

# Clever Light<sup>®</sup>

2025



Emergency Lighting Solution

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# ASM Security Ltd.

At the forefront of Hungary's safety market, our company is dedicated to providing cutting-edge technology to ensure your safety.

Our team of highly qualified experts is committed to customer-centric innovation. This dedication has led us to develop and manufacture our own state-of-the-art emergency Clever Light System. Today, we offer an extensive range of next-generation luminaires along with comprehensive services.

Our luminaires feature energy-efficient, environmentally friendly LED technology, making them ideal for buildings with high aesthetic standards. Designed for versatile installation, our lights can be seamlessly integrated into ceilings or sidewalls, either visibly or concealed.

Clever Light systems are designed to meet various requirements, offering options such as self-contained batteries, 230V central batteries, and since 2020, 24V central batteries. Our systems are available with both wired and wireless self-contained batteries, central batteries (230V AC, 230V AC/DC, 24V DC, Wireless), and can be easily programmed and monitored through Clever Light Control Panels.

Choose Clever Light for innovative, efficient, and reliable safety solutions.



Our addressable systems streamline power supply and communication with the main unit through a single cable. Thanks to the two-way data stream, individual lights or groups of lights can be controlled via emergency control panels. Upon request, we can provide luminaires with customized pictograms. Additionally, Eulumdat format photometric data files are available, compatible with lighting design programs like Dialux.

Our products are renowned not only in Hungary but also in international markets. We proudly serve partners in the UAE, Qatar, Saudi Arabia, Israel, and numerous countries across the Middle East, North Africa, Sri Lanka, and nearly every European Union country. Choose our addressable systems for unparalleled control and customization in your lighting solutions.

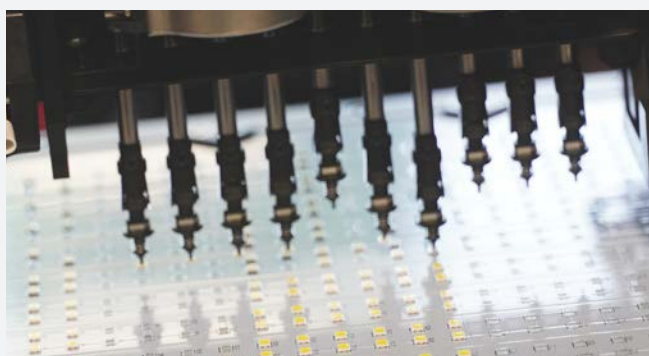




# Production

The Clever Light intelligent emergency systems are designed and produced by ASM Security Ltd.

Our 3700 m<sup>2</sup> production hall in Szolnok is where we manufacture intelligent control panels, emergency lights, exit sign luminaires, and modules. Using automatic surface-mount technology, we ensure the precision and reliability of our lamp panels, minimizing human error. Our manufacturing machines can handle 160,000 parts per hour, producing 1,500-4,500 piece devices within an 8-hour shift. The final assembly of the lamps is performed manually, with panels programmed during assembly and rigorously tested to meet strict quality standards.







Al Thumama Stadium, Doha, Qatar



Al Rayyan Stadium, Doha, Qatar



Keflavik International Airport, Keflavik, Iceland





Erele Mall, Budapest, Hungary



Zugló city center, Budapest, Hungary



Eagle Ottawa, Szolnok, Hungary





Ericsson Headquarters, Budapest, Hungary



EYOF Sport Centre, Győr, Hungary



Haladás Stadium, Szombathely, Hungary









# ADDRESSABLE SYSTEMS



# CBS 230 AC/DC control panel

**Type:** Addressable 230V AC/DC control panel, optional sub-panel

**Battery pack variations:** 18pcs 98Ah, 78Ah, 42Ah, 28Ah, 20Ah seal lead acid long life batteries

**Battery pack voltage:** DC230V

**Mains voltage:** AC 120-240V 50/60Hz

**Max. input current:** 50A

**Output voltage:** AC/DC 230V (AC is normal operation, DC is emergency operation)

**Max. output current:** 50A @ 1hour

**Max. 72-line output with 20pcs addressable devices/line, total number of lights:** Max 1200/panel

**Controller module slot number: max. 20pcs, change-over module types:** CL-LD-A 4x1.5A, CL-LD-A 2x3A, CL-LD-A 1x6A

**Battery charger module:** CL-BC 4A max. 2 pcs

**Cable inlets:** 7 x M20, 30 x M25, 4 x M30

**Cable connection for circuits:** Max. 2.5mm<sup>2</sup> cross-section solid or sleeved twisted wire

**Light addressing:** Automatic, based on factory unique identification number

Clever Light commissioning, graphic or end-user software compatibility

**Mounting:** Standing on floor, must be attached the main cabinet with 4 screws to wall, battery cabinets with 4 screws to wall and 4 screws to floor. Main cabinet and battery cabinet must be attached to each other too.

5" touch screen for checking system information of the last 2000 events

TCP / IP network communication between 254 pcs panels, RS485 ring network communication between 32 pcs panel

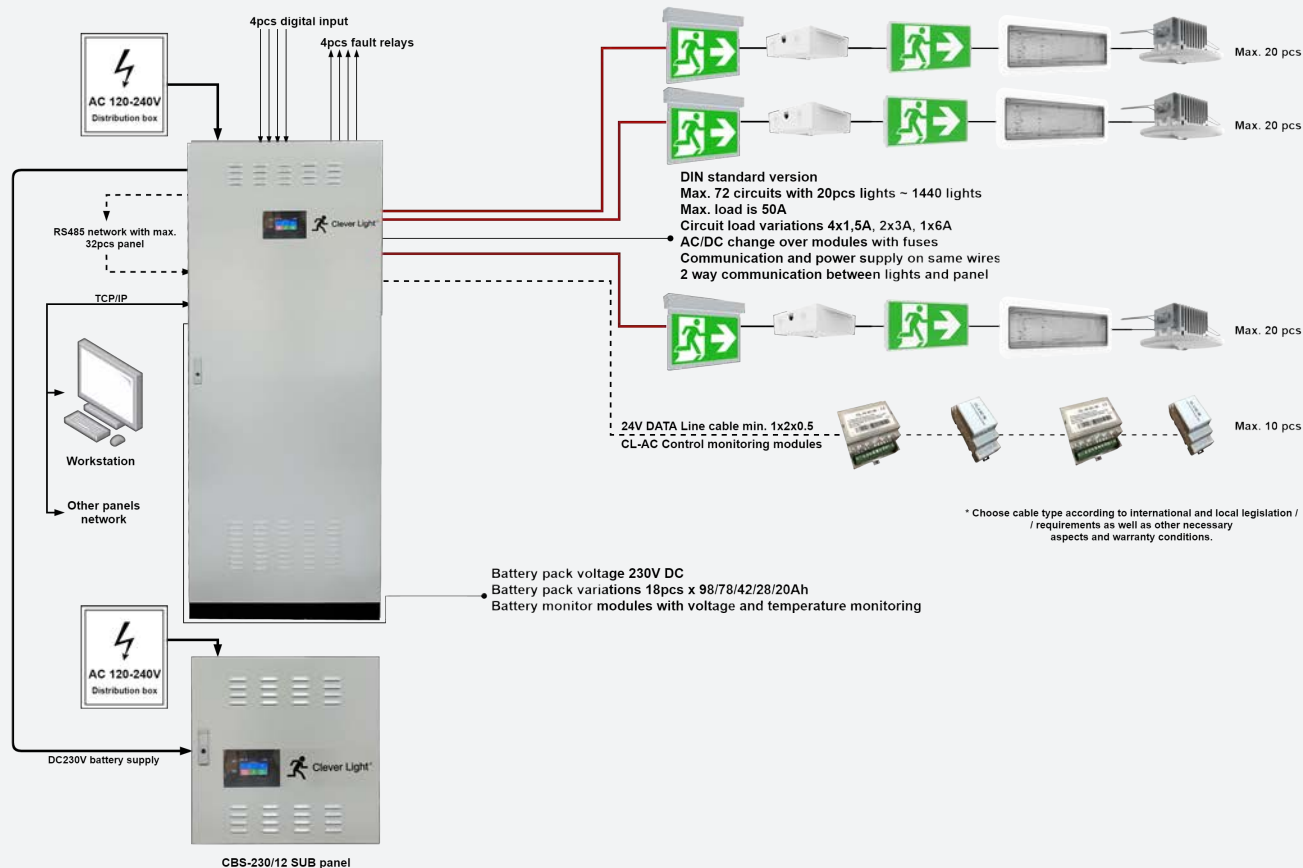
10 pcs phase monitor modules for monitoring lighting distributors (CL-3AC IN, CL-10AC IN, CL-10POT IN) with 24V DATA line communication (max load 500mA, max length 300m)

4 pcs configurable fault relays, 4 pcs configurable potential free input on master panel board

**Housing color and material:** Grey metal

**Constant nominal ambient temperature range:** 0°C < T<sub>a</sub> < 25°C

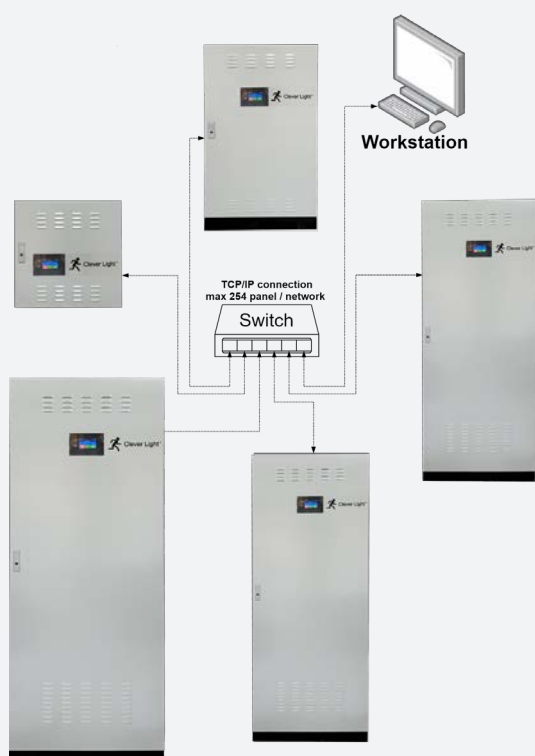
**Warranty:** 5-years repair warranty



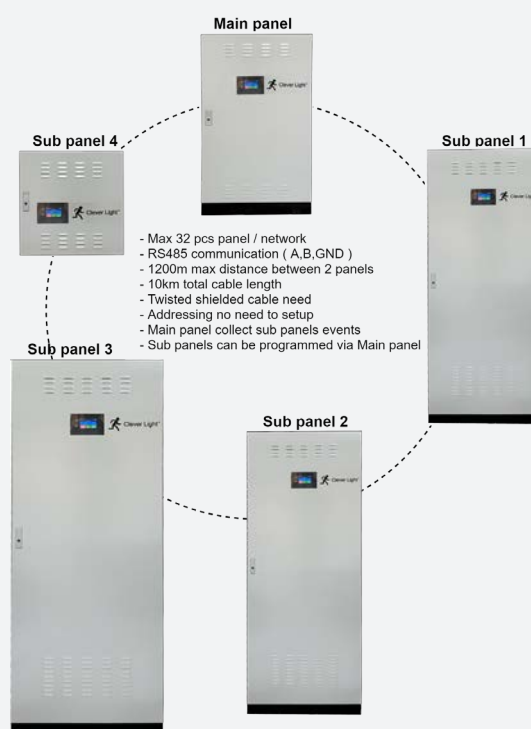
PANEL TYPE	CBS-230-72			CBS-230-44		CBS-230-24			CBS-230-12	CBS-230-12/SUB
INPUT VOLTAGE	120-240 AC									
OUTPUT VOLTAGE	120-240 AC standby mode, 230V DC emergency mode									
MAX INPUT CURRENT	50A			50A		50A			15A	15A
NUMBER OF BATTERIES	18pcs									-
BATTERIES CAPACITY	*98Ah	78Ah	42Ah	42Ah	28Ah	98Ah	78Ah	42Ah	20Ah	-
MAX LOAD 1 HOUR	50A	40A	20A	20A	15A	50A	40A	20A	11A	-
MAX LOAD 3 HOUR	25A	20A	9A	9A	7A	25A	20A	9A	5A	-
NUMBER OF LIGHTS	1200			880		480			240	320
MAX MODULE SLOT	20			12		8			4	4
NUMBER OF CIRCUITS	72			44		24			12	16
CHANGE-OVER MODULES	4x1,5A, 2x3A, 1x6A									
BATTERY CHARGERS (4A) MAX. QUANTITY	2	2	1	1	1	2	2	1	1	-
MONITOR MODULES	3 phase, 10 phase and 10 potential free in modules, max. 10pcs on 24V DATA line communication cable.									
DISPLAY	5" LCD									
SOFTWARE	CL-UNI Commissioning/End-user/Graphics softwares									
NETWORK COMMUNICATION	TCP/IP with 254pcs panel, RS485 with 32pcs panel									
EXTERNAL INPUT/OUTPUT	4 digital input, 4 relay input									
PROTECTION	IP20/54 option									
DIMENSIONS	2100x800x430			2100x800x430		2100x800x430			1200x600x330	600x600x330
TOTAL WEIGHT	704kg	562kg	295kg	340kg	250kg	694kg	552kg	404kg	142kg	25kg

### Network variations

#### TCP/IP network



#### RS485 network



# Change-over modules, battery charger and battery monitor

The CL-LD-A change-over modules controll the circuits and communicate with the addressable luminaries, 3 different types are available. AC/DC voltage conversion and fuse protection for each circuits. Power cables are used for data transmission as well, no additional data line is required.

AC voltage range:	120V-240V 50/60Hz
DC voltage range:	176V-255V
Number of circuit:	4
Current limit for circuit:	1,5A
Max. connected number of lights:	4x20

CL-LD-A 4x1,5A



AC voltage range:	120V-240V 50/60Hz
DC voltage range:	176V-255V
Number of circuit:	2
Current limit for circuit:	3A
Max. connected number of lights:	2x20

CL-LD-A 2x3A



AC voltage range:	120V-240V 50/60Hz
DC voltage range:	176V-255V
Number of circuit:	1
Current limit for circuit:	6A
Max. connected number of lights:	30

CL-LD-A 1x6A



The CL-BC-4A is a microprocessor controlled battery charger module with built-in bus communication with battery monitor modules. All modules have operation and fault status signal led.

AC voltage range:	120V-240V 50/60Hz
Max. DC output voltage:	252V
Max. output current:	4A
Max. number of modules/panel:	2
Number of connected batteries:	18

CL-BC-4A



The CL-BC/M module can monitor the voltage and temperature of each individual battery block. All datas can be read on the master panel's LCD and with software too. If any battery fails, the battery monitor automatic detect and communicate to master panel.



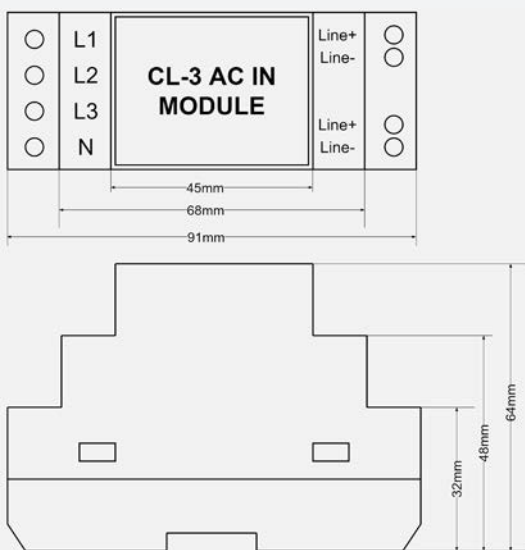
# CL-3 AC IN control module

- Snaps onto standard C-rail
- 24V DATA communication between modules and control panel
- Up to 10 modules can be connected to one control panel
- Max. communication cable length 1200m (1x2x1.5mm<sup>2</sup>)
- Total max. data cable load is 500mA
- Unbound communication cable structure (junction points are available)
- 3 phase-neutral monitoring input
- Each input control up to 3 different lamp groups
- Unique identifier for each module
- Compatible with all Clever Light AC/DC control panels
- Monitored input voltage AC 110-230V
- Current consumption: 35mA
- Rated power: 0,85W

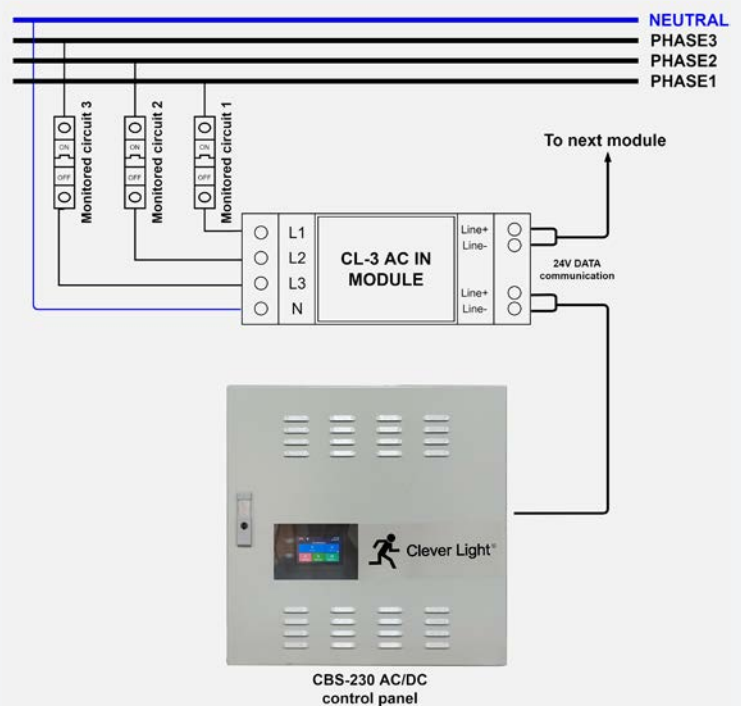


The CL-3AC IN voltage monitor input module is suitable for monitoring 3 normal lighting circuits in building distribution cabinets. In case of monitored phase loss, it's activated and send signal to master panel. Each input change can control 3 different lamp groups and 1 fire group. Power and data communication signal are in the same 2 core wire.

## DIMENSIONS



## SCHEMATIC DIAGRAM



# CL-AM AC/DC address module

**Unit:** Addressable module for 3rd party lights for AC/DC system

**Communication:** Only with CBS-230 control panels

**Addressing:** Automatic, based on factory unique identification number

**Addressable module current values:** 4–30W, 8–100W, 30–200W

**Mounting :** With bolts into light cabinet or in junction box

**Connected light load range:** 3W-100W

**External phase input:** AC 120-240V 50-60Hz

**Housing:** Polycarbonate

**Size:** 99mm x 41mm x 30mm

**Cabling:** Max. 2.5mm<sup>2</sup> twisted or solid wire

**Operation:** Standby, maintained, emergency

**Switching time:** <500ms

**Mains supply normal operation:** AC 120-240V 50-60Hz

**Mains supply emergency operation:** DC 230V

**Input current:** 11 mA

**Rated power:** 3 VA

**Constant nominal ambient temperature range:** 0°C<Ta<45°C

**Protection:** IP20

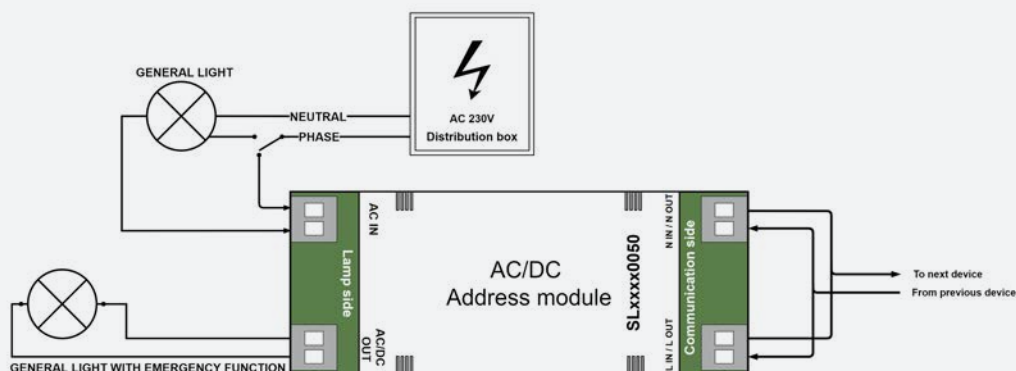
**Certification:** CE, UL

**Warranty:** 5 years repair warranty

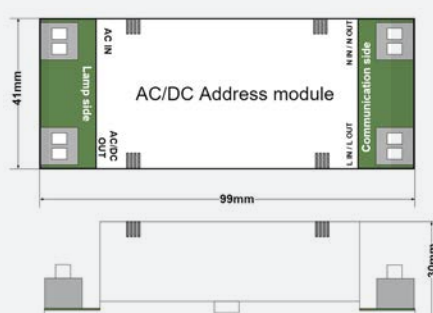


The module enables addressable control of 3rd-party lights in AC/DC systems with CBS-230 panels. It supports automatic addressing via a unique factory ID and operates with connected light loads from 3W to 100W. It mounts with bolts in light cabinets or junction boxes and features external phase input of AC 120-240V. The polycarbonate housing measures 99mm x 41mm x 30mm and supports standby, maintained, and emergency modes. It operates on AC 120-240V or DC 230V with <500ms switching time. Input current is 11mA with 3VA rated power. It supports 0°C to 45°C ambient temperatures and is IP20 rated. Certification includes CE and UL.

