

SYSTEMATIC QUALITY

LaneLED WALL

Lighting System

Product information



GIFAS
ELECTRIC

09 | 17



Lighting System LaneLED WALL – universally applicable surface mounted LED lighting for diverse applications

This new GIFAS product is based on our 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 and small structure and 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. (Mounting dependent on the situation)

The installation can also be carried out in niches – in this case, the small dimensions will particularly help users.

Applications

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

Your advantages

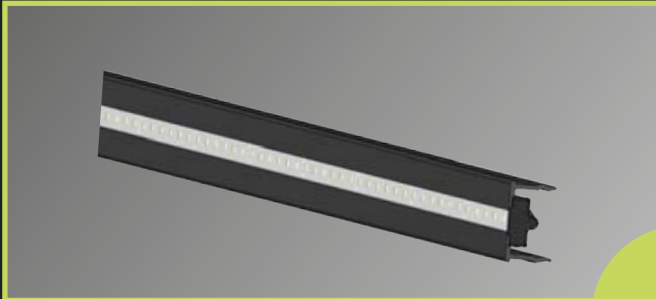
- simple and fast assembly thanks to the practical clicking/connection system
- replacement of a LaneLED light bar in 2 minutes
- flame-retardant, halogen-free and self-extinguishing
- optional half-redundancy
- LED light colours white (standard 4'400K) and green (528nm)
- various lighting options thanks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



System Components LaneLED WALL

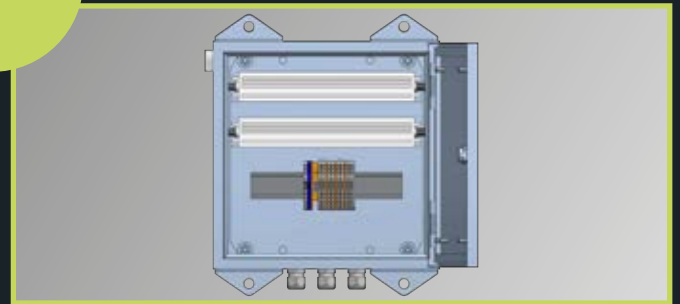
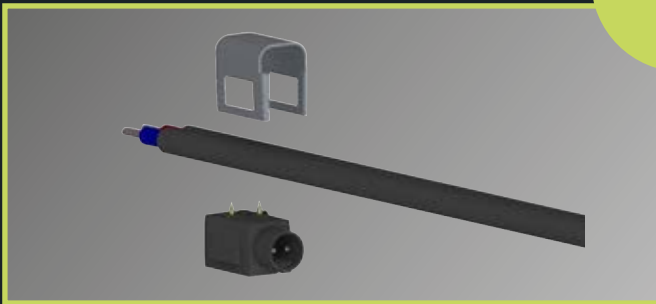
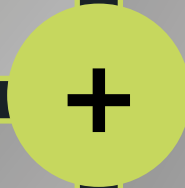
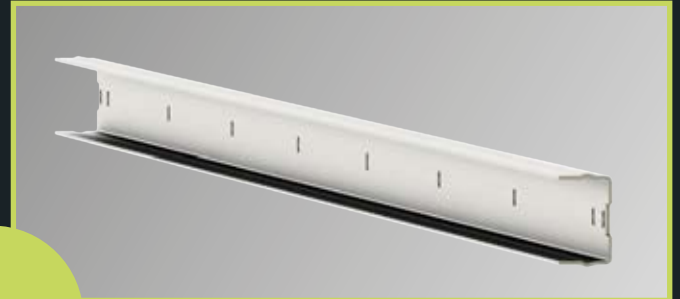
Lighting components

