CPR B2ca XLPO/XLPO
860120	Current collector SNAP 2P, 42V-5A, V2A-1.4310 (requires special pliers Item no. 860565)

## **Assortment/light data LaneLED WALL white**

#### Technical data LaneLED - light comparison measurements

Perfect light for each application! An overview of the values that can be achieved with light bars LaneLED type 1 to 5 and type 11 as following.

#### **Assortment**

Type 1: LaneLED WALL, 4'400 K, 21-32 VDC

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860391	372	12	0.12	5	11
860392	1110	36	0.36	15	34

#### Type 3: LaneLED WALL, 4'400 K, 21-32 VDC

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860394	372	12	0.5	20	44
860395	1110	36	1.5	60	132

#### Type 4: LaneLED WALL, 4'400 K, 21-32 VDC

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860526	372	12	1	40	88
860527	1110	36	3	120	264

Type 5: LaneLED WALL, 4'400 K, 21-32 VDC

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860397	372	12	1.5	60	132
860398	1110	36	4.5	180	396

Type 6: LaneLED WALL, 4'400 K, 21-32 VDC

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860529	372	12	3	120	246
860530	1110	36	9	360	738

Type 11: LaneLED WALL, 21-28VDC

3'000 K	4'400 K	5'800 K	Num- ber of LED	W-mA	Length mm	Luminous flux Im
860546	860538	860542	6	2W-80mA	188	120
860547	860539	860543	18	6W-240mA	558	360
860548	860540	860544	30	10 W-400 mA	926	600
860549	860541	860545	48	16 W-640 mA	1'479	960

Other versions on request

#### Redundancy

The LaneLED light bar has two independent lighting circuits which are fed separately. This ensures that, if one lighting circuit fails (power supply failure, wire breakage, electronics defect, etc.) the LaneLED light bar retains 50% of its functionality.

#### **Assortment redundant**

Type 2: LaneLED WALL redundant, 4'400 K, 21-32 VDC

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860400	374	12	2×0.12	2×5	2×11
860401	1112	36	2×0.36	2×15	2×34

Type 3: LaneLED WALL redundant, 4'400 K, 21-32 VDC

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860403	374	12	2×0.25	2×10	2×22
860404	1112	36	2×0.75	2×30	2×66

Type 4: LaneLED WALL redundant, 4'400 K, 21-32 VDC

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860532	374	12	2×0.50	2×20	2×44
860533	1112	36	2×1.50	2×60	2×132

Type 5: LaneLED WALL redundant, 4'400 K, 21-32 VDC

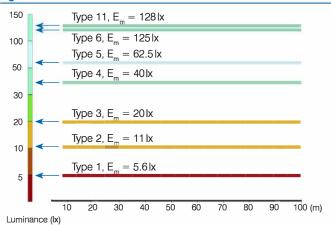
Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860406	374	12	2×0.75	2×30	2×66
860407	1112	36	2×2.20	2×90	2×198

Type 6: LaneLED WALL redundant, 4'400 K, 21-32 VDC

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860535	374	12	2×1.5	2×60	2×123
860536	1112	36	2×4.5	2×180	2×369

Other versions on request

#### Light data

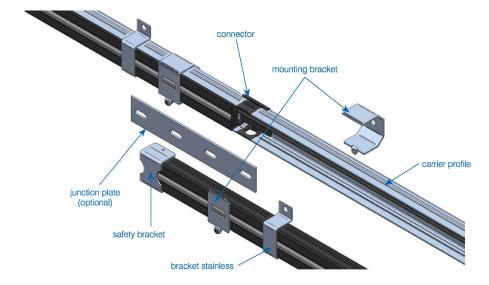


Maintenance factor: 1 (value as new)
Light mounting height: 95 cm (wall mounted)

Emergency escape route width: 1 m

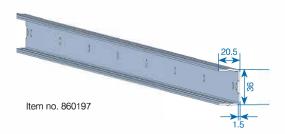
### System components

The LaneLED WALL system is mounted on the wall/ceiling as one «whole unit». To keep the mounting simple and quick, a variety of standard articles is available.



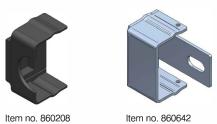
#### Carrier profile

The use of the carrier profile is obligatory for all mounting versions. The light strip is inserted by means of the click function. The carrier profile can be attached to the wall/ceiling directly (without further accessories).



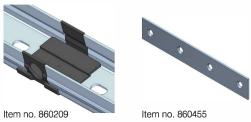
#### End cap

The end cap serves as a clean line ending. It is placed on the lighting profile at the beginning and the end of a section.



#### Connector

The connector is used for clean guiding at the junction from carrier profile to carrier profile. It is inserted lengthwise into the carrier profile during the mounting process to cleanly hold the next profile.



## Safety bracket

For every profile junction, the protective bracket is clicked-on from the front.







#### Mounting brackets

With different mounting brackets, the profile system can be used for a variety of applications in addition to the usual direct wall mounting. The installation can be realised vandal-proof, if required.