SCHEMATIC DIAGRAM



DIMENSIONS



Use copper wire only  
14 - 18 AWG, sol/str  
Max. Ø 2,5 mm<sup>2</sup>



# CL-AM AC/DC address module dali

**Unit:** Addressable DALI communication module for 3rd party lights

**Communication:** Only with CBS-230 control panels

**Addressing:** Automatic, based on factory unique identification number

**Mounting:** With bolts into light cabinet or in junction box

DALI bus input connection without address reservation

Isolated DALI bus output connection to the controlled light

Warranty: 2 years repair warranty

**Housing:** Polycarbonate

**Size:** 99mm x 41mm x 30mm

**Cabling:** Max. 2.5mm<sup>2</sup> twisted or solid wire

**Operation:** Pass-through DALI command and overwrite

**Mains supply normal operation:** AC 120-240V 50-60Hz

**Mains supply emergency operation:** DC 230V

**Input current:** 11 mA

**Rated power:** 3 VA

**Constant nominal ambient temperature range:** 0°C < T<sub>a</sub> < 45°C

**Protection:** IP20

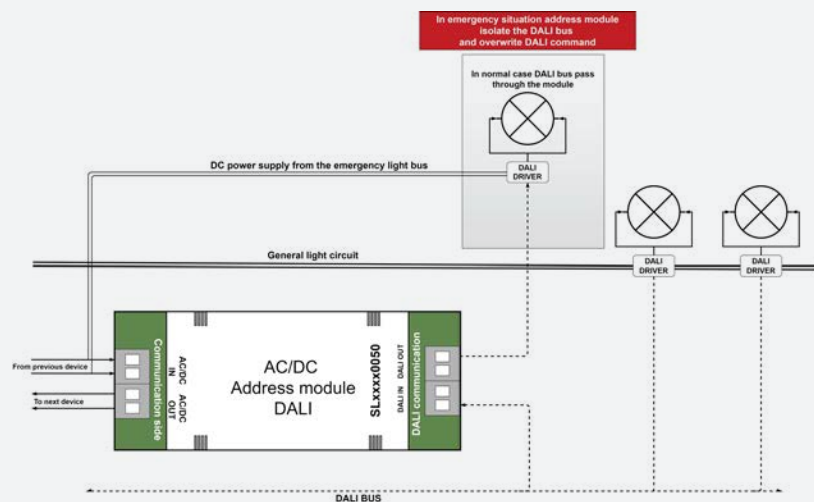
**Certification:** CE, UL

**Warranty:** 5 years repair warranty

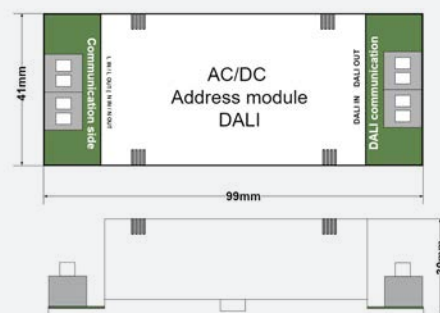


The DALI-3AC communication module enables addressable control of 3rd-party lights with CBS-230 panels. It supports automatic addressing via a unique factory ID and isolated DALI bus output. It mounts with bolts in light cabinets or junction boxes and connects via DALI bus without address reservation. The housing is polycarbonate, measuring 99mm x 41mm x 30mm. It operates on AC 120-240V or DC 230V with 11mA input current and 3VA rated power. It supports a 0°C to 45°C ambient temperature range and is IP20 rated. Certification includes CE and UL.

SCHEMATIC DIAGRAM



DIMENSIONS



Use copper wire only  
14-18 AWG, sol/str  
Max. Ø 2,5 mm<sup>2</sup>



# CL-10 AC IN control module

Snap onto standard C-rail

24V DATA communication between modules and control panel

Up to 10 modules can be connected to one control panel

Max. communication cable length 300m (1x2x2.5mm<sup>2</sup>)

Total max. data cable load is 500mA

Unbound communication cable structure (junction points are available)

10 individual phase-neutral monitoring input

Each input controls up to 3 different lamp groups

Unique identifier for each module

Compatible with all Clever Light AC/DC control panels

Monitored input voltage AC 110-230V

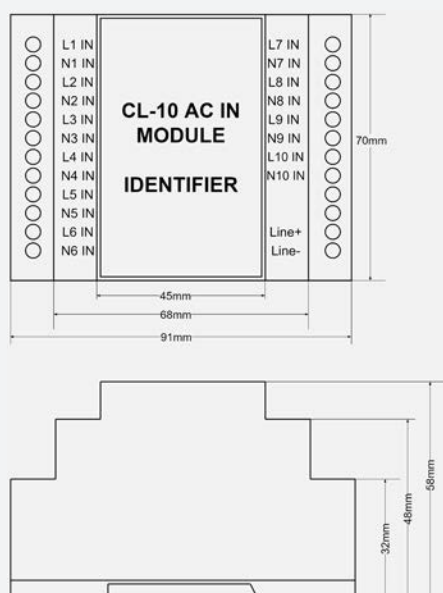
Current consumption: 35mA

Rated power: 0,85W

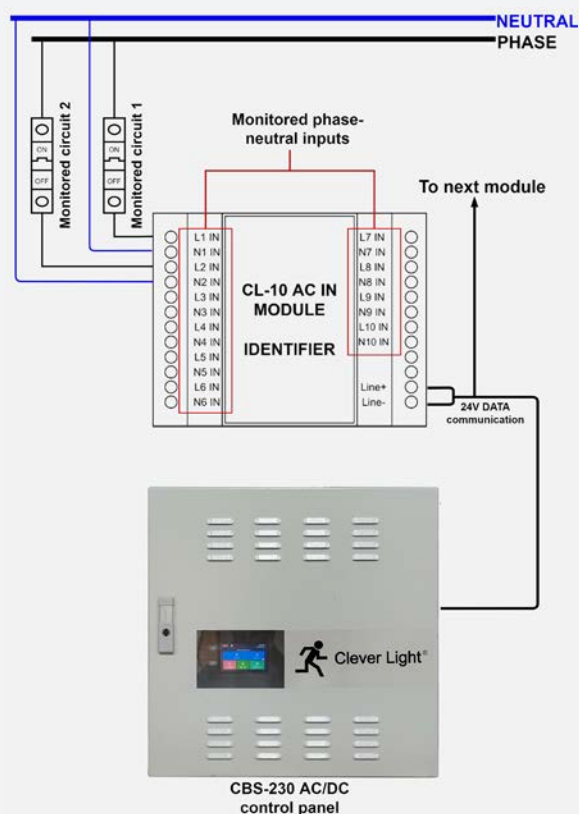


The CL-10 AC IN voltage monitor input module is suitable for monitoring 10 normal lighting circuits in building distribution cabinets. In case of monitored phase loss, it's activated and send signal to master panel. Each input change can control 3 different lamp groups and 1 fire group. Power and data communication signal are in the same 2 core wire.

## DIMENSIONS



## SCHEMATIC DIAGRAM





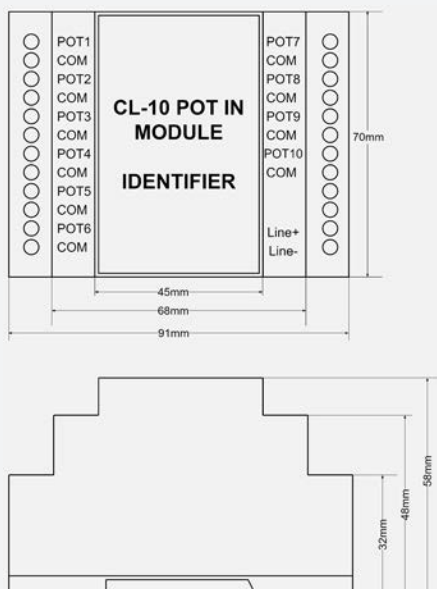
# CL-10 POT IN control module

Snaps onto standard C-rail  
 24V DATA communication between modules and control panel  
 Up to 10 modules can be connected to one control panel  
 Max. communication cable length 300m (1x2x1.5mm<sup>2</sup>)  
 Total max. data cable load is 500mA  
 Unbound communication cable structure(junction points are available)  
 10 potential free monitoring input, normally open-closed contact  
 Each input controls up to 3 different lamp groups  
 Unique identifier for each module  
 Compatible with all Clever Light AC/DC control panels  
 Current consumption: 35mA  
 Rated power: 0,85W

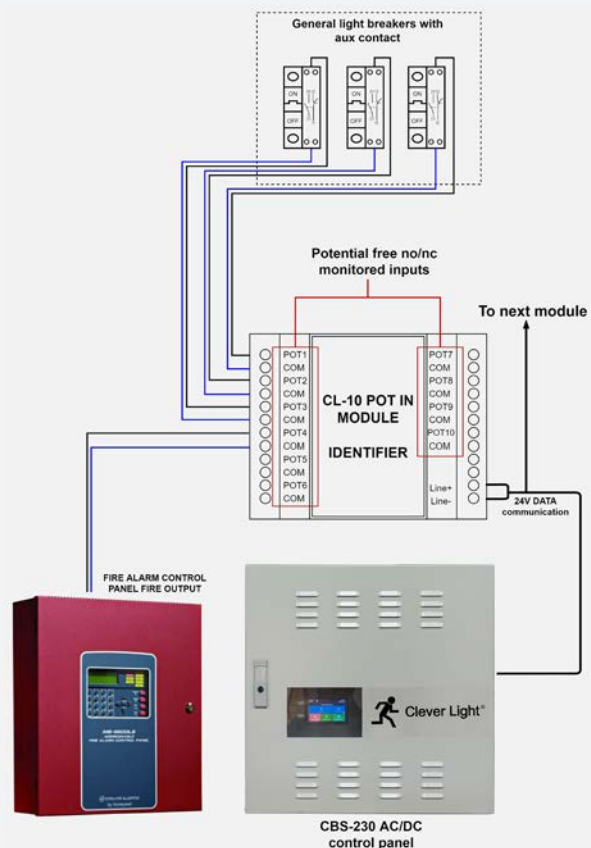


The CL-10 POT IN input module is suitable for monitoring 10 potential free normally open or close contact. In case of monitored input changed it's activated and send signal to master panel. Each input change can control 3 different lamp groups and 1 fire group. Power and data communication signal are in the same 2 core wire.

## DIMENSIONS



## SCHEMATIC DIAGRAM



# CL 601-606 control panel

**Type:** Addressable 230V AC central battery control panel

**Light addressing:** Automatic, based on factory unique identification number

**Panel variations:** 601 - 3 line outputs, 602 - 6 line outputs, 603 - 9 line outputs, 604 - 12 line outputs, 605 - 15 line outputs, 606 - 18 line outputs

**Max. 650W load / circuit, max. 20pcs addressable light / circuit**

**Total load:** 601 - 2kW, 602 - 4kW, 603 - 6kW, 604 - 8kW, 605 - 10kW, 606 - 12kW

Total number of lights: 601 - 60, 602 - 120, 603 - 180, 604 - 240, 605 - 300, 606 - 360

Clever Light commissioning, graphic or end-user software

**Mounting:** Sidewall

**Warranty:** 5-years repair warranty

**Housing color and material:** Black metal

7" touch screen for checking system information of the last 2000 events

TCP / IP network communication between 254 pcs panels

RS485 ring network communication between 32 pcs panel

RS232 communication with Riello UPS

32 pcs phase monitor modules for monitoring lighting distributors

4 pcs configurable fault relays

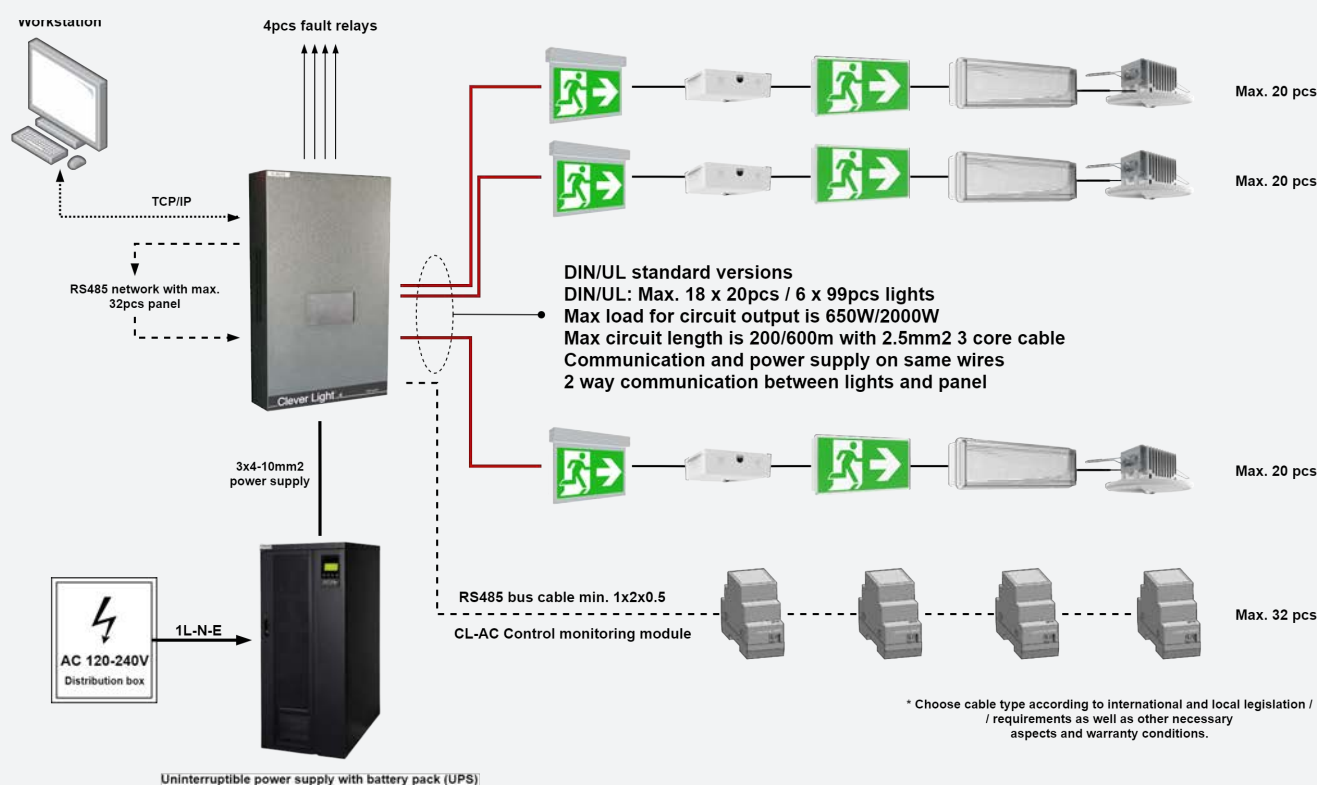
**Dimensions:** 650mm x 403mm x 110mm

**Cable connection:** Max. 10mm<sup>2</sup> for main input, max. 2.5mm<sup>2</sup> for line outputs

**Mains voltage:** AC 120-240V 50/60Hz

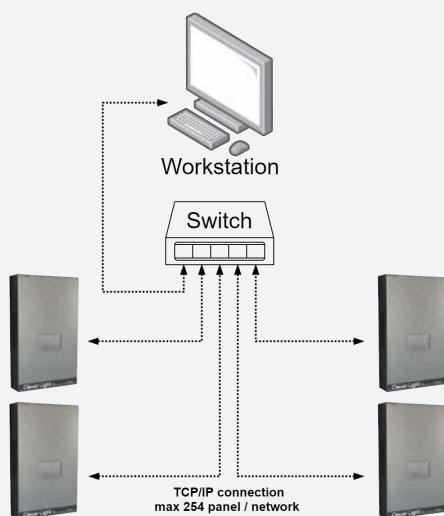
**Max. input current:** 601 - 6A, 602 - 12A, 603 - 18A, 604 - 24A, 605 - 30A, 606 - 36A

**Constant nominal ambient temperature range:** 0°C < T<sub>a</sub> < 25°C

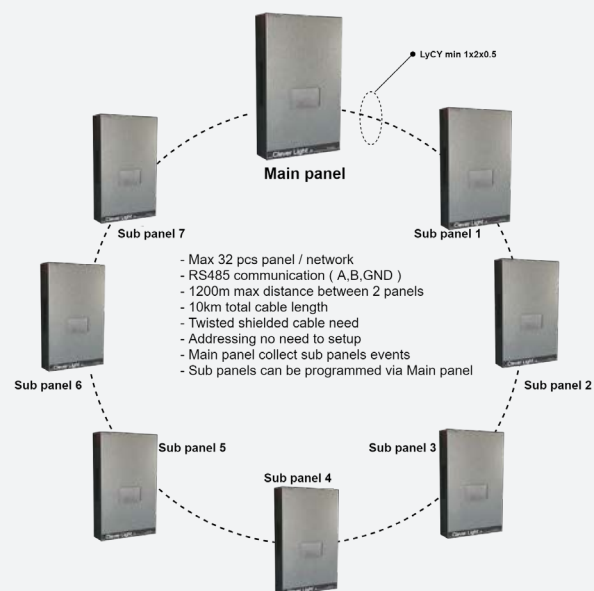


## Network variations

## TCP/IP network



## RS485 network



PANEL TYPE	CL-601	CL-602	CL-603	CL-604	CL-605	CL-606
INPUT VOLTAGE	120-140 AC					
OUTPUT VOLTAGE	120-140 AC					
MAX INPUT CURRENT	6A	12A	18A	24A	30A	36A
NUMBER OF LIGHTS	60	120	180	240	300	360
NUMBER OF CIRCUITS	3	6	9	12	15	18
MAX. CIRCUIT LOAD	3A					
MONITOR MODULES	Max. 32pcs CL-AC control modules on RS485 bus cable					
DISPLAY	7" LCD					
SOFTWARE	CL-UNI Commissioning/End-user/Graphics softwares					
NETWORK COMMUNICATION	TCP/IP with 254pcs panel, RS485 with 32pcs panel					
EXTERNAL INPUT/OUTPUT	4 digital input, 4 relay input					
PROTECTION	IP20					
DIMENSIONS	650x403x110					

# CL-AC 230 control module

## Snap onto standard C-rail

## RS485 communication between modules and control panel

## Up to 32 modules can be connected to one control panel

Max. communication cable length 1200m (1x2x0.5mm<sup>2</sup> twisted pair)

Selectable 1 phase-neutral or potential-free NO-NC input monitoring

## Controls up to 3 different lamp groups

Unique identifier for each module

Compatible with Clever Light 100-400 , CL100 RF/MB, CL601-606 and CL24V

CB control panels

Input voltage AC 110-230V

**Current consumption:** 11mA

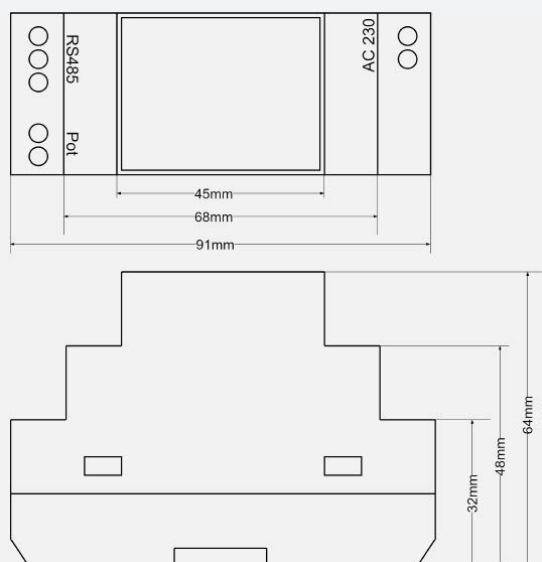
**Rated power:** 2.5VA

**Battery:** 6V 80mAh

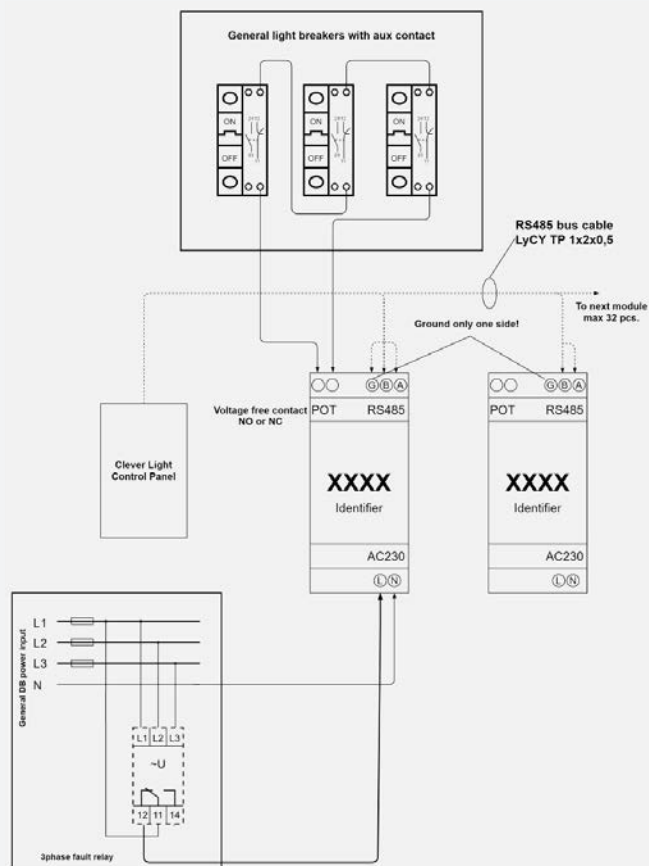


The CL-AC230 voltage monitor input module is suitable for monitoring normal lighting circuits in building distribution cabinets. In case of monitored phase loss or change of the potential-free input it's activated and send signal to master panel. It can control 3 different lamp groups and 1 fire group. In the event of a power failure, it will operate on its internal battery until it transmits signals.