- LaneLED light bar in special plastic profile incl. electrical supply



Mechanical components

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



System components

- system cable
- current collector

Supply components

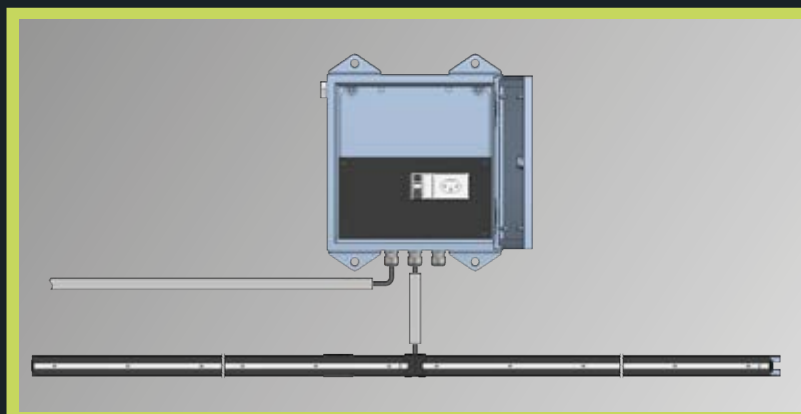
- supply unit
- mains unit
- cable and line

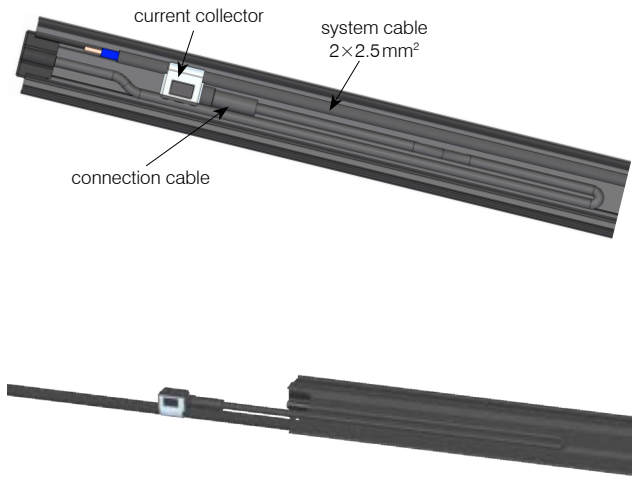
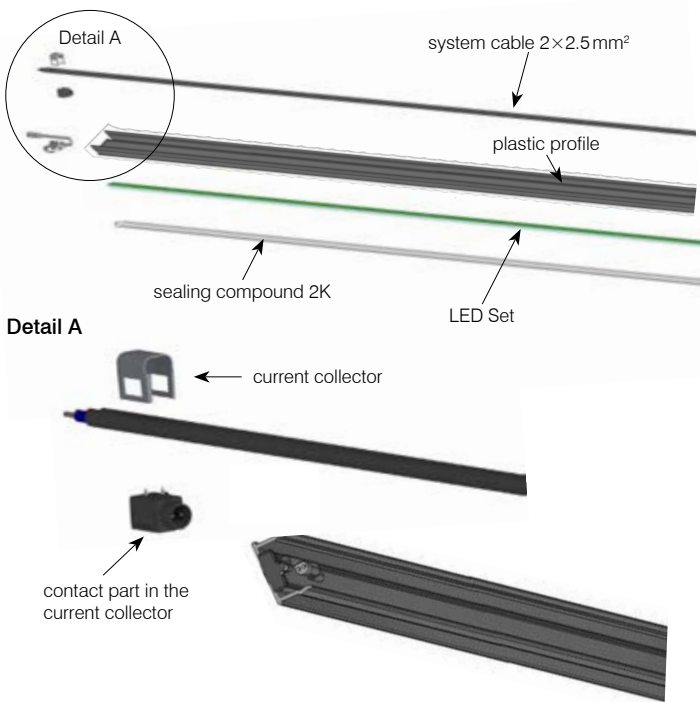


A product that has come from successful GIFAS development!

LaneLED WALL

Hand rail with integrated emergency escape route lighting





GIFAS-LaneLED WALL

The light bar «LaneLED» from GIFAS is the base element for the illuminated handrails LaneLED GFK and LaneLED WALL. The appropriate type is selected depending on the requirements of the operator, whereas the desired average luminance is the most important specification. The other parameters of the LaneLED are carefully defined.

- light colour: 4'400 K (3'000 K or 5'800 K on request)
- beam angle: 120°
- protection class: IP66/69K
- operating life LED: L90/B10 100'000h +25° C

Composition of the light bar LaneLED

The carrier profile of the LaneLED WALL light bar consists of a special synthetic 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.