Item no. 860595

#### Assortment

860197	Carrier profile, 36×20.5 mm, L= 2'950mm, steel V4A 1.4404		
860209	Connector black with cable entry piece plastic UL94-V0, halogen-free		
860455	Connector with 4 bore steel V4A 1.4404		
860210	Protective bracket black, plastic, UL94-V0, halogen-free		
860586	Protective bracket steel V4A 1.4404		
860208	End cap black plastic UL94-V0, halogen-free		
860642	End cap black steel V4A 1.4404		
860323	Bracket stainless steel, V4A 1.4404		
860595	Mounting bracket steel V4A 1.4404		

## **Assortment LaneLED WALL green**

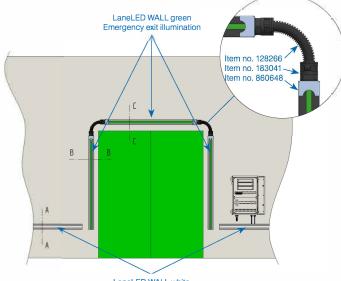
#### Emergency exit marking «fix» with flat angle

Installation directly on tunnel wall with a 90° flat angle:

# LaneLED WALL green Emergency exit illumination Item no. 860578 LaneLED WALL white

#### Door surrounding «flexible» with conduit

Installation of inclined light bars on angle profile (45°):



LaneLED WALL white

Cut B-B (45°):

Cut A-A/C-C:

LaneLED WALL

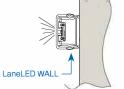
Cut B-B:

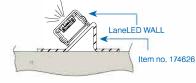




Cut A-A/C-C:









Item no. 860648





Item no. 860579

Item no. 174626

LaneLED WALL green, 21-32VDC

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux Im
860569	372	12	3	120	190
860570	1110	36	9	360	570
860571	2956	96	24	960	1520

Further versions on request.

#### Accessories

860578	Flat angle 90°, steel, V4A, 1.4404
860648	End cap with drilling, steel, V4A, 1.4404
860579	Mounting bracket 45°, steel, V4A 1.4404
183041	Conduit gland
128266	Flexible conduit
174626	Angle profile 45°, steel, V4A, 1.4404

## **Power supply**

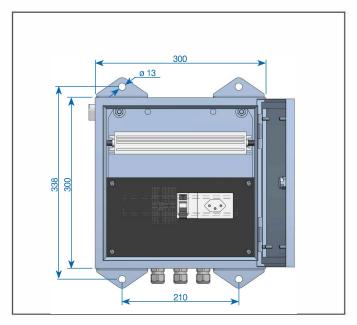
The electric power supply of the LaneLED light bar is ensured through power supplies that are individually installed into the main or sub-distribution or that are directly built into the housing on site (housing in hard rubber, polycarbonate or steel).

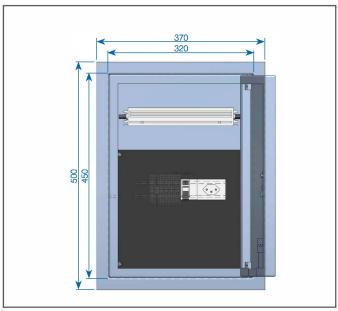
The supply of 21-32 VDC (nominal power 24VDC) is usually provided by a power supply 230VAC. Different output sizes are available, in each case depending on the total lighting length and the performance of the elected LED light output.

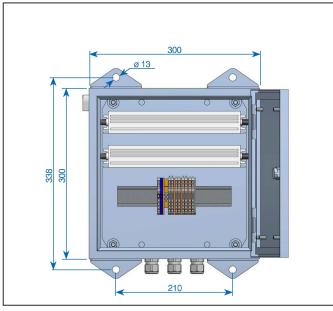
According to customer requirements, the power supply can also be installed anywhere in a distributor or in a socket.

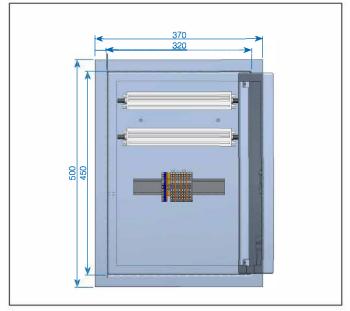
# Surface-mounted power supply with/without service socket

# Recessed-mounted power supply with/without service socket









#### **Assortment**

173882 Surface-mounted box V2A, 300×300×210 mm, power supply unit 1×240 W with service socket T23+FI
173286 Surface-mounted box V2A, 300×300×210 mm, power

Surface-mounted box V2A, 300×300×210 mm, power supply unit 2×240 W

Further executions on request

#### **Assortmen**

173839	Recessed-mounted box V2A, 320×450×170 mm, power supply unit 1×240 W with service socket T23+FI	
173288	Recessed-mounted box V2A, 320 $\times$ 450 $\times$ 170 mm, power supply unit 2 $\times$ 240 W	

## Further services/assembly support

#### Our services (incl.)

- relux lighting calculation
- consultation and support through our field service
- mutual support within partner companies, contact mediation

#### Our services (excl.)

- planning and concept development as per specifications
- creation of object-specific plans and documents
- instruction and assistance on site or at GIFAS
- assembly support on site

#### **Assembly**

Please ask for our detailed installation instructions.

(i) A complete system can be viewed in the «Hagerbach» test gallery.

#### Assembly aids (provided on loan)



Item no. 138524

Designation cable reel trolley for cable reel max. Ø 500×500



Item no. 176955

**Designation** Wall scanner for detecting iron



Item no. 860565

**Designation** Crimping tool mechanical for current collector SNAP



Item no. 179280

Designation Battery pack 24 V, 7.2 Ah

## Areas of application



To signalise escape routes in road tunnels



- unobtrusive and efficient illumination of waiting halls
- shelters
- train stations and waiting areas



- bike path, walkway and roadway illumination
- handrail and crash barrier illumination



- ceiling lighting for railway station buildings and stops
  general and basic illumination for halls and buildings of all kinds

## **Applications**

















# THE SOLUTION PARTNER

GIFAS-ELECTRIC GmbH

Dietrichstrasse 2 CH-9424 Rheineck

+41 71 886 44 44 info@gifas.ch www.gifas.ch