## DIMENSIONS



## SCHEMATIC DIAGRAM



# CL-AM/CB Address module

**Unit:** Addressable, central battery

**Addressing:** Automatic, based on factory unique identification number

**Mounting:** With bolts into light cabinet or in junction box

**Connected light load range:** 3W-100W

**Monitored input:** AC 120-240V 1 phase (disable option in the software)

**General light switch input:** AC 120-240V 1 phase

**Warranty:** 5 years repair warranty

**Housing:** Polycarbonate

**Size:** Outer diameter x Inner diameter x Height: 163mm x 35mm x 47mm

**Cabling:** Max. 2.5mm<sup>2</sup> twisted or solid wire

**Operation:** Standby, maintained, emergency

**Switching time:** <500ms

**Mains supply:** AC/DC 120-240V 50-60Hz

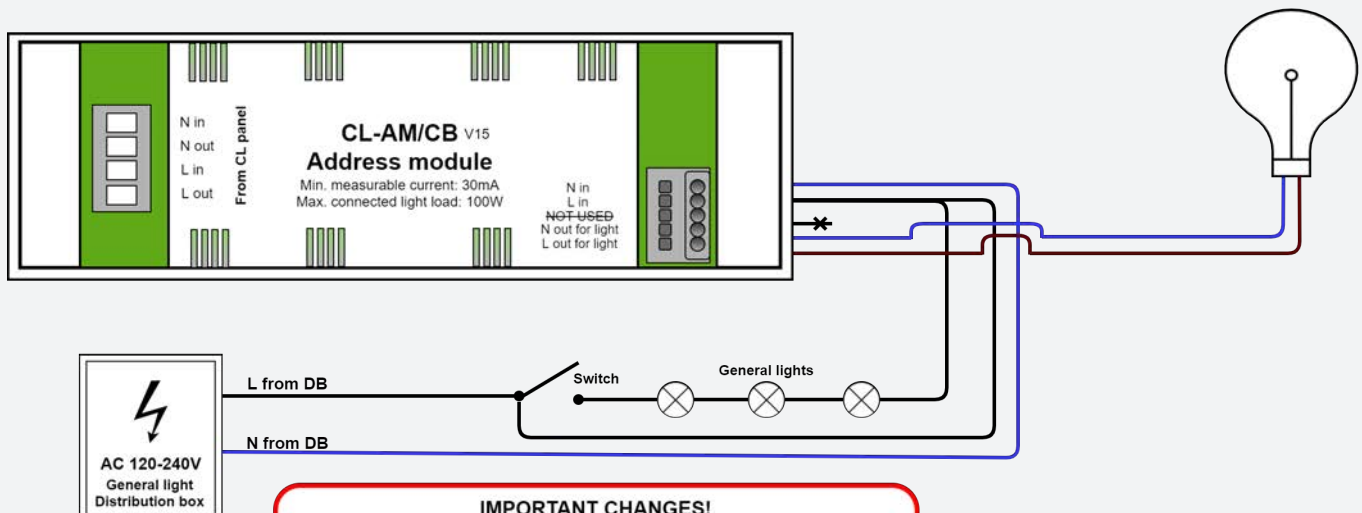
**Input current:** 11 mA

**Rated power:** 3 VA

**Constant nominal ambient temperature range:** 0°C<T<sub>a</sub><45°C



The module automatically switches the lamp to emergency mode when the phase input is configured to monitoring function. This input also can be configured to general light switch phase input too.



### IMPORTANT CHANGES!

Switch L input for general use is not available anymore. "L in, N in" inputs can use for monitored phase input and light switch input too. The input mode settings are in programming software. It can be selected for phase detection or phase loss mode. Only one mode can be use in the future.





# CPS-Central Power Supply

In the event of power failure or power fluctuation, the central power supply ensures the protection and operation of electronic devices. The CPS charges the battery and switches the battery backup, when the mains power is depleted. There are several types available to suit your needs. CPS is related to EN50171.



Power: 1/3/5/8/10 kW

Running time: 1-3 hours





# CL 100-400 control panel

**Type:** Addressable control panel for self-contained battery lights

**Variations:** CL100, CL200, CL300, CL400

**Light addressing:** Automatic, based on factory unique identification number

**Communication:** 2 way between lights and panel with 2 core cable

**Output:**

CL100 - 1 output with 99 devices,

CL200 - 2 outputs with 198 devices,

CL300 - 3 outputs with 297 devices,

CL400 - 4 outputs with 396 devices.

Clever Light commissioning, graphic or end-user software

**Mounting:** Sidewall

**Warranty:** 5-years repair warranty

**Housing color and material:** White plastic, grey-white metal

5" touch screen for checking system information of the last 2000 events

TCP / IP network communication between 254 pcs panels

32 pcs phase monitor modules for monitoring lighting distributors

4 pcs configurable fault relays

**Dimensions:** 331mm x 241mm x 113mm

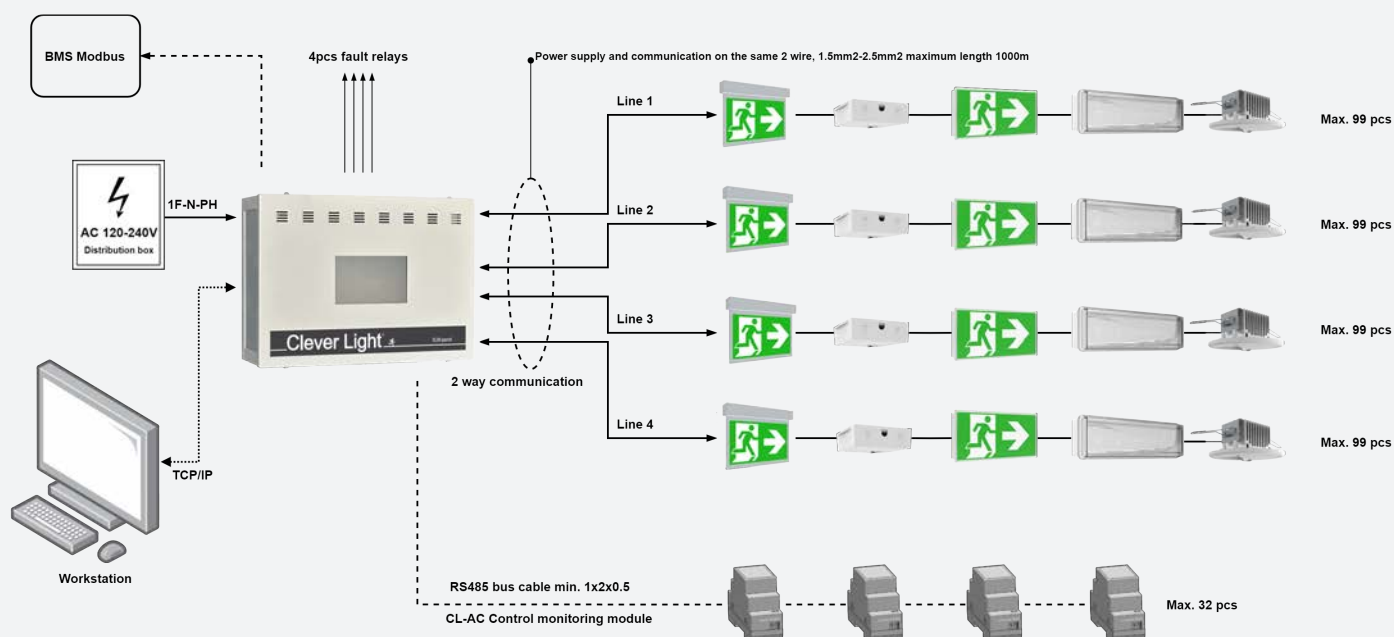
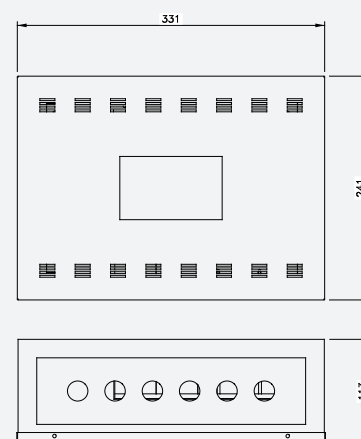
**Cable connection:** Max. 2.5mm<sup>2</sup> cross-section solid or sleeved twisted wire

**Mains voltage:** AC 120-240V 50/60Hz

**Max. input current:** 12A

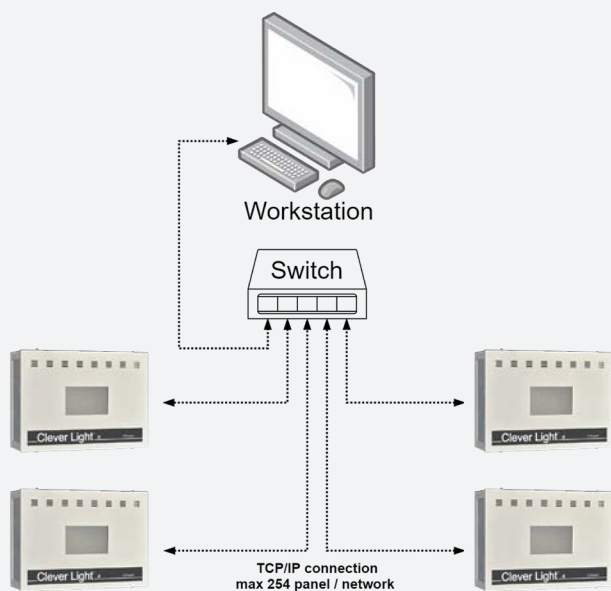
**Output voltage:** AC 120-240V 50/60Hz with communication signal

**Constant nominal ambient temperature range:** 0°C < T<sub>a</sub> < 25°C

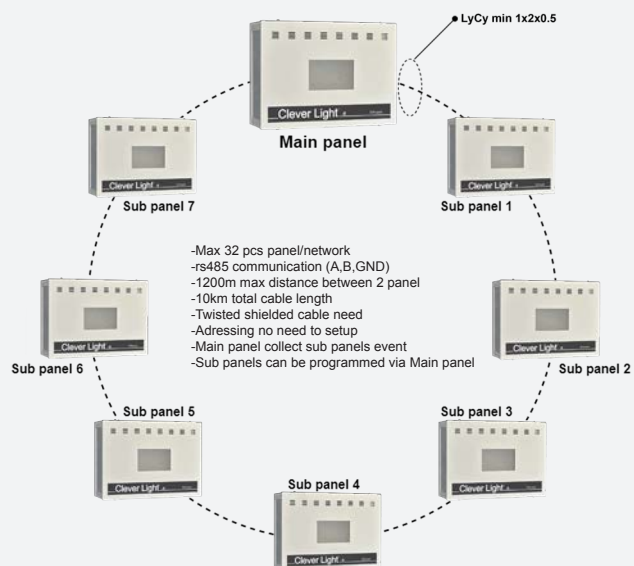


## Network variations

### TCP/IP network



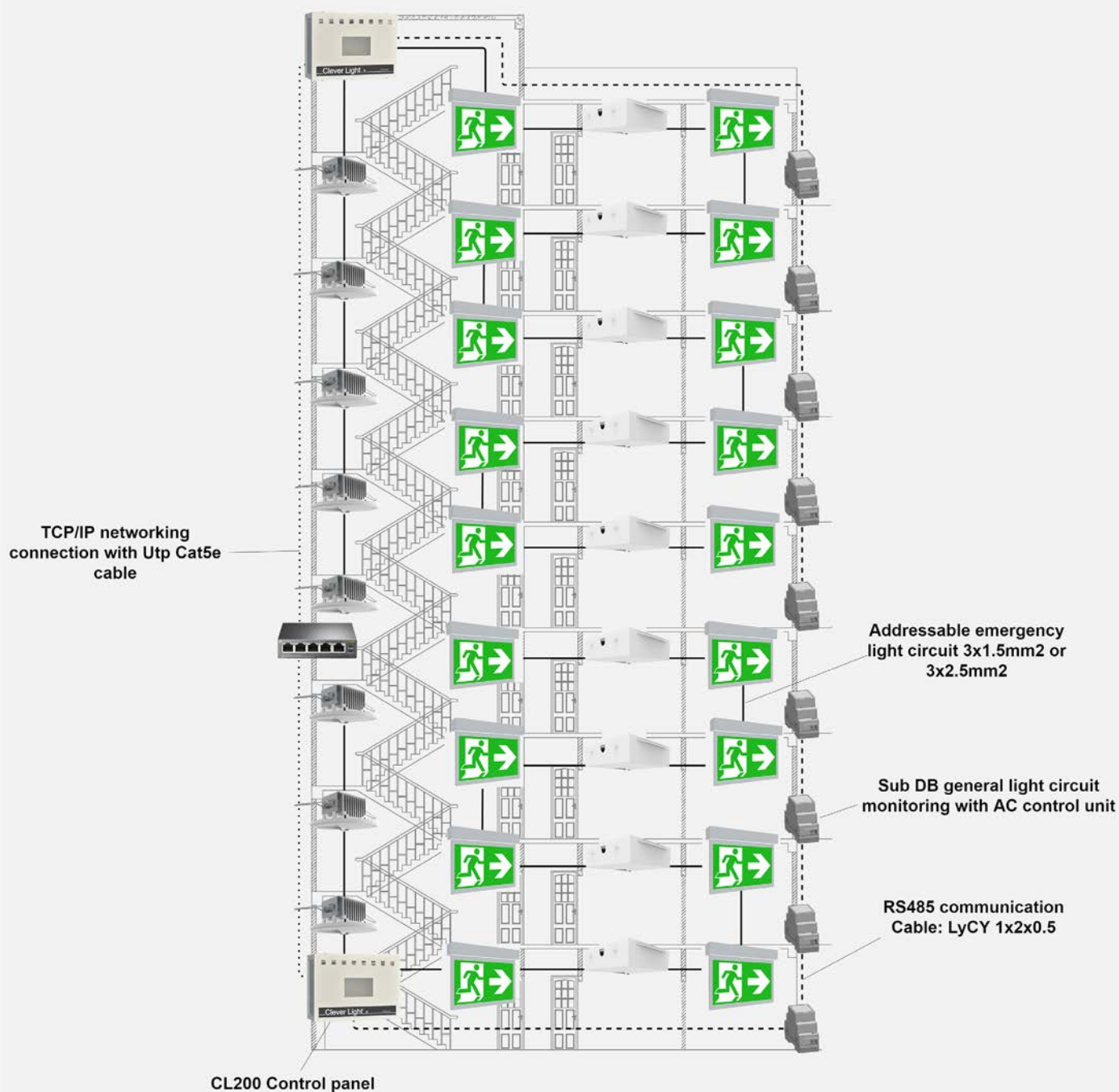
### RS485 network



PANEL TYPE	CL-100	CL-200	CL-300	CL-400
INPUT VOLTAGE	120-240 AC			
OUTPUT VOLTAGE	120-240 AC			
MAX INPUT CURRENT	12A			
NUMBER OF LIGHTS	99	198	297	396
NUMBER OF CIRCUITS	1	2	3	4
MAX. CIRCUIT LOAD	3A			
MONITOR MODULES	Max. 32pcs CL-AC control modules on RS485 bus cable			
DISPLAY	5" LCD			
SOFTWARE	CL-UNI Commissioning/End-user/Graphics softwares			
NETWORK COMMUNICATION	TCP/IP with 254pcs panel, RS485 with 32pcs panel			
EXTERNAL INPUT/OUTPUT	4 digital input, 4 relay input			
PROTECTION	IP20			
DIMENSIONS	331x241x113			

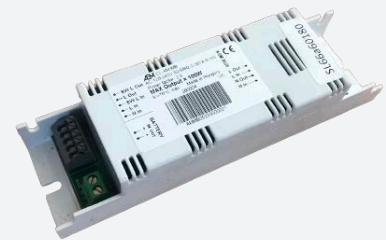
**Network system example, multiple group control**

In case of short circuit the CL-AC control panel sends a signal to the Control Panel, and the Control Panel transmits the signal via TCP/IP network to the other control panels.

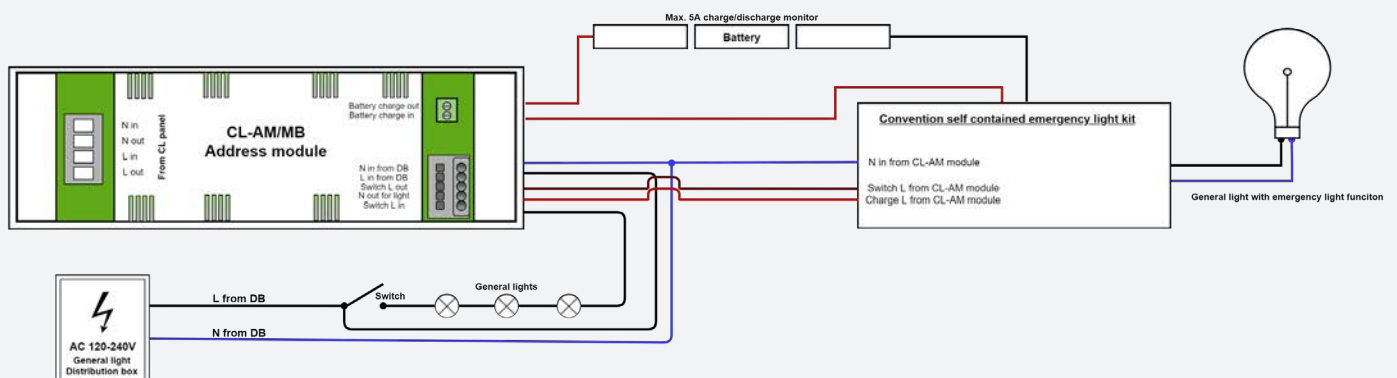


# CL-AM/MB Address module

**Unit:** Address module for 3rd party light with self contained battery  
**Addressing:** Automatic, based on factory unique identification number  
**Mounting:** With bolts into light cabinet or in junction box  
**Connected light battery charge measurement:** Max. 5A  
**Monitored input:** AC 120-240V 1 phase (must be connected)  
**General light switch input:** AC 120-240V 1 phase  
**Warranty:** 5 years repair warranty  
**Housing:** Polycarbonate  
**Size:** Outer diameter x Inner diameter x Height: 163mm x 35mm x 47mm  
**Cabling:** Max. 2.5mm<sup>2</sup> twisted or solid wire  
**Operation:** Non-maintained emergency  
**Switching time:** <500ms  
**Mains supply:** AC 120-240V 50-60Hz  
**Input current:** 11 mA  
**Rated power:** 3 VA  
**Constant nominal ambient temperature range:** 0°C < T<sub>a</sub> < 45°C



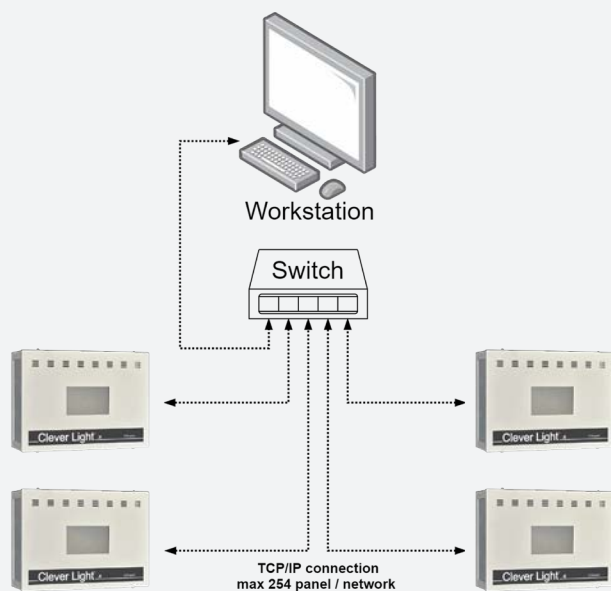
The module automatically switches the lamp to emergency mode when the monitored phase is lost. This supervised input must be connected, because the light battery charger is supply from there. In order to observe the battery charge and the status of the lamp, the positive wire of the battery must be passed through the module. The 'switch L' cable can be connected directly into the general light.