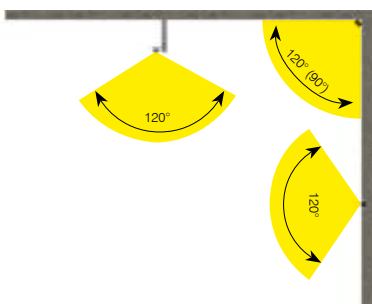
There is room for the cable guide and the current collector in the upper part of the profile (in between the flanks).

Light bar LaneLED

The light bar LaneLED completely ready for connection (pluggable), not including assembly materials (system cable and current collector).

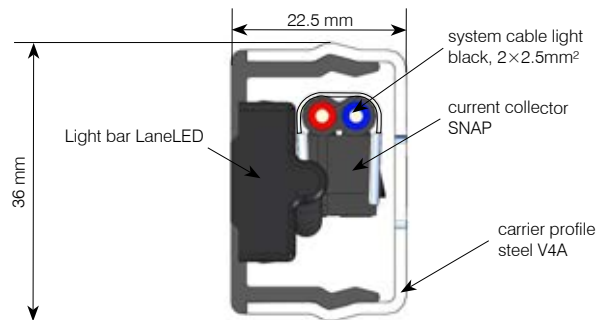
Illumination

Light cone with radiation 120°. Illumination depending on placement.



Current collector type SNAP

Each individual LaneLED is connected to the power supply via the current collector and is freely attachable to the flat cable 2x2.5mm² (crimping tool for current collector).



View: cut profile with current collector

Accessories LaneLED

Item no.	Description
209768	LED, system cable black, 2x2.5mm² flat cable CPR B2ca XLPO/XLPO
209769	LED, system cable blue, 2x2.5mm² flat cable CPR B2ca XLPO/XLPO
209770	LED, system cable red, 2x2.5mm² flat cable CPR B2ca XLPO/XLPO
136230	LED, current collector SCREW 2P, 42V-5A, V4A 1.4401, with metal bracket, thread base plate and set screw
860120	LED, current collector SNAP 2P, 42V - 5A, V2A 1.4310 (requires special pliers Item no. 860565)

Light data / Assortment 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 6 follows.

Standard assortment

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux lm
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Type 1: LaneLED WALL, 4'400K, 21 -32VDC

860391	372	12	0.12	5	8
860392	1110	36	0.36	15	24
860393	2956	96	1.00	40	64

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

860394	372	12	0.5	20	32
860395	1110	36	1.5	60	96
860396	2956	96	4.0	160	256

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

860526	372	12	1	40	64
860527	1110	36	3	120	192
860528	2956	96	8	320	512

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

860397	372	12	1.5	60	96
860398	1110	36	4.5	180	288
860399	2956	96	12.0	480	768

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

860529	372	12	3	120	192
860530	1110	36	9	360	576
860531	2956	96	24	960	1536

Typ 11: LaneLED WALL, 21 -32VDC

3'000K	4'400K	5'800K	Number of LED	W-mA	Length mm	Luminous flux lm
860546	860538	860542	6	2W-80mA	188	120
860547	860539	860543	18	6W-240mA	558	360
860548	860540	860544	30	10W-400mA	926	600
860549	860541	860545	48	16W-640mA	1'479	960
860556	860554	860555	96	32W-1'280mA	2'956	1'920

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.

Redundant assortment

Item no.	Length mm	Number of LED	Output W	Power mA	Luminous flux lm
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Type 2: LaneLED WALL redundant, 4'400K, 21 -32VDC

860400	374	12	2×0.12	2× 5	2× 8
860401	1112	36	2×0.36	2×15	2×24
860402	2958	96	2×1.00	2×40	2×64

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

860403	374	12	2×0.25	2×10	2× 16
860404	1112	36	2×0.75	2×30	2× 48
860405	2958	96	2×2.00	2×80	2×128

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

860532	374	12	2×0.50	2× 20	2× 32
860533	1112	36	2×1.50	2× 60	2× 96
860534	2958	96	2×4.00	2×160	2×254