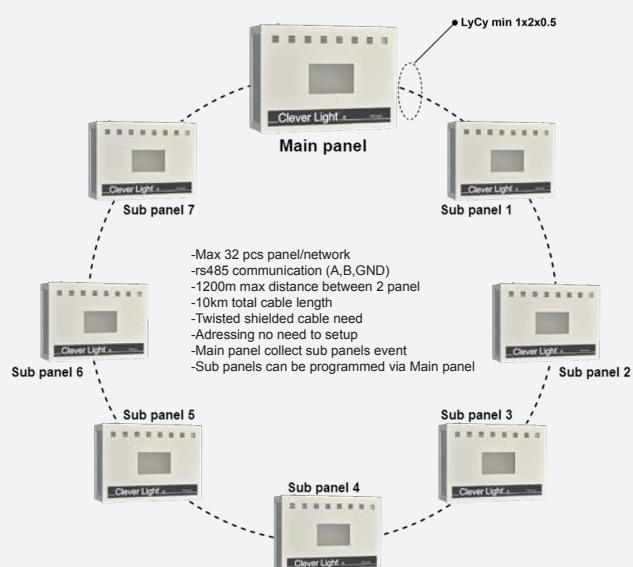


## Network variations

### TCP/IP network



### RS485 network



PANEL TYPE	CL-800/1	CL-800/2	CL-800/3	CL-800/4
INPUT VOLTAGE	120-240 AC			
OUTPUT VOLTAGE	24A			
MAX INPUT CURRENT	1A			
NUMBER OF LIGHTS	200	400	600	800
NUMBER OF CIRCUITS	1	2	3	4
MAX. CIRCUIT LOAD	68mA			
MONITOR MODULES	Max. 32pcs CL-AC control modules on RS485 bus cable			
DISPLAY	5" LCD			
SOFTWARE	CL-UNI Commissioning/End-user/Graphics softwares			
NETWORK COMMUNICATION	TCP/IP with 254pcs panel, RS485 with 32pcs panel			
EXTERNAL INPUT/OUTPUT	4 digital input, 4 relay input			
PROTECTION	IP20			
DIMENSIONS	331x241x113			

# CL-100/RF Wireless control panel

**Type:** Addressable control panel for self-contained battery lights

**Light addressing:** Automatic, based on factory unique identification number

**Communication:** Wireless mesh network data transmit on 868Mhz

**Wireless coverage:** Max. 300m in open space

**Max. number of devices:** 99 pcs wireless self-contained battery devices

**Clever Light commissioning, graphic or end-user software**

**Mounting:** Sidewall

**Warranty:** 5-years repair warranty

**Housing color and material:** White plastic, grey-white metal

**5" touch screen** for checking system information of the last 2000 events

**TCP / IP network communication between 254 pcs panels**

**32 pcs phase monitor modules for monitoring lighting distributors**

**4 pcs configurable fault relays**

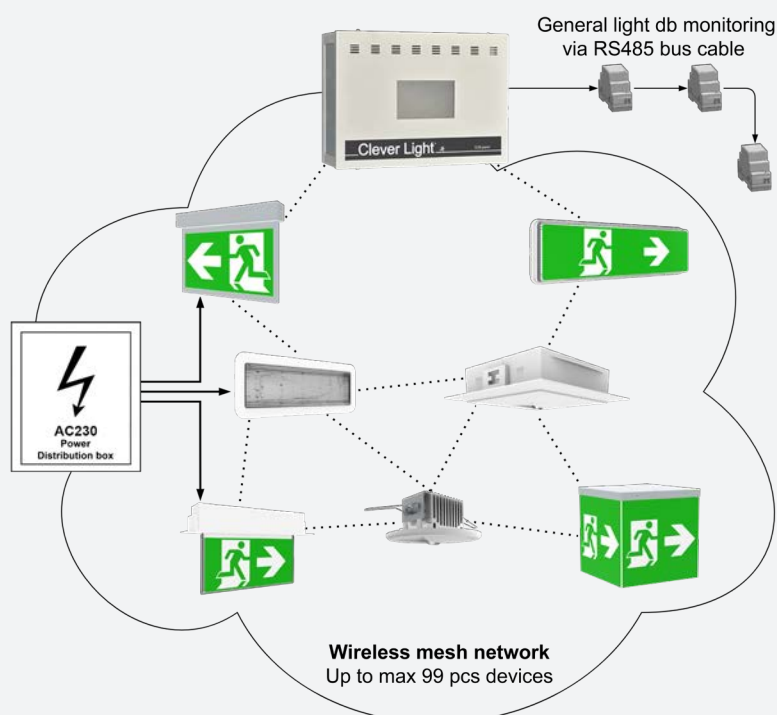
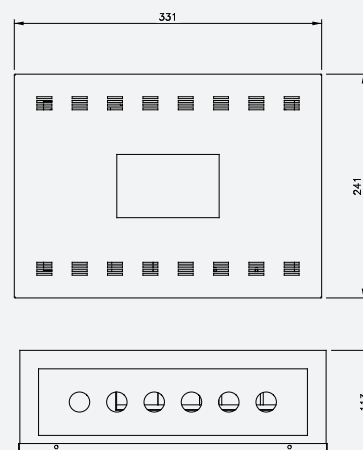
**Dimensions:** 331mm x 241mm x 113mm

**Cable connection:** Max. 2.5mm<sup>2</sup> cross-section solid or sleeved twisted wire

**Mains voltage:** AC 120-240V 50/60Hz

**Max. input current:** 0,2A

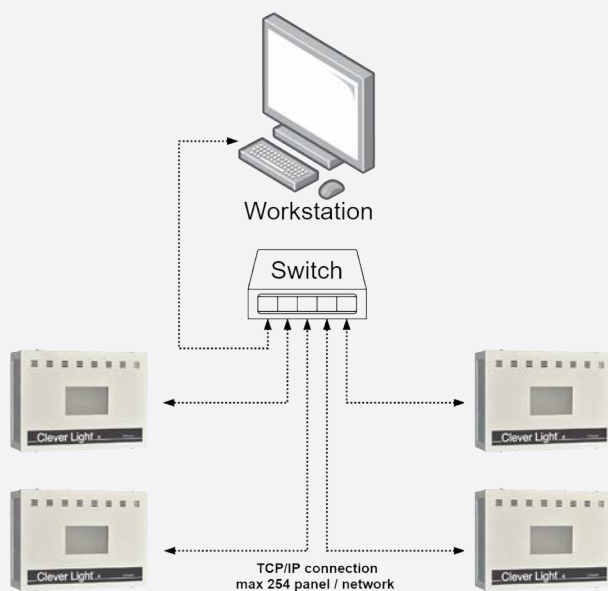
**Constant nominal ambient temperature range:** 0°C<T<sub>a</sub><25°C



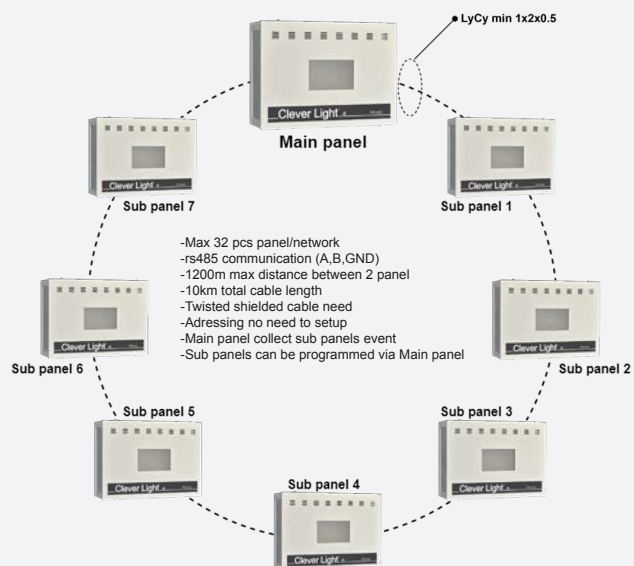


## Network variations

## TCP/IP network



## RS485 network



PANEL TYPE	CL-100RF/MB
INPUT VOLTAGE	120-240 AC
MAX INPUT CURRENT	0,2A
NUMBER OF WIRELESS CHANNEL	99 pcs wireless lights
NUMBER OF CIRCUITS	1
WIRELESS COVERAGE	300m (open space)
MONITOR MODULES	Max. 32pcs CL-AC control modules on RS485 bus cable
DISPLAY	5" LCD
SOFTWARE	CL-UNI Commissioning/End-user/Graphics softwares
NETWORK COMMUNICATION	TCP/IP with 254pcs panel, RS485 with 32pcs panel
EXTERNAL INPUT/OUTPUT	4 digital input, 4 relay input
PROTECTION	IP20
DIMENSIONS	331x241x113

# CL-24V CB control panel

**Type:** Addressable 24V central battery control panel

**Variations:** 1 hour backup, 3 hour backup

**Light addressing:** Automatic, based on factory unique identification number

**Output:** 6 line output with 3A/line load and 20pcs addressable devices

**Total load:** 18A, 10A for maintained lights

**Battery:** 2 or 4 pcs 45Ah

**Clever Light commissioning, graphic or end-user software**

**Mounting:** Sidewall

**Warranty:** 5-years repair warranty

**Housing color and material:** White plastic, grey-white metal

**5" touch screen** for checking system information of the last 2000 events

**TCP / IP network communication between 254 pcs panels**

**RS485 ring network communication between 32 pcs panel**

**32 pcs phase monitor modules for monitoring lighting distributors**

**4 pcs configurable fault relays**

**Dimensions:** 534x475x186, 754x475x186

**Cable connection:** Max. 2.5mm<sup>2</sup> cross-section solid or sleeved twisted wire

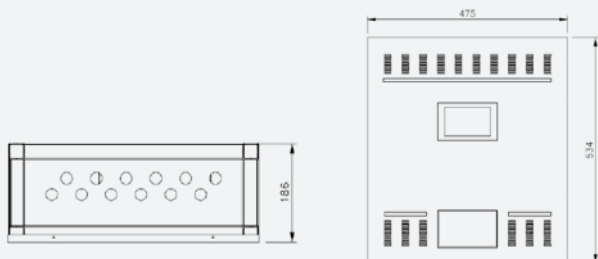
**Mains voltage:** AC 120-240V 50/60Hz

**Max. input current:** 2A

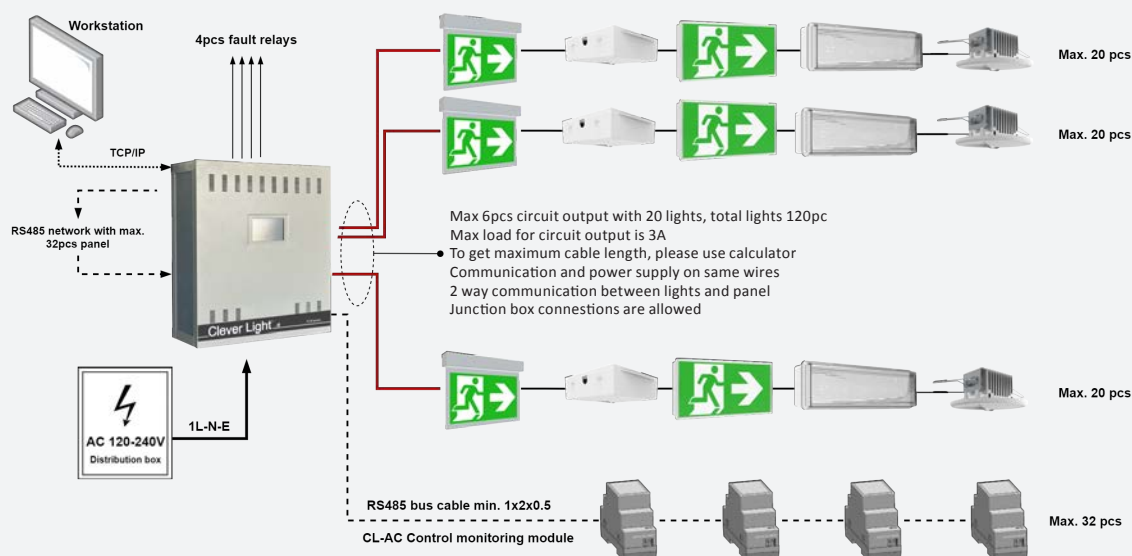
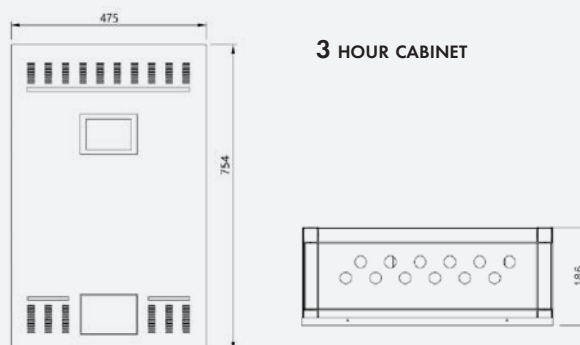
**Constant nominal ambient temperature range:** 0°C<T<sub>a</sub><25°C

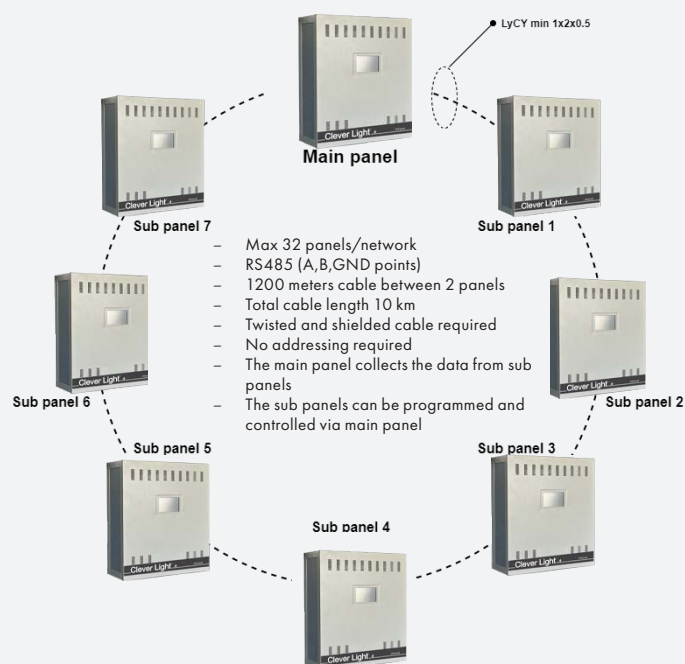
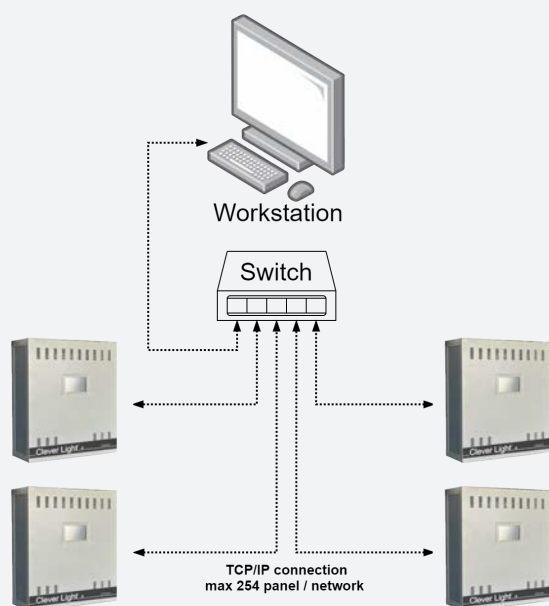


1 HOUR CABINET



3 HOUR CABINET





- With controlled battery charger for 2 or 4 battery
- Individually addressed
- It embodies the benefits of the central battery system
- Monitors all individual components of the system
- Gathers all collected information to a single location
- Fast and cost-effective maintenance
- The system records data
- Max. 120 devices/panel (20 devices/line)
- System receives power and communicates with the main unit through one cable
- 32 panels/system
- Battery replacement quick and simple
- High level of the safety
- Offer long-term cost advantages
- High quality
- Easy to install

PANEL TYPE	CL-24V CBS 1 HOUR	CL-24V CBS 3HOURS
INPUT VOLTAGE	120-240 AC	
OUTPUT VOLTAGE	24-32V DC	
MAX INPUT CURRENT	2A	
BATTERIES CAPACITY	45Ah	
NUMBER OF BATTERIES	2	4
NUMBER OF LIGHTS	120	
NUMBER OF CIRCUITS	6	
MAX. CIRCUIT LOAD	3A	
MAX OUTPUT LOAD	18A	
MONITOR MODULES	Max. 32pcs CL-AC control modules on RS485 bus cable	
DISPLAY	5" LCD	
SOFTWARE	CL-UNI Commissioning/End-user/Graphics softwares	
NETWORK COMMUNICATION	TCP/IP with 254pcs panel, RS485 with 32pcs panel	
EXTERNAL INPUT/OUTPUT	4 digital input, 4 relay input	
PROTECTION	IP20	
DIMENSIONS	534x475x186	754x475x186

# CL-24V CON CB control panel

**Type:** Conventional 24V central battery control panel

Standalone panel, easy setup without programming software

**Variations:** 1 hour backup, 3 hour backup

**Circuit programming:** Maintained, non-maintained, timer staircase modes

**Output:** 6 line output with 3A load

**Total load:** 18A, 10A for maintained lights

**Battery:** 2 or 4 pcs 45Ah

Built-in webserver and email sending function

**Mounting:** Sidewall

**Warranty:** 5-years repair warranty

**Housing color and material:** White plastic, grey-white metal

5" touch screen for checking system information of the last 2000 events

**TCP / IP network communication**

3 inputs for sub-db monitoring, 1 input to active staircase timer function

**4 pcs pre-configured fault relays**

**Dimensions:** 534x475x186, 754x475x186

**Cable connection:** Max. 2.5mm<sup>2</sup> cross-section solid or sleeved twisted wire

**Mains voltage:** AC 120-240V 50/60Hz

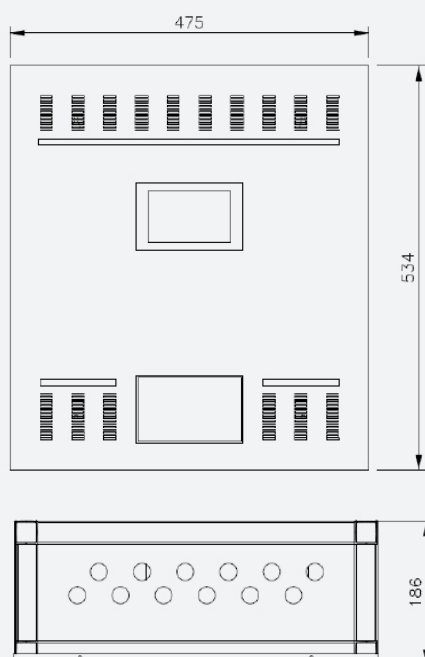
**Max. input current:** 2A

**Output voltage:** 24-32V

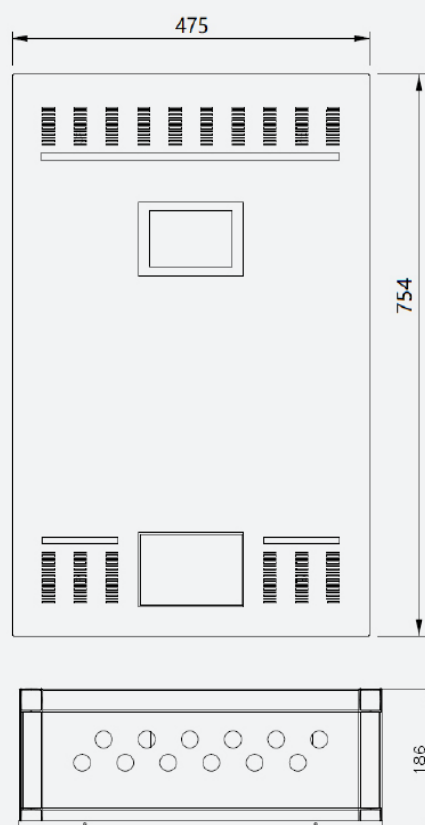
**Constant nominal ambient temperature range:** 0°C<T<sub>a</sub><25°C