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

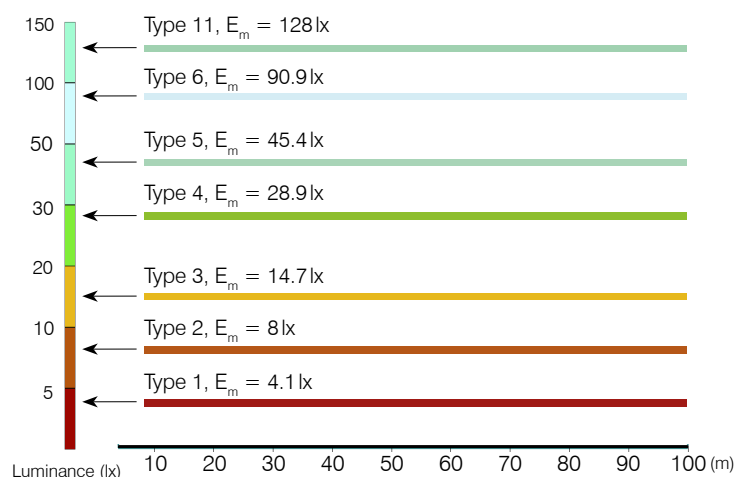
860406	374	12	2×0.75	2× 30	2× 48
860407	1112	36	2×2.20	2× 90	2×144
860408	2958	96	2×6.00	2×240	2×384

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

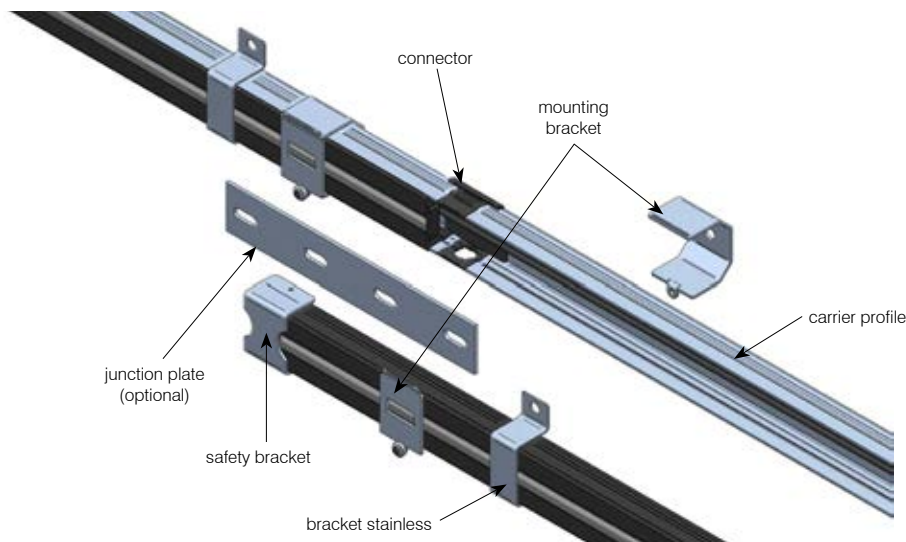
860535	374	12	2× 1.5	2× 60	2× 96
860536	1112	36	2× 4.5	2×180	2×288
860537	2958	96	2×12.0	2×480	2×768

Other versions on request

Maintenance factor: 1 (value as new)
Light mounting height: 95 cm (wall mounted)
Emergency escape route width: 1 m



Overview

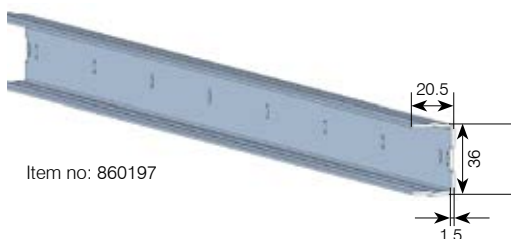


LaneLED WALL

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 are available.

Carrier profile – Steel V4A, 1.4404, cold-rolled

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 – Black plastic / Steel V4A, 1.4404

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. Available in two versions: Plastic or steel.



Item no. 860208



Item no. 860642

Mounting brackets – Steel V4A, 1.4404

With the 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.



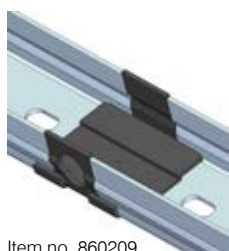
Item no. 860323



Item no. 860595

Connector – Black plastic/steel V4A, 1.4404

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.



Item no. 860209



Item no. 860455

Safety bracket – Black plastic/steel V4A, 1.4404

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



Item no. 860210



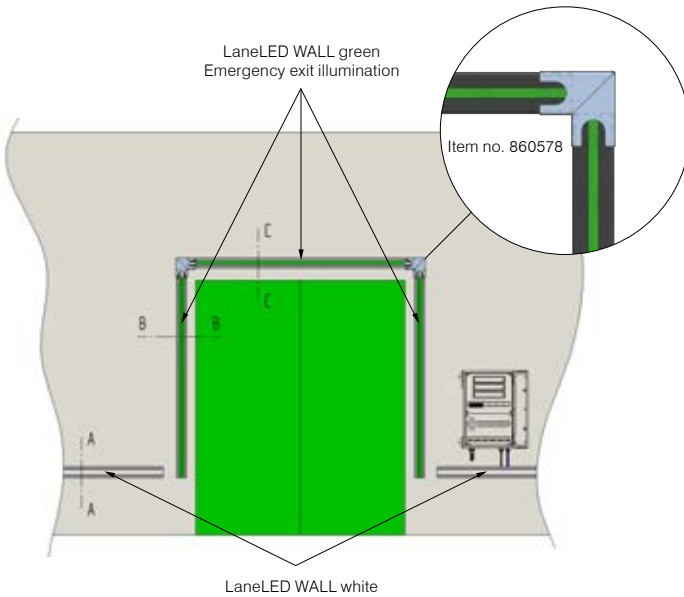
Item no. 860586

Item no.	Description
860197	LaneLED WALL, carrier profile 36×20 mm, L=2950 mm steel V4A, 1.4404
860209	LaneLED WALL, connector black with cable entry piece plastic, UL94-V0, halogen-free
860455	LaneLED WALL, connector with 4 bore steel, V4A, 1.4404
860210	LaneLED WALL, protective bracket black, plastic, UL94-V0, halogen-free
860586	LaneLED WALL, protective bracket steel, V4A, 1.4404
860208	LaneLED WALL, end cap black, plastic, UL94-V0, halogen-free
860642	LaneLED WALL, end cap with drilling, steel, V4A, 1.4404
860323	LaneLED WALL, bracket stainless steel, V4A, 1.4571
860595	LaneLED WALL, mounting bracket steel, V4A, 1.4404

Assortment LaneLED WALL green

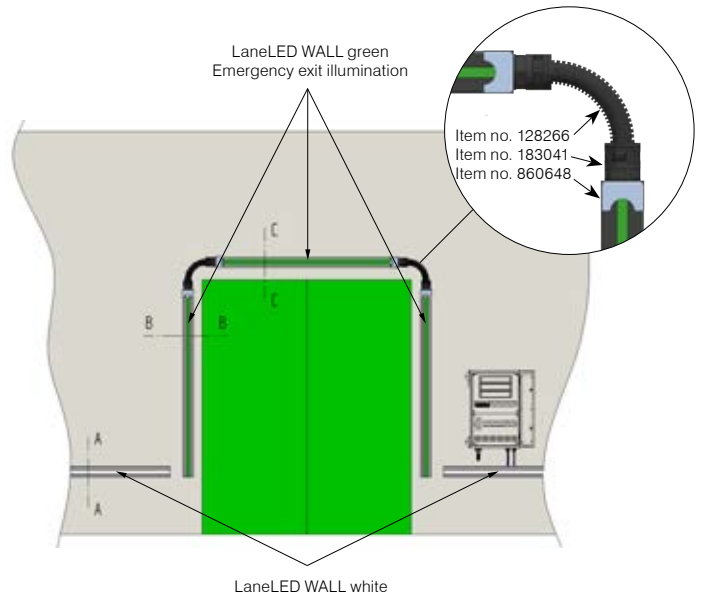
Emergency exit marking «fixed» with flat angle