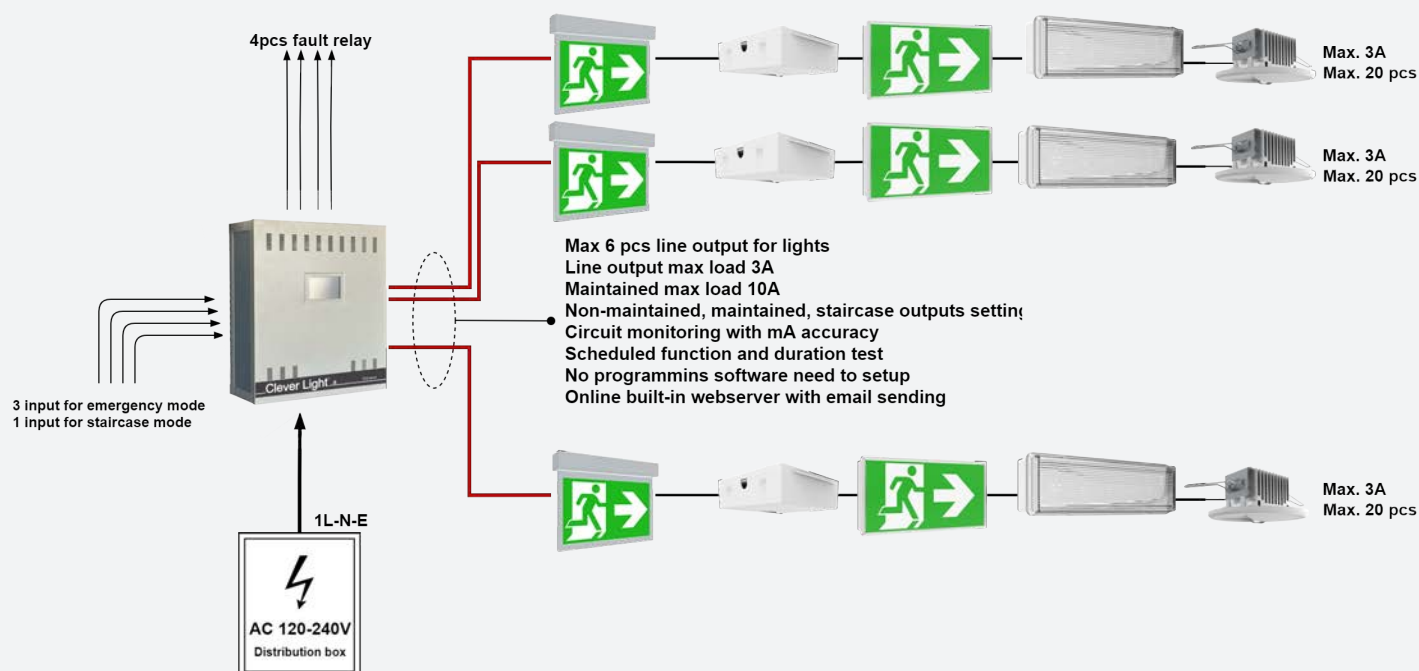


1 HOUR CABINET



3 HOUR CABINET





PANEL TYPE	CL-24V CON CBS 1 HOUR	CL-24V CON CBS 3 HOURS
INPUT VOLTAGE	120-240 AC	
OUTPUT VOLTAGE	24-32V DC	
MAX INPUT CURRENT	2A	
BATTERIES CAPACITY	45Ah	
NUMBER OF BATTERIES	2	4
NUMBER OF LIGHTS	120	
NUMBER OF CIRCUITS	6	
CIRCUIT FUNCTIONS	Non-maintained, maintained, timer staircase	
MAX. CIRCUIT LOAD	3A	
MAX OUTPUT LOAD	18A	
MONITOR MODULES	Max. 32pcs CL-AC control modules on RS485 bus cable	
DISPLAY	5" LCD	
SOFTWARE	Webserver with e-mail sending	
NETWORK COMMUNICATION	TCP/IP	
EXTERNAL INPUT/OUTPUT	3 inputs for sub-db monitoring, 1 input for staircase, 4 programmed fault relays	
PROTECTION	IP20	
DIMENSIONS	534x475x186	754x475x186

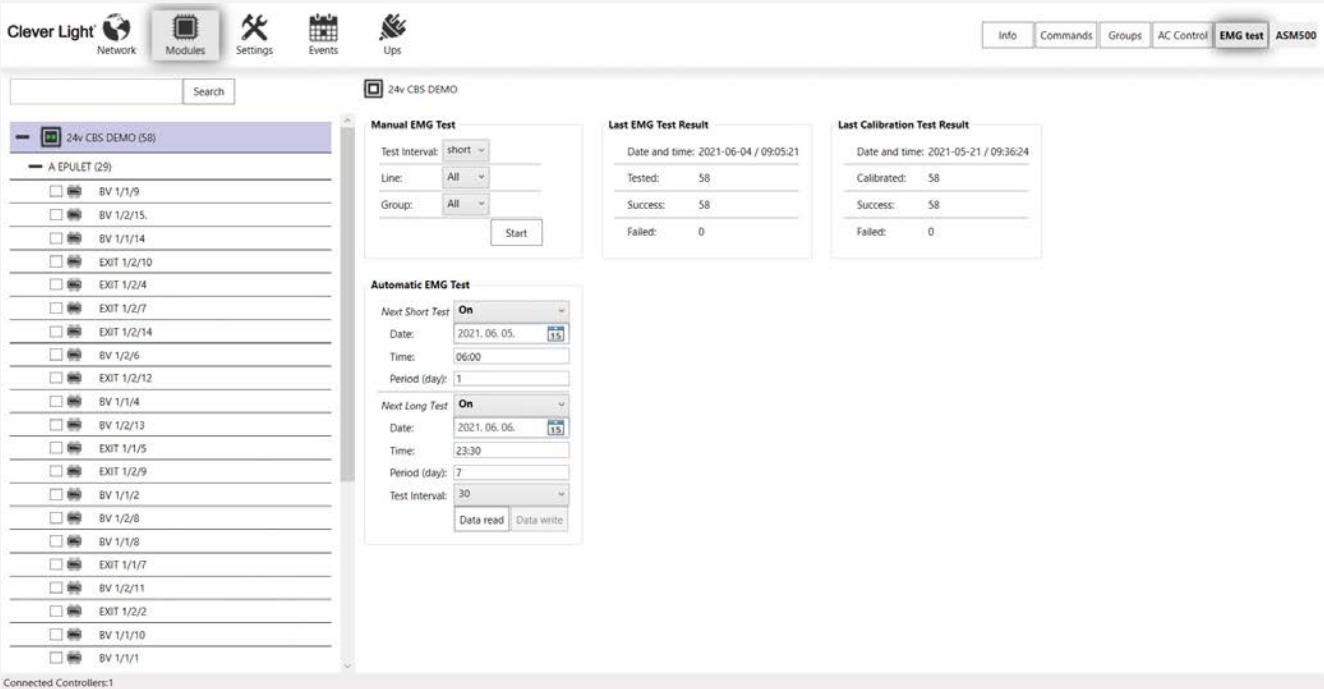
# Software

- CL-UNI software versions:
- > installer

> client

> graphic display

TCP/IP network connection, compatible with all our addressable master panels on Windows. Annually renewable license for installer and graphical display version. Easy to use, logical structure, fast operation. Filterable, printable events list, that is exportable to MS pdf format and you can send it in e-mail. Free client version for basic functions.



Operating system	Windows 7/8/10
Hardware requirements	Average configuration with ethernet network adapter
Features	Complete configuration of the addressable systems
	Real-time query for device status
	Event download and export
	Tests set up and run
	Importing BMP, JPEG, PNG file format to graphical viewer
	USB hardware key



CL

CleverLight-Client-Software v1.33

Network

Modules

Settings

Events

Ups

Graphics Designer

File

Edit

Options

ASM SECURITY

C building

Warehouse

Production area

Office

B building

A building

03 - Show room

02 - Data storage

Back to main page

B building

Warehouse

Show room

Data storage



**EXIT SIGN LUMINAIRES**

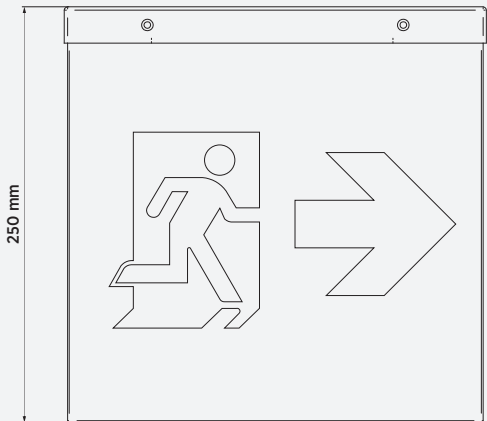
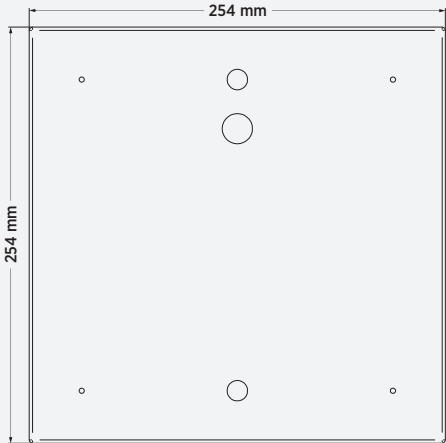
White plastic/  
grey metal exit sign luminarie  
**CL-014**



Mounting	Light source	Warranty	Size	Temperature
Ceiling, suspended from ceiling	50.000h 6000k	5-years	254x254x250mm	0°C<Ta<45°C



Our four-sided exit light specially developed for large public areas and industrial scale halls. Suitable for airports and shopping malls as well, due to its visibility distance (46m). It is applicable for ceiling or it is available in hanging design. With unique pictograms, it's practical not only for showing the exit, but also for marking a meeting point, or showing other information. The suspension accessories are sold separately.



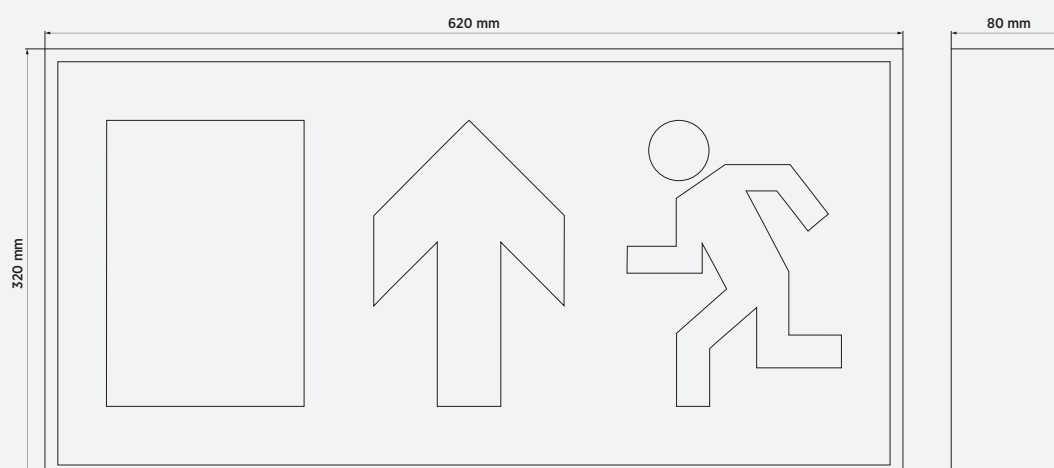
# White plastic/ metal exit sign luminarie **CL-9017**



Mounting	Light source	Warranty	Size	Temperature
Sidewall	50.000h 6000k	5-years	620x320x80mm	0°C<Ta<45°C



The largest LED exit sign of our portfolio is the CL-9017. Due to its size the exit sign is suitable for industrial halls and big buildings with large interior, where the long visibility distance is important (60m). It can be mounted onto the sidewall.



# White plastic exit sign luminarie

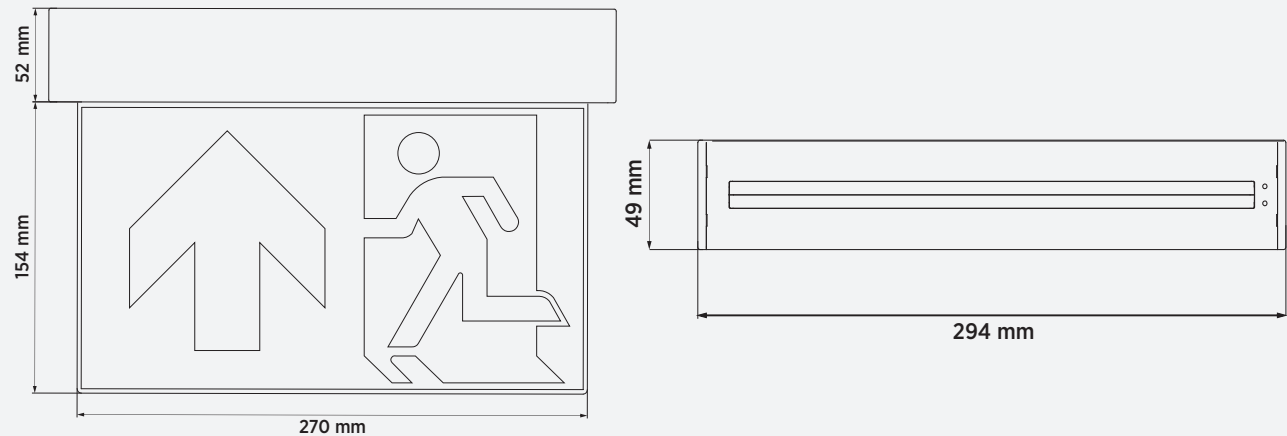
## CL-414



Mounting	Light source	Warranty	Size	Temperature
Ceiling, sidewall, flag, suspended	50.000h 6000k	5-years	294x49x206mm	0°C<T <sub>a</sub> <45°C



High-quality double sided LED exit sign. It was designed mainly for buildings with high aesthetic requirements (hotels, business centres). The CL-414 luminaire suitable for types of mounting: to the ceiling, parallel to the sidewall and perpendicularly to the sidewall.





# White plastic exit sign luminarie

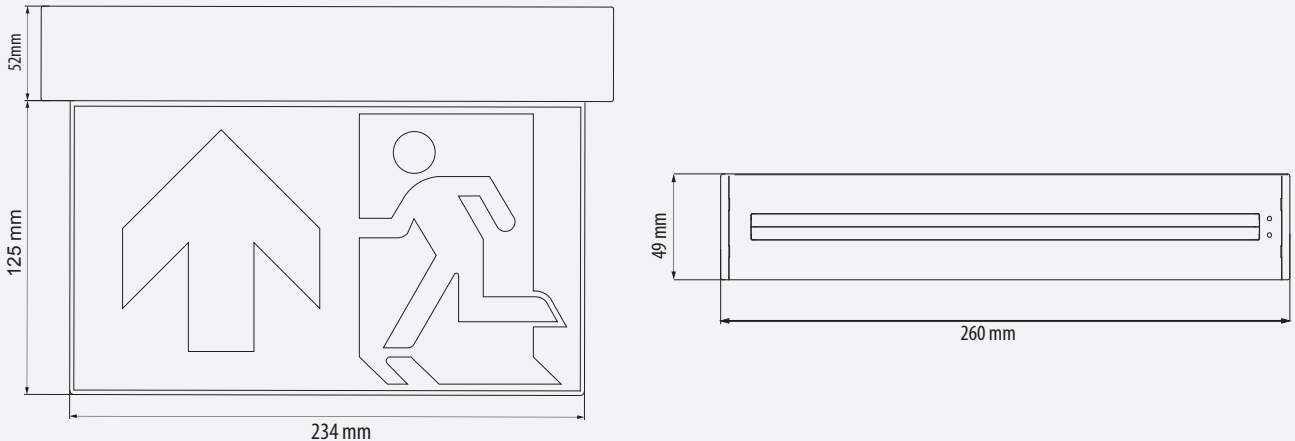
## CL-417



Mounting	Light source	Warranty	Size	Temperature
Ceiling, sidewall, flag, suspended	50.000h 6000k	5-years	260x49x177mm	0°C<Ta<45°C



High-quality double sided LED exit sign. It was designed mainly for buildings with high aesthetic requirements (hotels, business centres). The CL-417 luminaire suitable for types of mounting: to the ceiling, parallel to the sidewall and perpendicularly to the sidewall. The suspension accessories are sold separately.

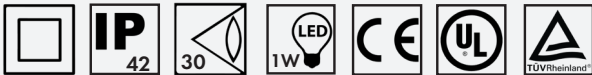


# White plastic exit sign luminarie

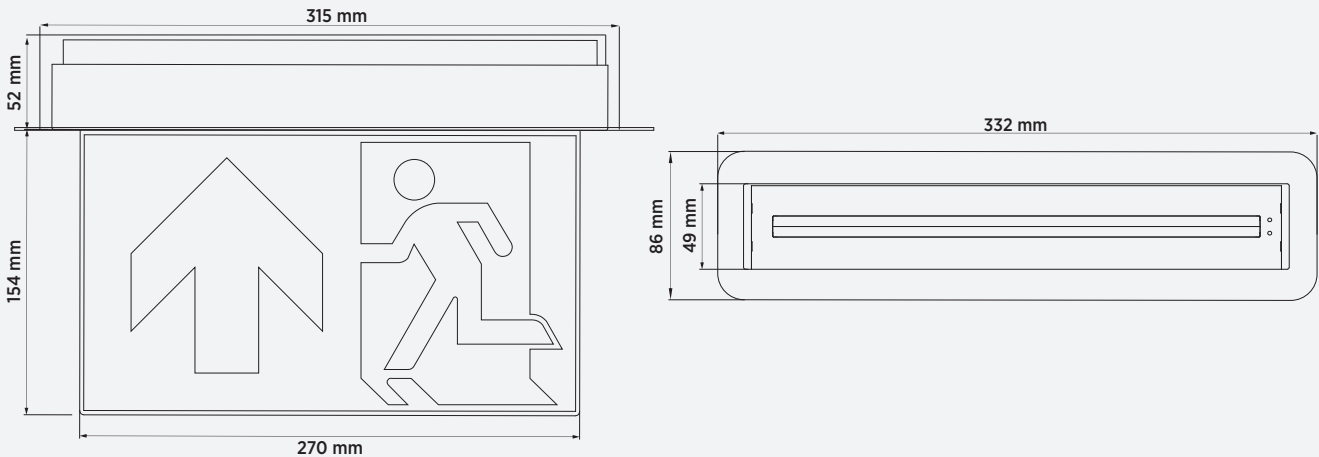
## CL-414C



Mounting	Light source	Warranty	Size	Temperature
Recessed into ceiling	50.000h 6000k	5-years	332x86x206mm	0°C<Ta<45°C



The CL-414C light is the ceiling recessed version of the CL-414 light.



# White plastic exit sign luminarie

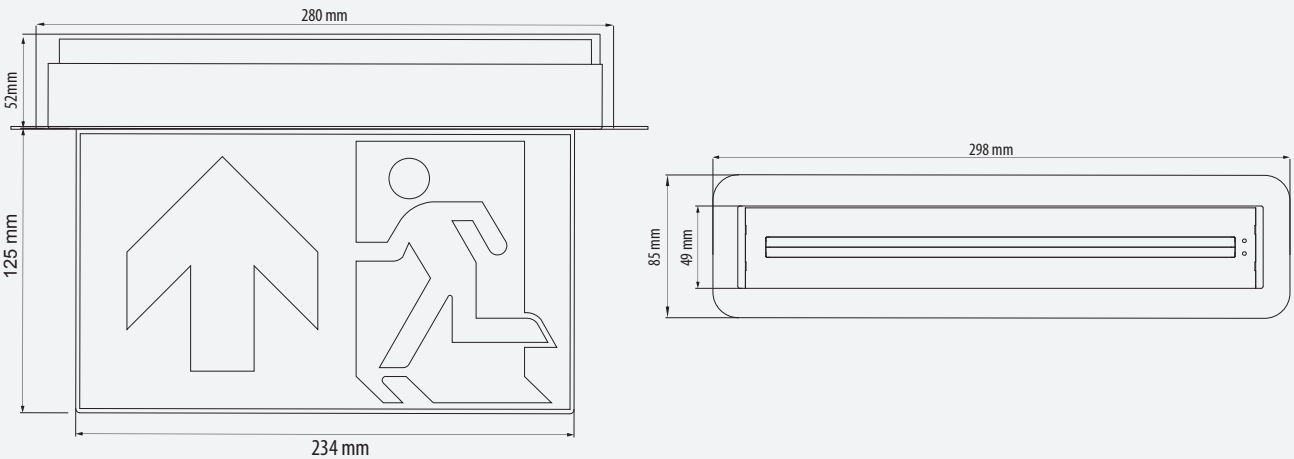
## CL-417C



Mounting	Light source	Warranty	Size	Temperature
Recessed into ceiling	50.000h 6000k	5-years	298x87x179mm	0°C<Ta<45°C



The CL-417C light is the ceiling recessed version of the CL-417 light.