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

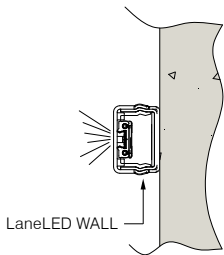


Door surrounding «flexible» with conduit

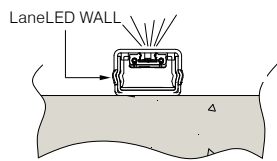
Installation of inclined light bars on angle profile (45°):



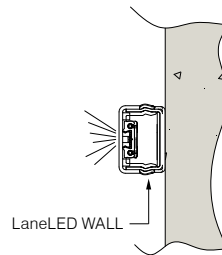
Cut A-A/C-C:



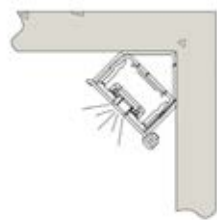
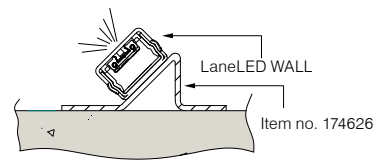
Cut B-B:



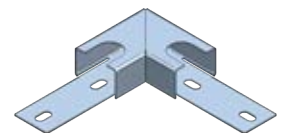
Cut A-A/C-C:



Cut B-B (45°):



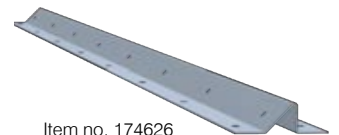
Item no. 860648



Item no. 860579



Item no. 860579



Item no. 174626

LaneLED WALL green, 21-32 VDC

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

Other versions on request

Item no.	Description
860578	Flat angle 90°, steel, V4A, 1.4404
860648	LaneLED WALL, end cap with drilling, steel, V4A, 1.4404
860579	LaneLED WALL, mounting bracket 45°, steel, V4A 1.4404
183041	Conduit gland
128266	Flexible conduit
174626	Angle profile 45°, steel, V4A, 1.4404

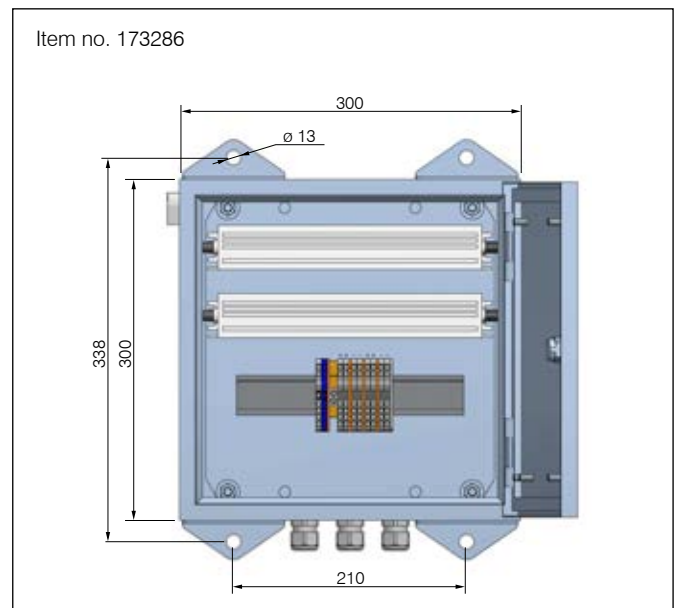
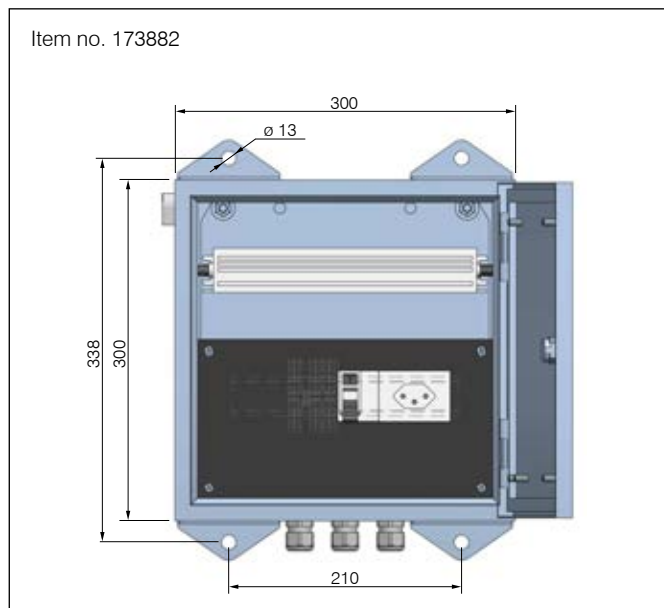
Power supply

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)

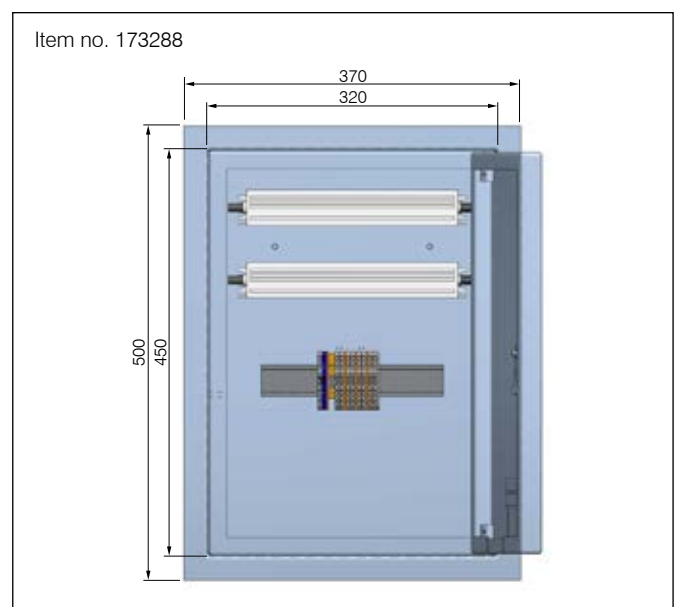
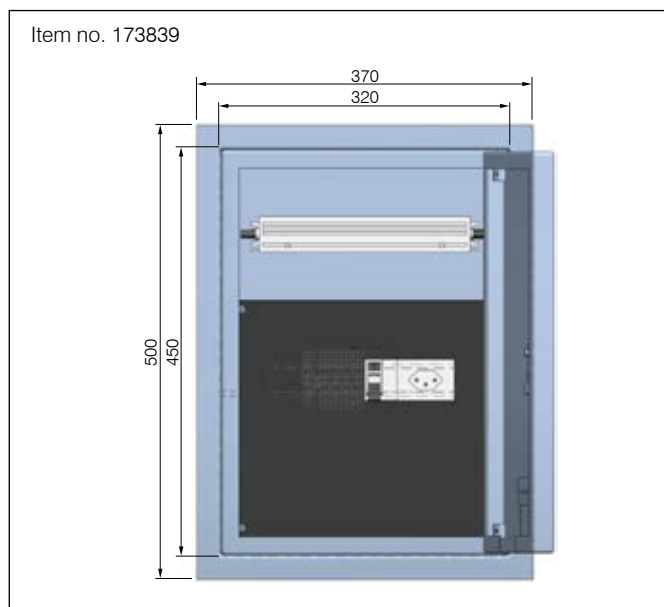
The supply of 21-32 VDC (nominal power 24VDC) is usually provided by a power supply 230 VAC – different output sizes are available! (In each case depending on the total lighting length and the performance of the desired LED light output).

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



Item no.	Description
173882	Surface-mounted box V2A, 300×300×210 mm, mains unit 1×240W with service socket
173839	Recessed-mounted box V2A, 320×450×170 mm, mains unit 1×240W with service socket, FI + T23

Item no.	Description
173286	Surface-mounted box V2A, 300×300×210 mm mains unit, 2×240 W
173288	Recessed-mounted box V2A, 320×450×170 mm mains unit, 2×240 W

Further executions on request



1

Install the mains supply distributor and power supply in a suitable place, then connect and energise them (functional control of LED light bars)



5

Assembly and connection of current collector



2

Assembly of stainless steel mounting profile on wall/ceiling



6

Connect the connection cable of the light bar with the current collector



3

Install connection bracket



7

Final installation of the LaneLED light bar into the profile by clicking/snapping into place