# White plastic exit sign luminarie

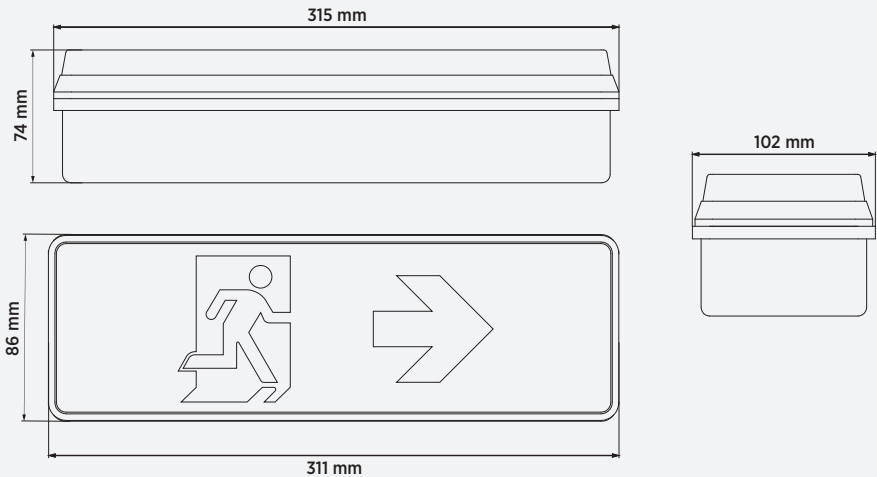
## CL-617



Mounting	Light source	Warranty	Size	Temperature
Sidewall	50.000h 6000k	5-years	315x102x74mm	0°C<Ta<45°C



The CL-617 is a one-sided, sidewall-mounted LED exit sign with strong plastic housing with IP54 protection. Due to its design, it is suitable for shopping centres, office buildings, staircases, and other public buildings.





# White plastic exit sign luminaire

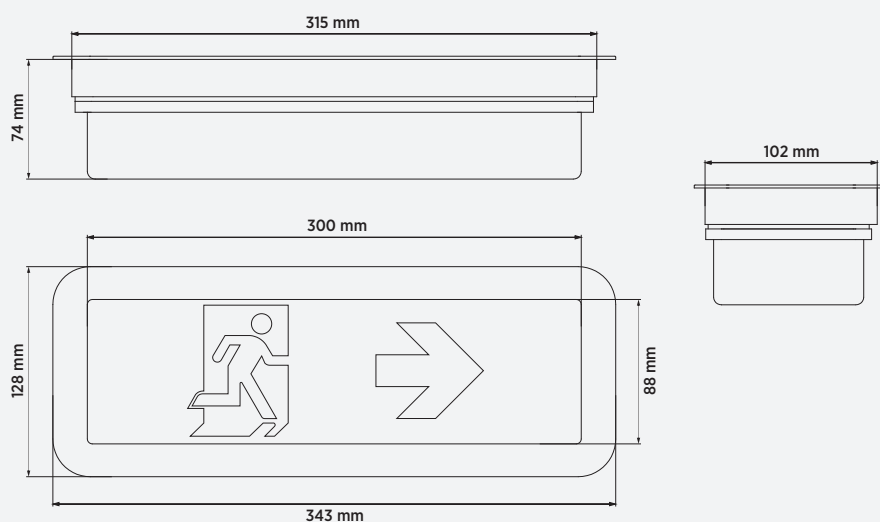
## CL-817



Mounting	Light source	Warranty	Size	Temperature
Recessed into sidewall	50.000h 6000k	5-years	343x128 x74mm	0°C<Ta<45°C



The CL-817 is a one-sided, sidewall-recessed LED exit sign with strong plastic housing with IP54 protection. Due to its design, it is suitable for shopping centres, office buildings, staircases, and other public buildings.



# White plastic exit sign luminarie

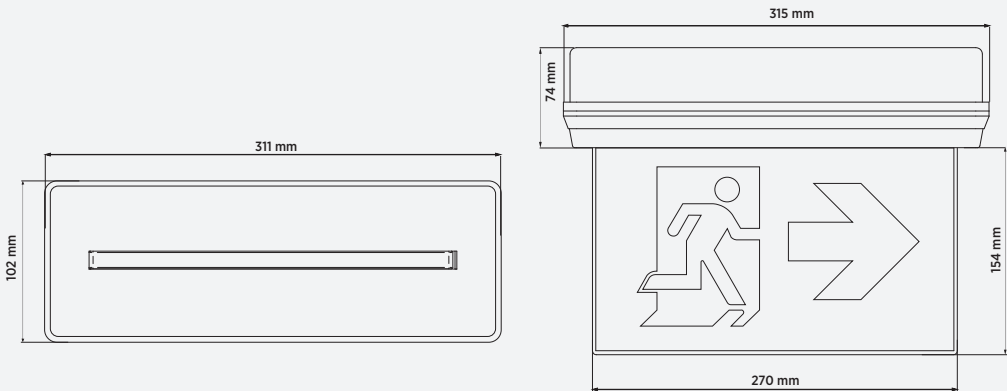
## CL-617 PLEXIGLASS



Mounting	Light source	Warranty	Size	Temperature
Ceiling	50.000h 6000k	5-years	315x102x228mm	0°C<Ta<45°C



The CL-617 + plexiglass is a double-sided, ceiling-mounted LED exit sign with strong plastic housing with IP54 protection. Due to its design, it is suitable for shopping centres, office buildings, staircases, and other public buildings.



# White plastic exit sign luminarie

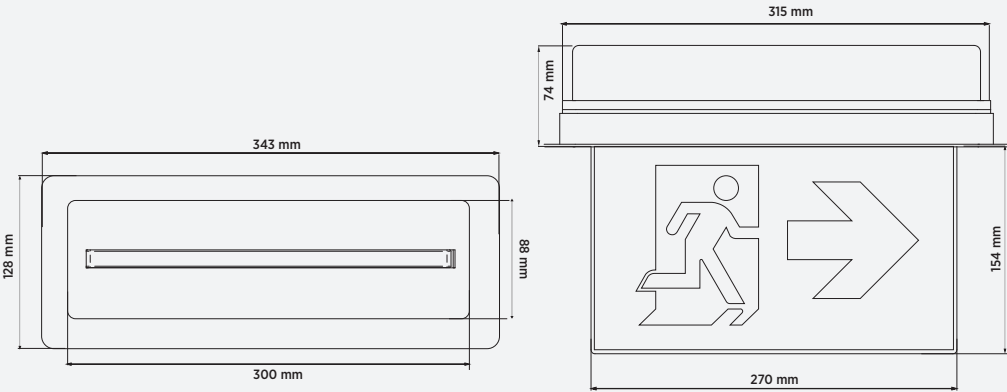
## CL-817 PLEXIGLASS



Mounting	Light source	Warranty	Size	Temperature
Recessed into ceiling	50.000h 6000k	5-years	343x128 x228mm	0°C<Ta<45°C



The CL-817 + plexiglass is a double-sided, ceiling-recessed LED exit sign with strong plastic housing with IP54 protection. Due to its design, it is suitable for shopping centres, office buildings, staircases, and other public buildings.



# White plastic exit sign luminaire

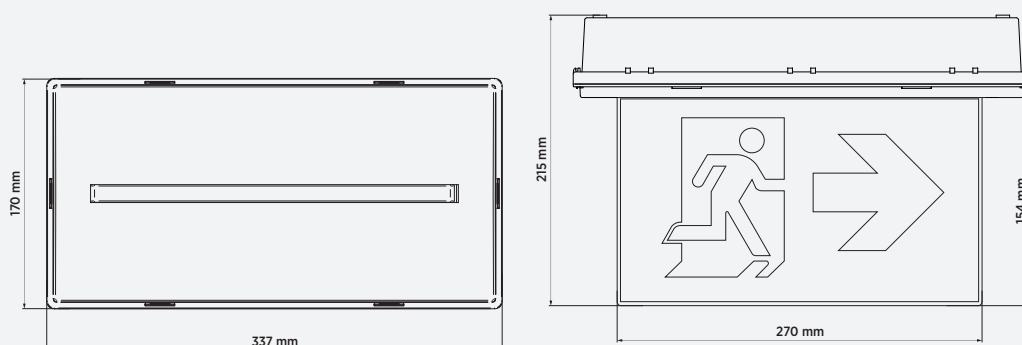
## CL-6014



Mounting	Light source	Warranty	Size	Temperature
Ceiling	50.000h 6000k	5-years	337x170x 215mm	0°C<Ta<45°C



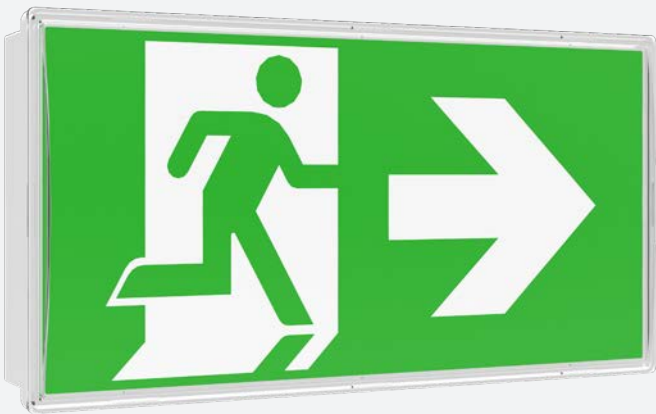
The CL-6014 is a double-sided, ceiling-mounted LED exit sign with strong plastic housing with IP65 protection. Suitable for dry and wet locations (rest room, basement, garage) and for outdoor use as well.



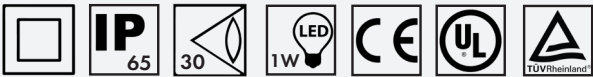


# White plastic exit sign luminarie

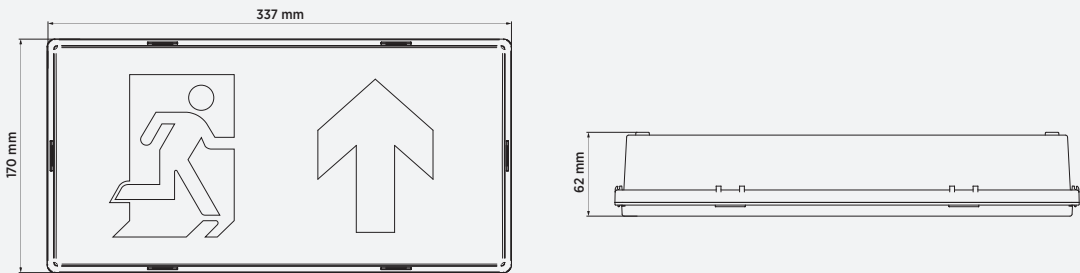
## CL-6017



Mounting	Light source	Warranty	Size	Temperature
Sidewall	50.000h 6000k	5-years	337x170x62mm	0°C<Ta<45°C



The CL-6017 is an elegant one-sided, sidewall-mounted LED exit sign with IP65 protection. Suitable for dry and wet locations (rest room, basement, garage) and for outdoor use as well.







# Grey plastic exit sign luminarie

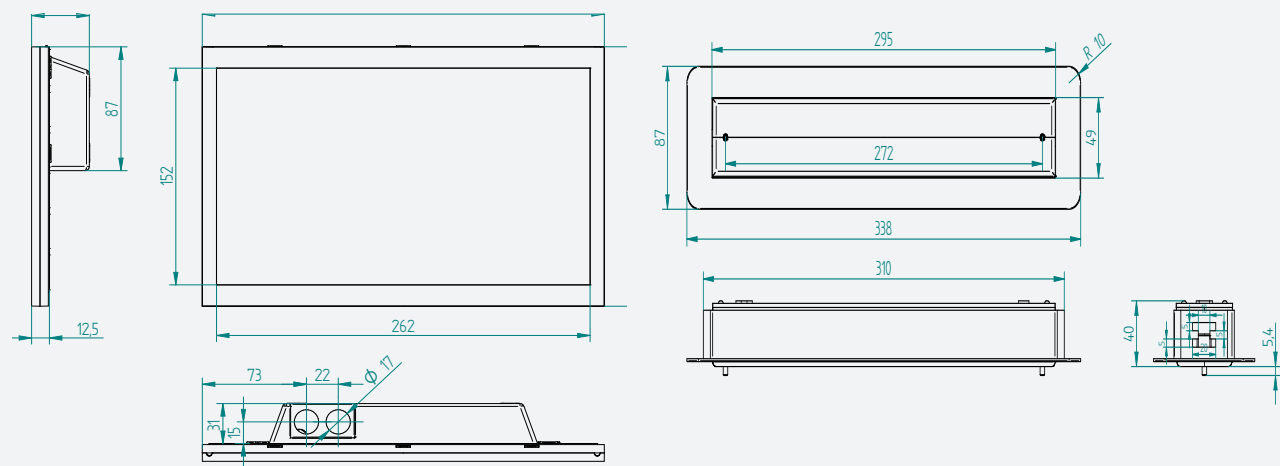
## CL-415



Mounting	Light source	Warranty	Size	Temperature
Sidewall, ceiling one side, ceiling two side, recessed into celiling one side, recessed into ceiling two side	50.000h 6000k	5-years	294x49x206mm	0°C<Ta<45°C



The CL-415 is an elegant exit sign with IP42 protection and a 30m viewing distance. One-sided and double-sided design with sidewall-mounted, ceiling-recessed suspended, and ceiling-suspended mounting variations. Pictogram’s direction must be marked during the order.



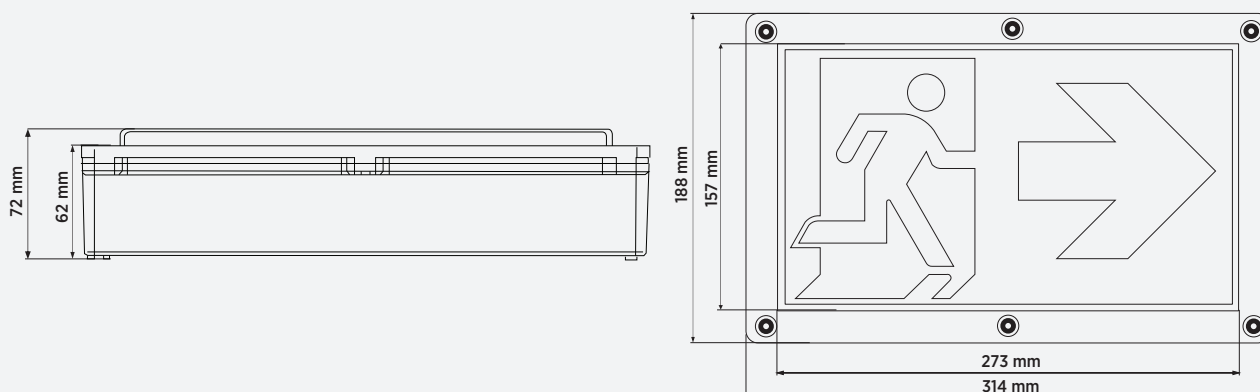
# Explosion-proof white plastic exit sign luminaire **CL-8017**



Mounting	Light source	Warranty	Class	Size	Temperature
Sidewall	50.000h 6000k	5-years	Zone 2	314x188x72mm	0°C<Ta<45°C



The CL-8017 is a one-sided, sidewall-mounted, explosion-proof LED exit sign designed for Zone 2 hazardous areas. Due to its IP65 rating, the luminaire is suitable for dry and wet locations (rest room, basement, garage) and for outdoor use as well. Pictogram's direction must be marked during the order.



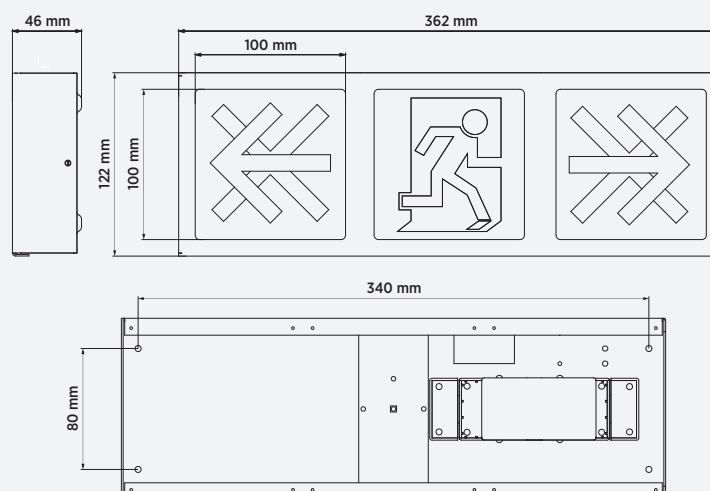
# Metal grey dynamic exit sign luminarie **CL-D200**



Mounting	Light source	Warranty	Size	Temperature
Sidewall, ceiling, flag	50.000h 6000k red-green cross-arrows	5-years	362x46x122mm	0°C<Ta<45°C



Dynamic LED exit light for sidewall. It is recommended in buildings, where more escape routes are possible. In case of emergency the control panel receives information from the fire alarm centre regarding the location of the fire. Then it informs the light about the right escape route to show.





# Metal grey exit sign luminarie

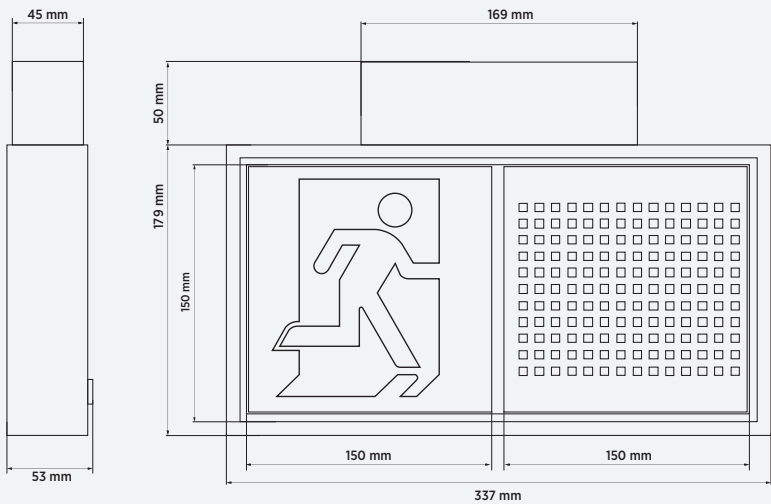
## CL-D300



Mounting	Light source	Warranty	Size	Temperature
Sidewall, ceiling one side, ceiling two side, flag one side, flag two side	50.000h 6000k	5-years	337x52x179 or 337x 52x 229mm	0°C<Ta<45°C



The CL-D300 is a dynamic LED exit light with a ceiling or sidewall-mounted design. It is recommended in buildings where more escape routes are available. In case of an emergency the control panel receives the information from the fire alarm center regarding the location of the fire, then the panel does inform the light about the right escape route to show.



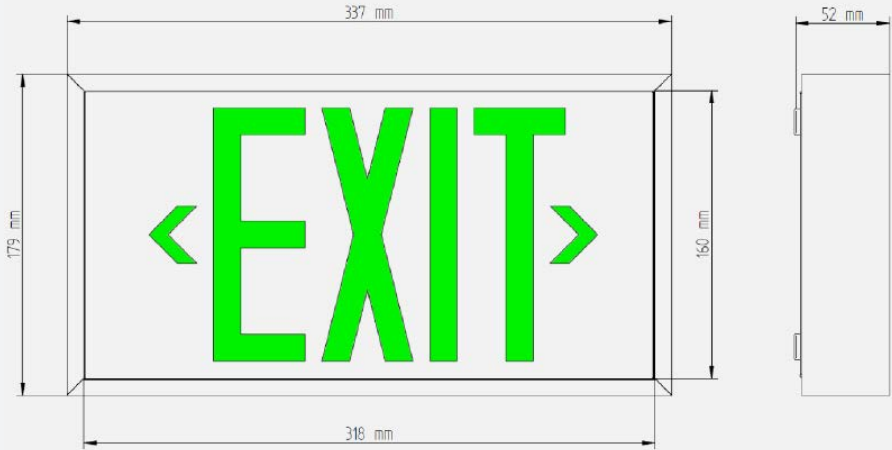
Metal grey  
dynamic exit sign luminarie  
**CL-D300 EXIT**



Mounting	Light source	Warranty	Size	Temperature
Sidewall, ceiling one side, ceiling two side, flag one side, flag two side	50.000h green or red "EXIT" letters variations	5-years	337x52x179 or 337x 52x 229mm	0°C<Ta<45°C



The CL-D300 EXIT is a dynamic LED exit light showing „EXIT“ with green or red letters. Two escape routes can be shown by the chevrons. In case of fire, the control panel receives the signal from the fire alarm panel regarding the location of the fire, the the panel does inform the light about the right escape route to show.



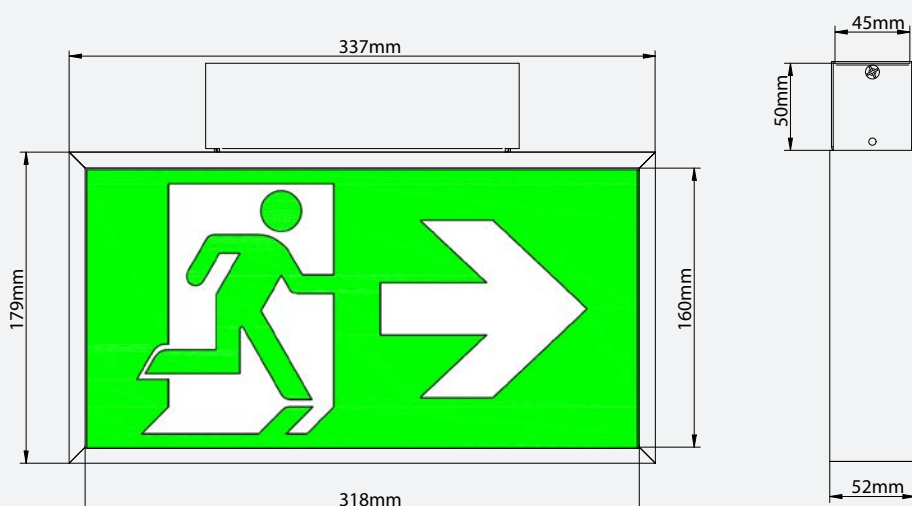
# Metal grey exit sign luminarie **CL-D300 RUNNING MAN**



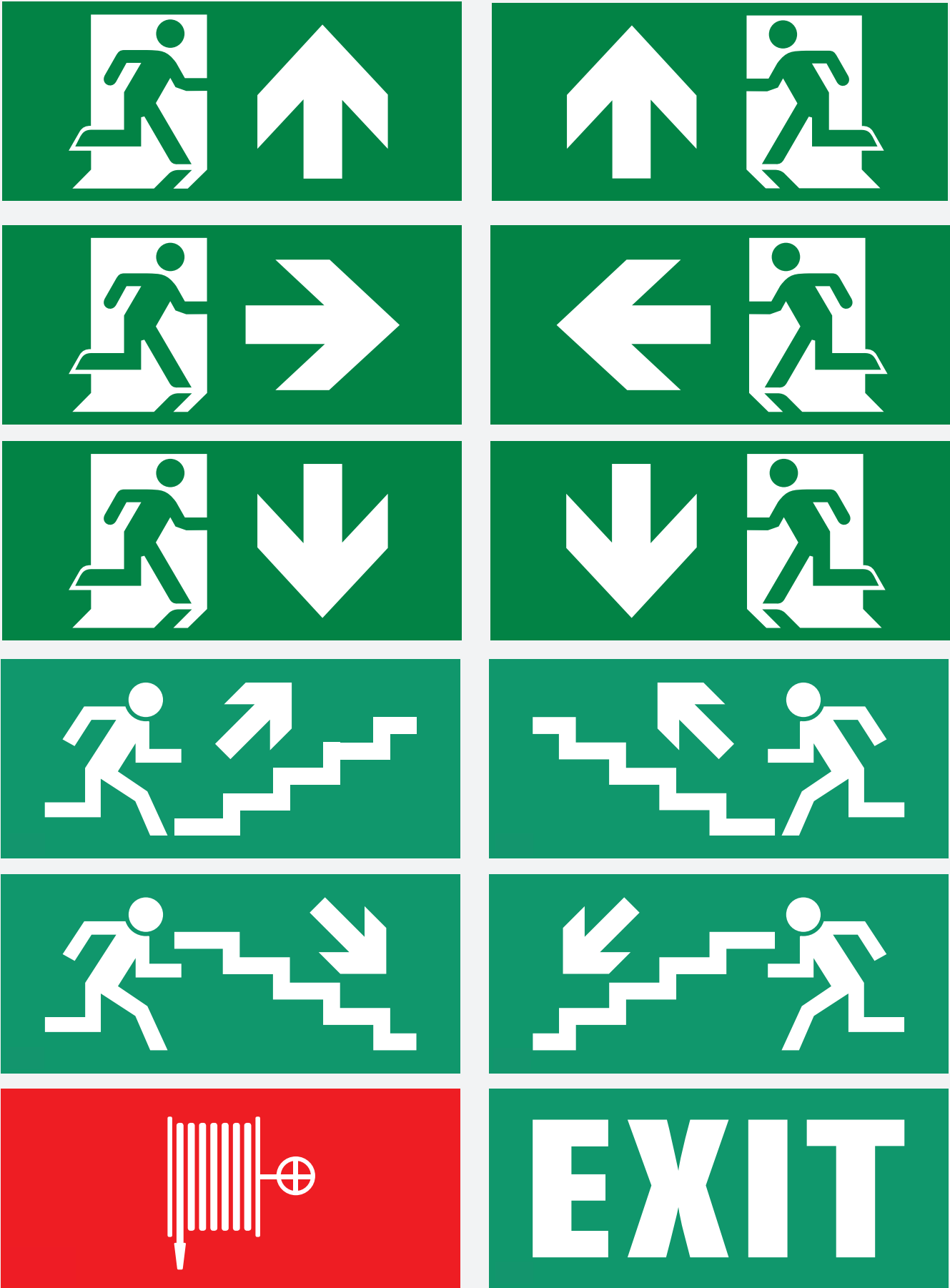
Mounting	Light source	Warranty	Size	Temperature
Sidewall, ceiling one side, ceiling two side, flag one side, flag two side	50.000h 6000k	5-years	337x52x179 or 337x 52x 229mm	0°C<Ta<45°C



The CL-D300 Running man is a one-sided or two-sided exit light in a D300 housing. Pictogram's direction must be marked during the ordering.



Pictograms



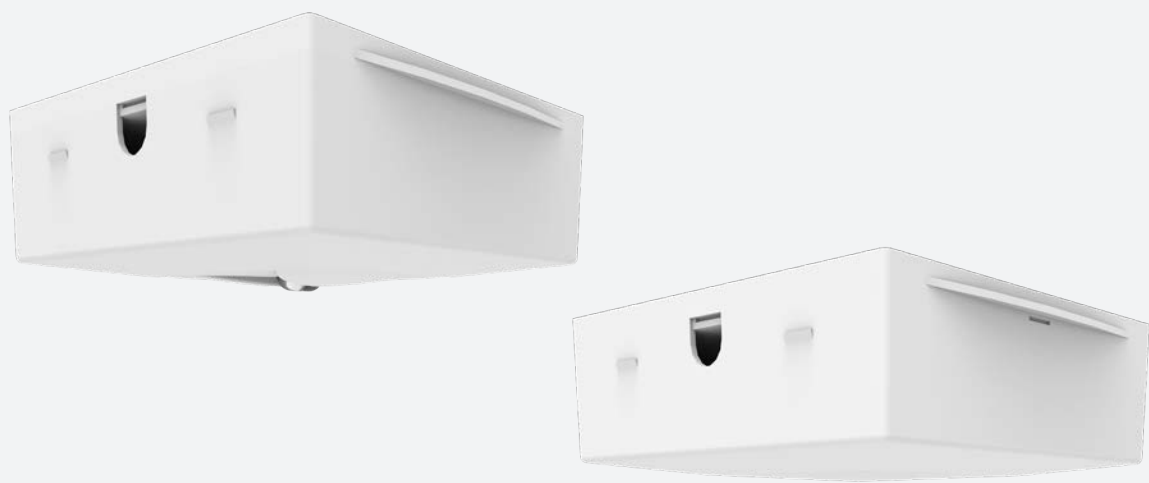




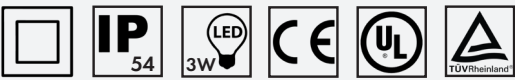


# EMERGENCY LUMINAIRES

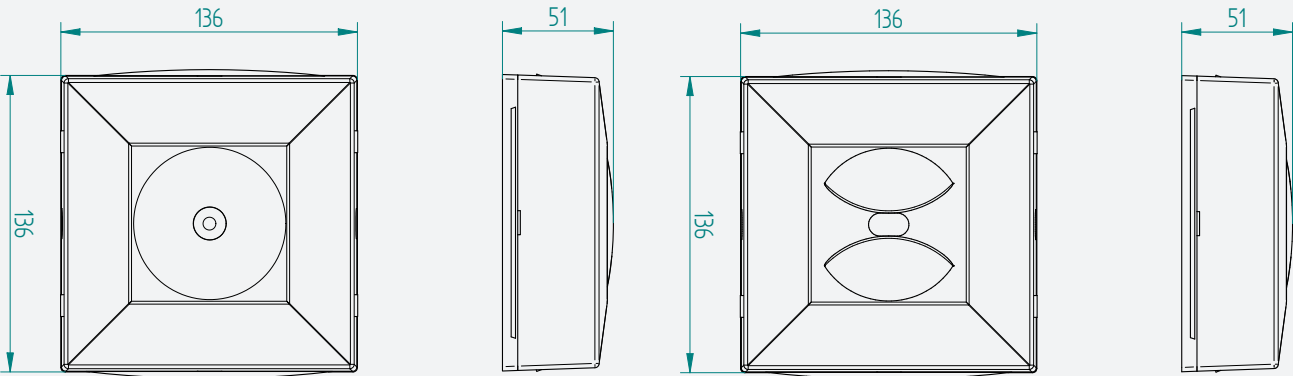
# White, black plastic emergency luminarie **CL-313 R/F**



Mounting	Light source	Luminous flux	Warranty	Size	Temperature
Ceiling, wall	50.000h 6000k	261 lm (R), 329 lm (F)	5-years	136x136x51mm	0°C<Ta<45°C

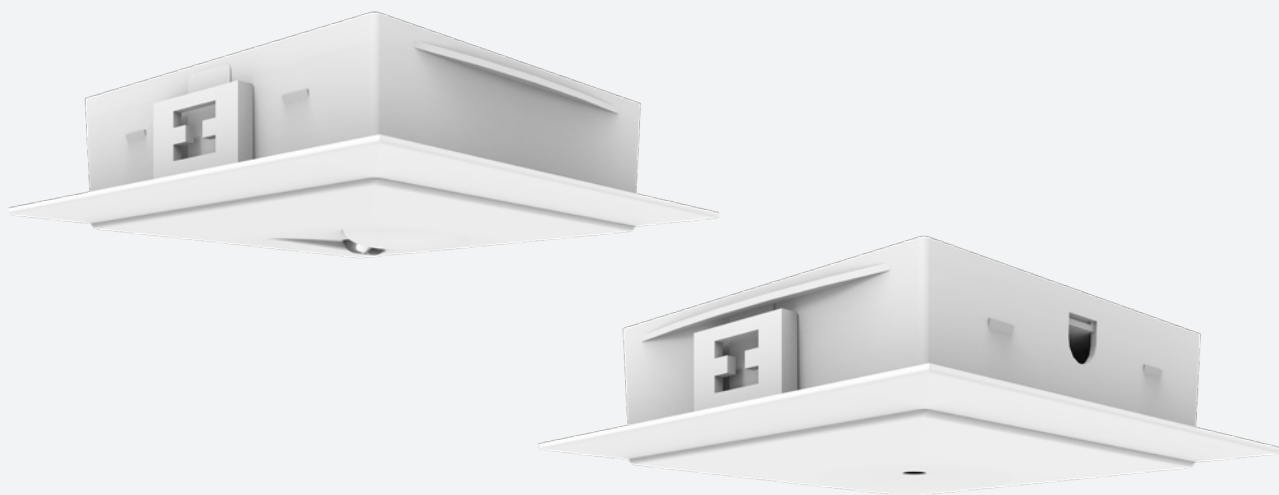


LED safety light for the illumination of escape areas. Suitable for surface mounting. It can be ordered with round LED lens or with lens for corridors according to our customers' needs.





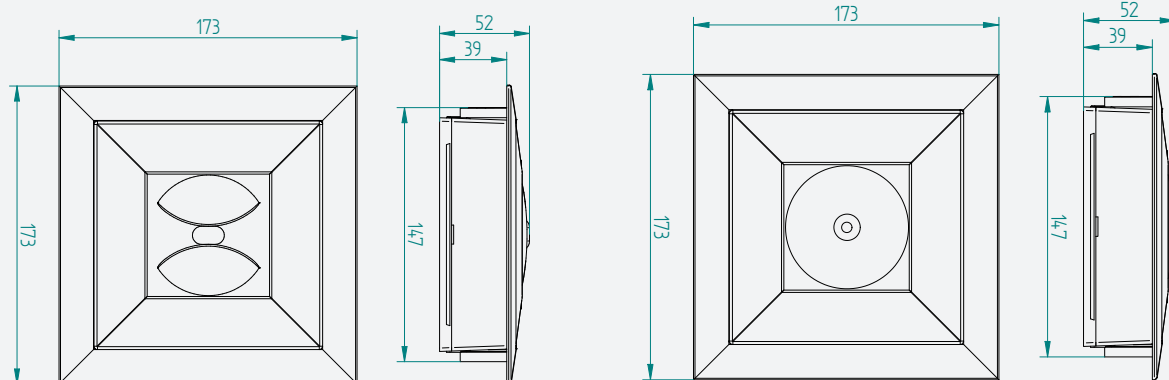
# White, black plastic emergency luminarie **CL-313 C/R and C/F**



Mounting	Light source	Luminous flux	Warranty	Size	Temperature
Ceiling recessed	50.000h 6000k	261 lm (C/R), 329 lm (C/F)	5-years	173x173x52mm	0°C<Ta<45°C



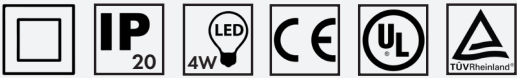
LED safety light for the illumination of escape areas. It can be recessed into the ceiling. It can be ordered with round LED lens or with lens for corridors (C/R or C/F).



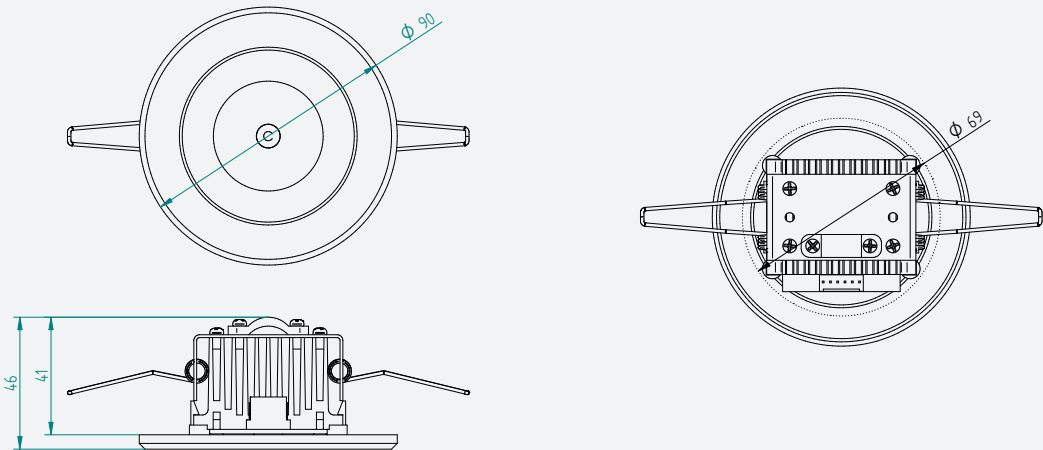
White, black plastic  
emergency luminarie  
**CL-4014R**



Mounting	Light source	Luminous flux	Warranty	Size	Temperature
Recessed into ceiling	50.000h 6000k	377 lm	5-years	90x69x46mm	0°C<Ta<45°C



Aesthetic LED safety light for recessing into the ceiling. It is available with round LED lens. It has a great effective range, its practical design makes it easy to install.



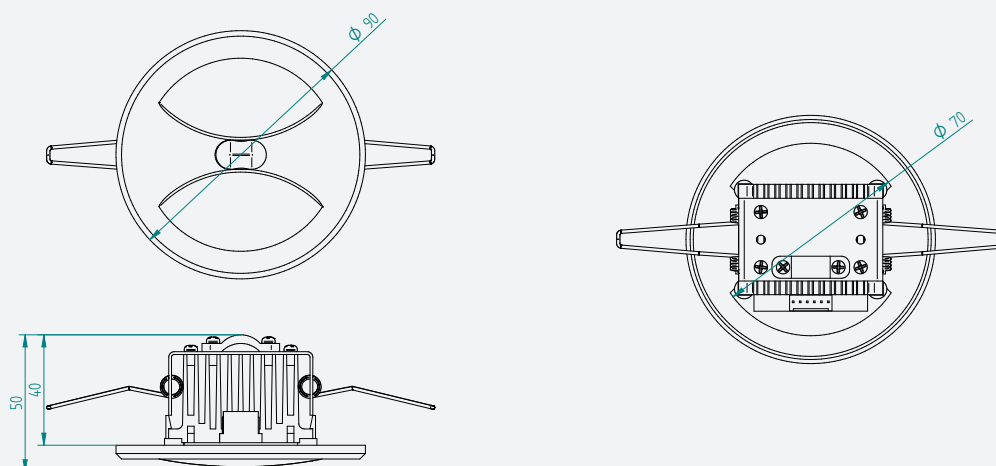
# White, black plastic emergency luminarie **CL-4014F**



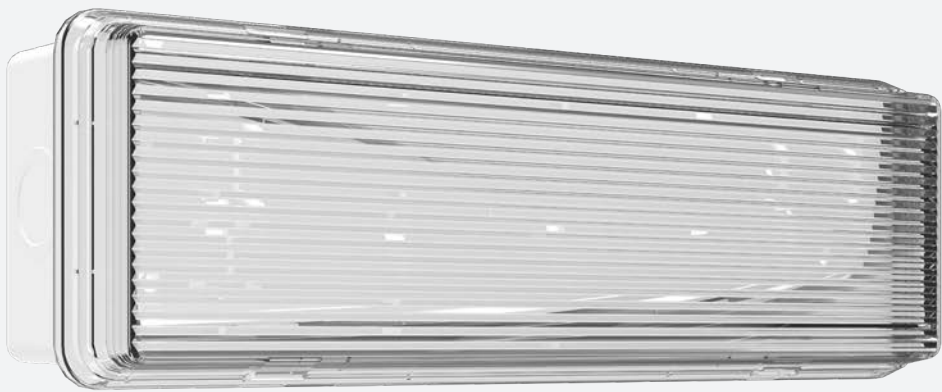
Mounting	Light source	Luminous flux	Warranty	Size	Temperature
Recessed into ceiling	50.000h 6000k	388 lm	5-years	90x69x46mm	0°C<Ta<45°C



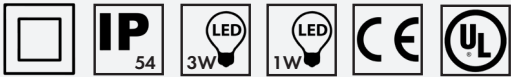
Aesthetic LED safety light for recessing into the ceiling. It is available with lens for corridors. It has a great effective range, its practical design makes it easy to install.



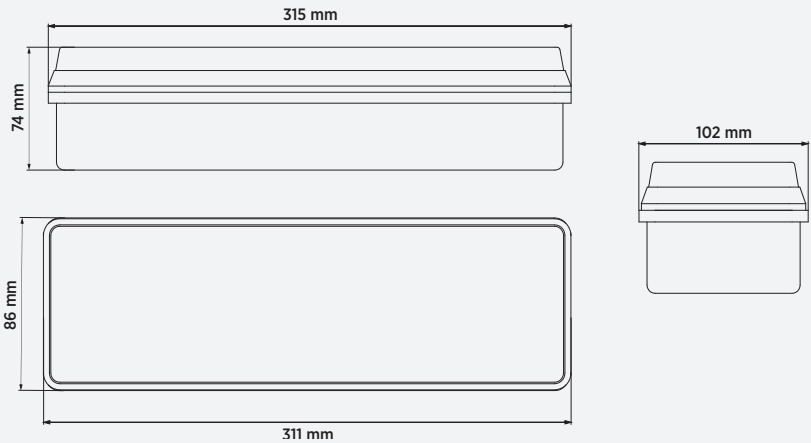
# White plastic emergency luminarie **CL-613**



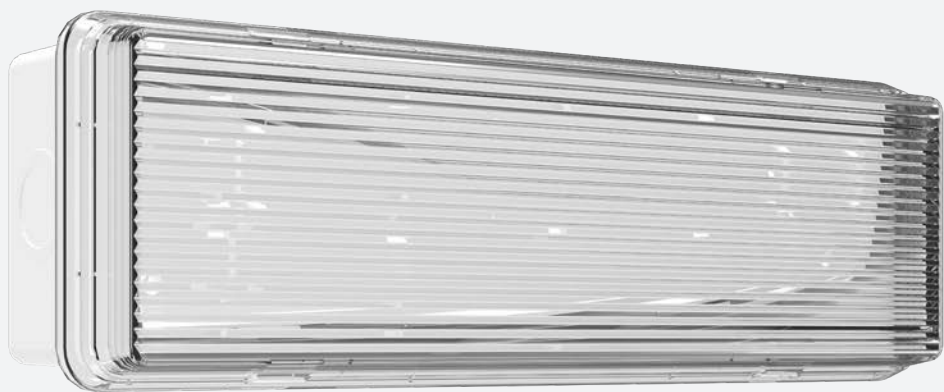
Mounting	Light source	Luminous flux	Warranty	Size	Temperature
Sidewall, ceiling	50.000h 6000k	294 lm	5-years	315x102x74mm	0°C<Ta<45°C



LED safety light with IP54 protection for ceilings or sidewalls. Maintained function with the built-in 1W LED.