4

Laying the supply cable into the profile



8

Click safety bracket into place (pictured plastic bracket is not suitable for tunnel applications)



Item no. 179280



Item no. 138524



Item no. 860565



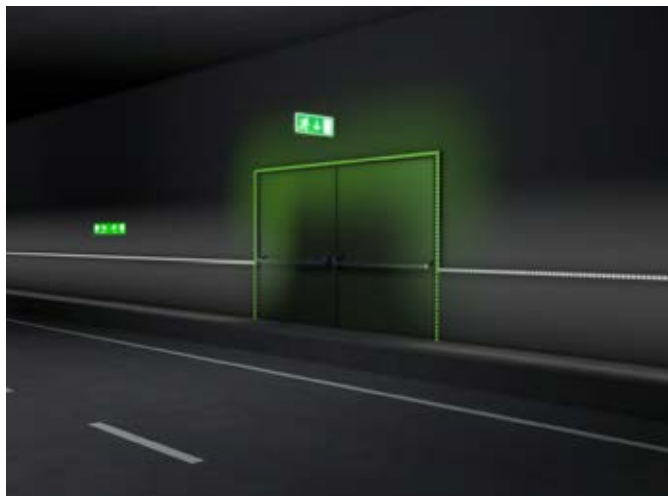
Item no. 176955

Assembly equipment for rent

Item no.	Description
138524	LaneLED cable reel trolley for cable reel max. Ø 500×500
176955	Wall scanner for detecting iron
860565	Crimping tool mechanical for current collector/system cable
179280	Battery pack 24V, 7.2Ah

Other versions on request

Use and application possibilities



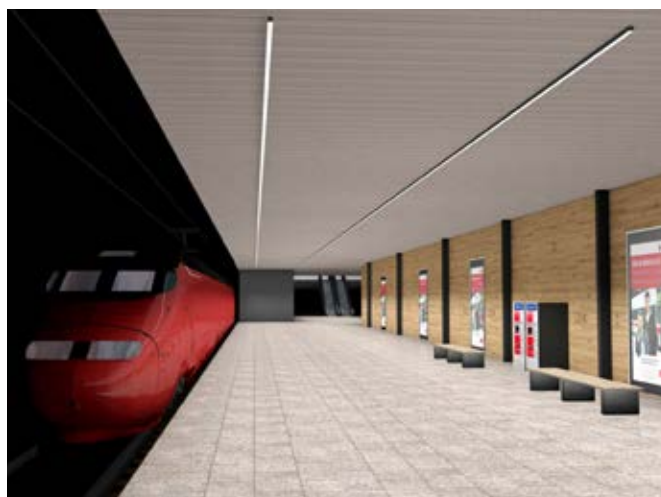
- to signalise escape routes in road tunnels



- 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



Sembrancher railway station (underpass: LaneLED WALL, stairs: LaneLED INOX42)



Sembrancher railway station (ceiling: LaneLED WALL, staircase: LaneLED INOX42)



Car park Troistorrents



Pedestrian bridge Brügg



Cycle path Ittigen



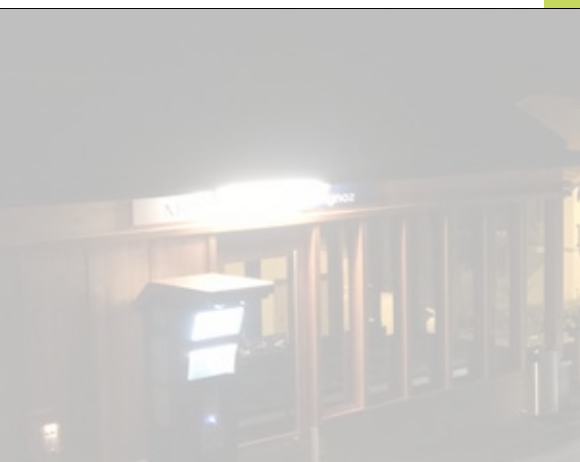
LaneLED WALL production in Rheineck (CH)

GET IN TOUCH WITH US

News about the assortment and specific solutions
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We reserve the right to make technical modifications. V0918



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