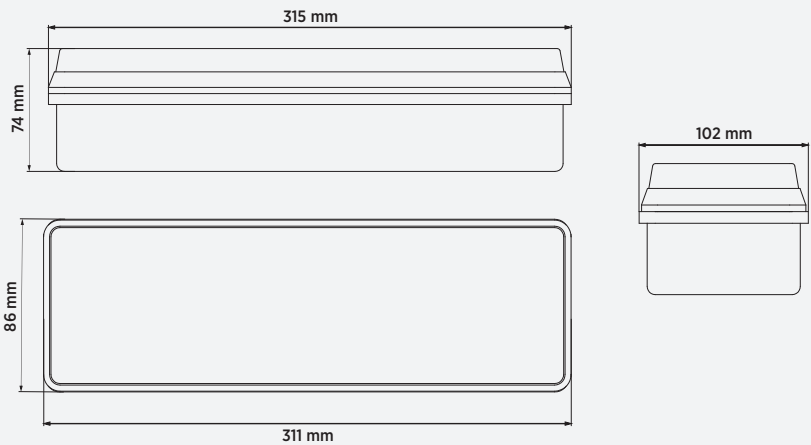
White plastic  
emergency luminarie  
**CL-616**



Mounting	Light source	Luminous flux	Warranty	Size	Temperature
Sidewall, ceiling	50.000h 6000k	591 lm	5-years	315x102x74mm	0°C<Ta<45°C



LED safety light with IP54 protection for ceilings or sidewalls.











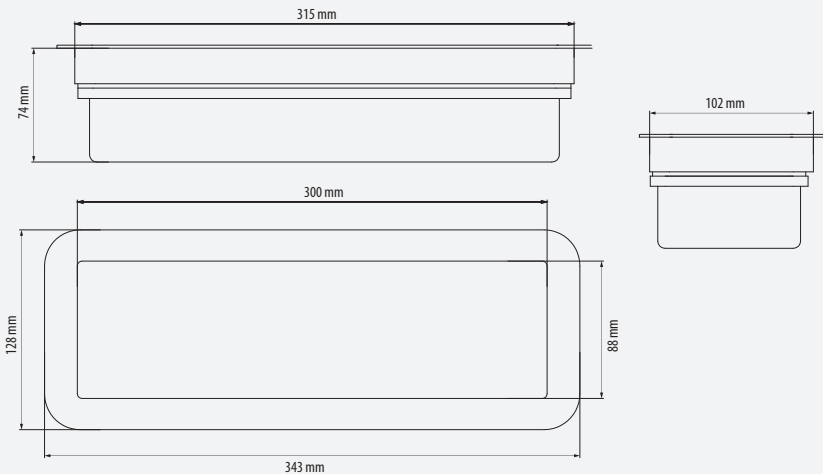
# White plastic emergency luminarie **CL-813**



Mounting	Light source	Luminous flux	Warranty	Size	Temperature
Ceiling recessed, sidewall recessed	50.000h 6000k	251 lm	5-years	343x128x74mm	0°C<Ta<45°C









LED safety light with IP54 protection, can be mounted into suspended ceiling. Maintained function with the built-in 1W LED



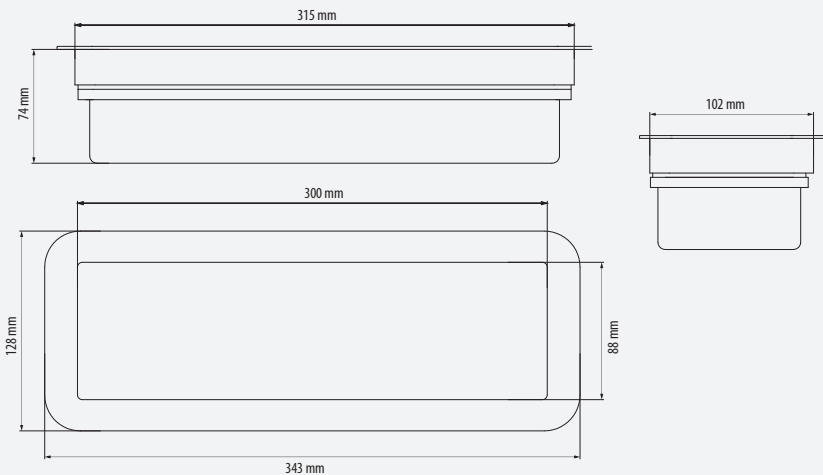
# White plastic emergency luminarie **CL-816**



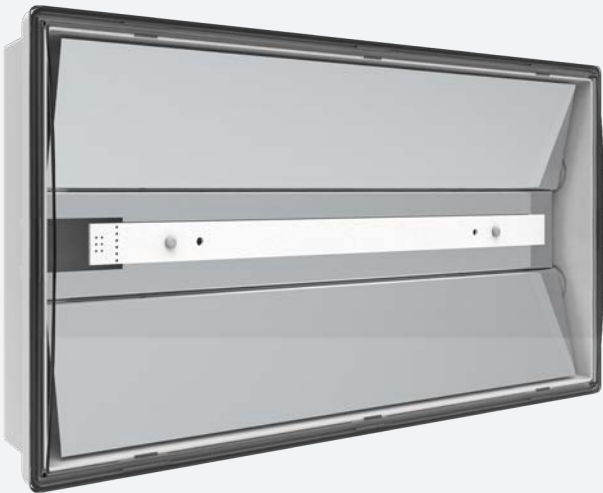
Mounting	Light source	Luminous flux	Warranty	Size	Temperature
Ceiling recessed, sidewall recessed	50.000h 6000k	591 lm	5-years	343x128x74mm	0°C<Ta<45°C



LED safety light with IP54 protection, can be mounted into suspended ceiling.



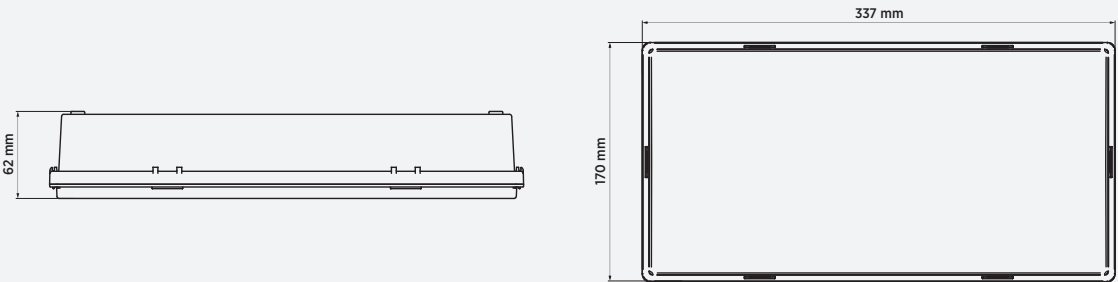
# White plastic emergency luminarie **CL-6016**



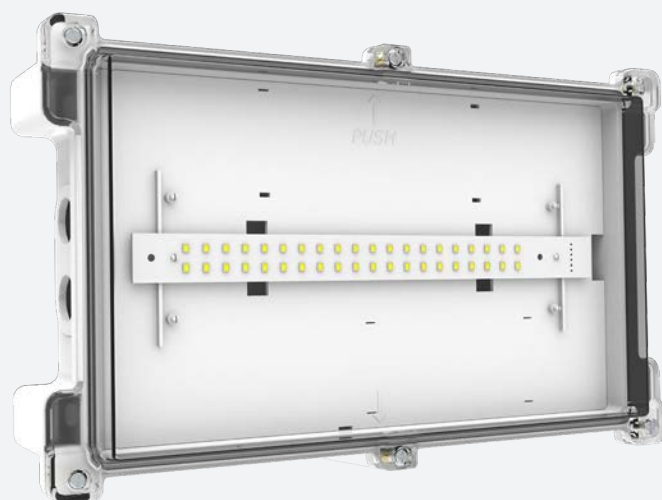
Mounting	Light source	Luminous flux	Warranty	Size	Temperature
Sidewall, ceiling	50.000h 6000k	604 lm	5-years	337x170x62mm	0°C<Ta<45°C



Thanks to IP65 protection it is suitable in dry and wet locations (rest room, basement, garage, etc.) and for outdoor use as well.



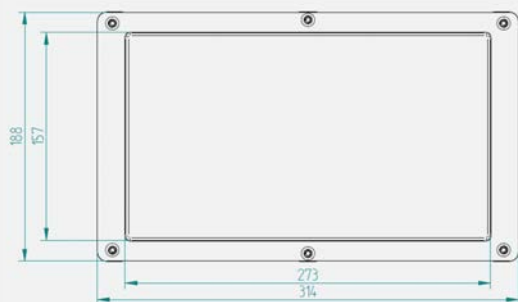
# White plastic emergency luminarie **CL-8016**



Mounting	Light source	Luminous flux	Warranty	Size	Temperature
Sidewall, ceiling	50.000h 6000k	591 lm	5-years	314x188x72mm	0°C<Ta<45°C



The CL-8016 is an explosion-proof LED emergency light, designed for Zone 2 hazardous areas. Thanks to IP65 protection it is suitable in dry and wet locations (rest room, basement, garage, etc.) and for outdoor use as well.



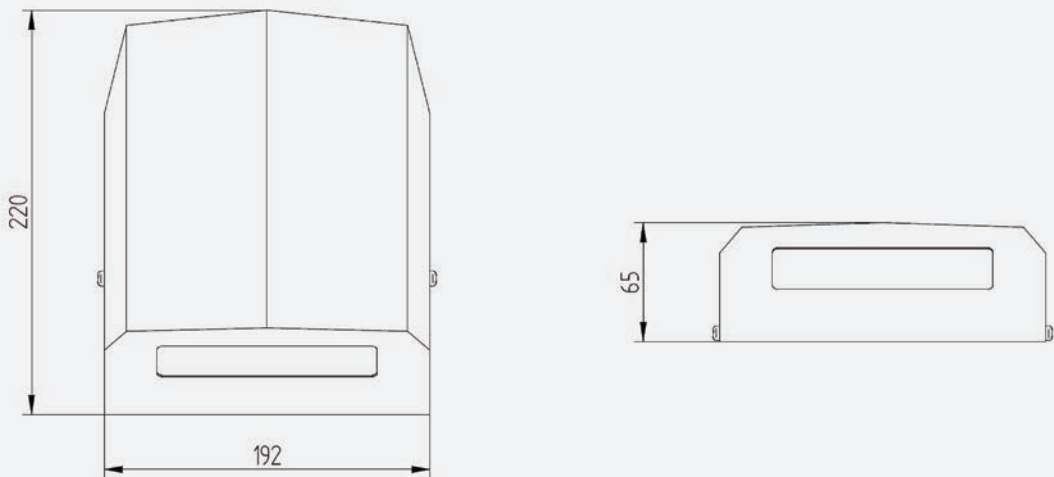
# White metal emergency luminarie **CL-5013**



Mounting	Light source	Luminous flux	Warranty	Size	Temperature
Sidewall	50.000h 6000k	314 lm	5-years	192x220x65mm	-25°C<Ta<50°C














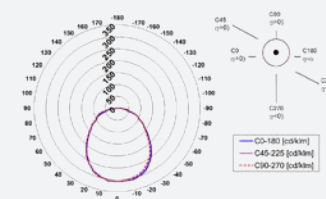
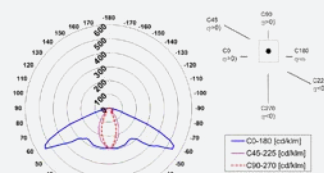
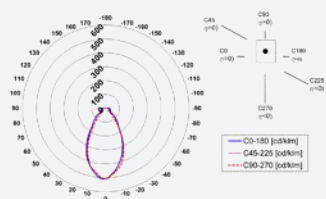
Thanks to IP65 protection it is suitable in dry and wet locations (rest room, basement, garage, etc.) and for outdoor use as well.


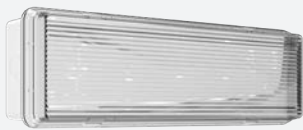











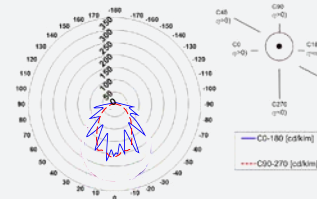
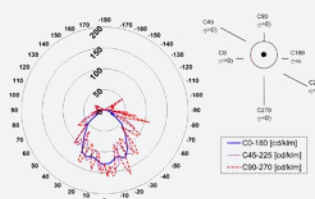
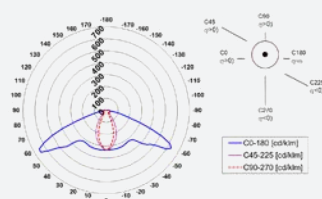














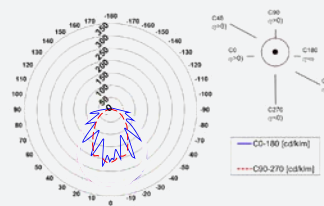
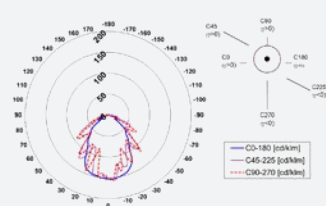
			CL 313 R (314 lm)							CL 313C F (329 lm)							CL-4014R (377 lm)						
Luminaire																							
Mounting height (m)			2,5	3	4	6	8	10	15	2,5	3	4	6	8	10	15	2,5	3	4	6	8	10	15
Escape route min 1 lux	Transverse mounting		6,47	7,4	9,05	10,73	11,49	12,03	9,51	13,12	14,9	18,02	22,53	21,75	15,35	0	10,06	10,73	11,97	13,3	13,77	13,33	0
			2,92	3,27	3,68	4,03	4,15	3,77	0	5,87	6,62	7,77	8,06	4,66	1,84	0	4,13	4,35	4,75	5,01	4,51	2,63	0
	Axial mounting		5,81	5,77	7,12	9,55	10,84	11,69	9,36	5,99	5,71	4,77	6,18	6,9	6,63	0	10,03	10,74	11,97	13,24	13,72	13,23	0
			2,34	2,69	3,31	3,95	4,23	3,96	0	1,51	1,73	2,13	2,49	2,18	0,68	0	4,11	4,32	4,76	4,89	4,36	2,28	0
Open (anti-panic) area min 0.5 lux	Transverse mounting		6,79	8,18	10,01	13,25	14,88	15,83	17,28	14,56	16,59	20,31	26,53	31,02	31,86	19,89	12,52	13,45	14,8	17,24	18,63	19,35	18,25
			3,01	3,63	4,48	5,33	5,65	5,89	4,95	6,6	7,48	9,03	11,32	12,23	7,71	0	5,08	5,45	6,08	6,8	7,08	6,92	0
	Axial mounting		6,45	7,76	7,82	10,6	13,07	14,56	16,73	7,93	8,52	8,26	6,9	8,44	9,45	8,81	12,73	13,52	14,79	17,22	18,57	19,27	18,1
			2,41	2,9	3,65	4,83	5,5	5,89	5,36	3	2,93	2,36	3,15	3,5	3,4	0	5,04	5,42	6,04	6,67	6,92	6,72	0




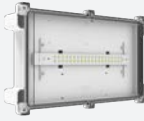









			CL-4014F (388 lm)							CL-613 (294 lm)							CL-616 (591 lm)						
Luminaire																							
Mounting height (m)			2,5	3	4	6	8	10	15	2,5	3	4	6	8	10	15	2,5	3	4	6	8	10	15
Escape route min 1 lux	Transverse mounting		14,18	16,02	19,08	23,91	24,74	18,34	4,61	7,43	8,38	9,71	10,58	10,68	8,29	0	9,71	10,48	11,55	13,29	14,17	14,84	0
			6,29	6,99	8,25	8,38	5,55	3,62	0	3,27	3,55	3,73	3,8	2,07	0	0	3,92	4,23	4,52	5,08	5,17	4,66	0
	Axial mounting		5,8	5,48	4,84	6,44	7,35	7,4	1,83	9,37	10,09	11,19	11,56	10,27	6,18	0	11,43	12,8	14,81	13,91	16,46	15,74	0
			1,6	1,72	2,13	2,53	2,45	1,5	0	4,14	4,52	3,78	2,99	1,65	0	0	4,9	5,4	4,78	5,96	4,7	2,76	0
Open (anti-panic) area min 0.5 lux	Transverse mounting		15,98	17,92	21,87	27,98	32,96	36,23	23,87	8,52	9,52	11,46	14,03	14,76	15,04	9,75	10,41	12,3	14,24	17,01	18,16	19,34	20,87
			7,15	8,07	9,59	11,99	13	8,88	3,24	3,75	4,23	4,91	5,37	5,4	4,99	0	4,38	5,24	5,77	6,64	7,08	7,42	5,85
	Axial mounting		8,46	8,49	7,79	7,19	8,79	9,93	10,35	10,87	12,13	14,41	16,3	15,86	15,34	5,66	12,22	14,58	17,51	21,29	19,12	21,52	19,24
			2,9	2,77	2,35	3,15	3,55	3,68	1,34	4,55	5,26	6,23	5,56	4,28	2,51	0	5,37	6,4	7,4	6,95	8,23	8,97	3,7

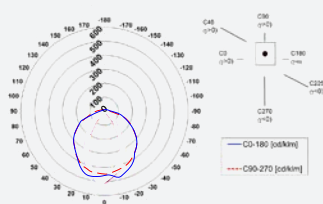


			CL-813 (251 lm)							CL-816 (591 lm)						
Luminaire																
Mounting height (m)			2,5	3	4	6	8	10	15	2,5	3	4	6	8	10	15
Escape route min 1 lux	Transverse mounting		7,28	8,18	9,58	10,37	10,53	10,44	0	9,71	10,48	11,55	13,29	14,17	14,84	0
			3,17	3,47	3,6	3,71	3,38	0	0	3,92	4,23	4,52	5,08	5,17	4,66	0
	Axial mounting		9,29	10,44	11,61	11,47	9,39	5,58	0	11,43	12,8	14,81	13,91	16,46	15,74	0
			4,16	3,53	4,11	3,65	2,26	0	0	4,9	5,4	4,78	5,96	4,7	2,76	0
Open (anti-panic) area min 0.5 lux	Transverse mounting		8,44	9,37	11,22	11,88	14,37	14,99	12,65	10,41	12,3	14,24	17,01	18,16	19,34	20,87
			3,66	4,11	4,8	5,2	5,32	5,28	0	4,38	5,24	5,77	6,64	7,08	7,42	5,85
	Axial mounting		10,5	11,97	14,27	16,44	15,72	15,72	7,7	12,22	14,58	17,51	21,29	19,12	21,52	19,24
			4,87	5,39	4,87	6,09	5,08	3,19	0	5,37	6,4	7,4	6,95	8,23	8,97	3,7





			CL-6016 (604 lm)							CL-8016 (591 lm)							CL-5013 (314 lm)						
Luminaire																							
Mounting height (m)			2,5	3	4	6	8	10	15	2,5	3	4	6	8	10	15	2,5	3	4	6	8	9	
Escape route min 1 lux	Transverse mounting		9,71	10,48	11,55	13,29	14,17	14,84	0	9,71	10,48	11,55	13,29	14,17	14,84	0	3,813	4,15	4,31	4,35	4,39	3,75	
			3,92	4,23	4,52	5,08	5,17	4,66	0	3,92	4,23	4,52	5,08	5,17	4,66	0	7,625	7,75	8,05	8,12	8,24	7,5	
	Axial mounting		11,43	12,8	14,81	13,91	16,46	15,74	0	11,43	12,8	14,81	13,91	16,46	15,74	0							
			4,9	5,4	4,78	5,96	4,7	2,76	0	4,9	5,4	4,78	5,96	4,7	2,76	0							
Open (anti-panic) area min 0.5 lux	Transverse mounting		10,41	12,3	14,24	17,01	18,16	19,34	20,87	10,41	12,3	14,24	17,01	18,16	19,34	20,87							
			4,38	5,24	5,77	6,64	7,08	7,42	5,85	4,38	5,24	5,77	6,64	7,08	7,42	5,85							
	Axial mounting		12,22	14,58	17,51	21,29	19,12	21,52	19,24	12,22	14,58	17,51	21,29	19,12	21,52	19,24							
			5,37	6,4	7,4	6,95	8,23	8,97	3,7	5,37	6,4	7,4	6,95	8,23	8,97	3,7							





# Clever Light®

## **ASM SECURITY LTD.**

Hungary, 5000 Szolnok, Hrsz: 21804

Tel: +36 56 510 740

Fax: +36 56 510 741

E-mail: [info@clever-light.com](mailto:info@clever-light.com)

[www.clever-light.com](http://www.clever-light.com)

## **EDGE TECHNICAL SOLUTIONS LLC**

Dubai UAE, PO BOX: 123881

Tel.: +971 4 3352011, Toll free: 800-3343 (EDGE)

E-mail: [info@edge-ts.net](mailto:info@edge-ts.net)

[www.edgetechnicalsolutions.com](http://www.edgetechnicalsolutions.com)