Product Specification

acrylicacrylic



Product Description

This series of explosion-proof evacuation indicator lights is designed for hazardous areas where explosive gases or combustible dust may be present. It is suitable for oil & gas, petrochemical, chemical, pharmaceutical, alcohol, painting, gas station and storage applications, serving as emergency escape signage and evacuation guidance in dangerous locations.

The product is available in single-sided and double-sided versions:

The single-sided version is intended for corridors and passages viewed from one direction;

The double-sided version faces two directions at once, ideal for intersections, halls and cross-passages, ensuring the evacuation route remains clearly visible from either side.

Two mounting options are supported — chain-hung (pendant) and wall-mounted — to fit pipes, trusses, walls and other on-site structures, meeting the installation conditions of various hazardous locations.

It operates in maintained mode and integrates power-failure simulation, monthly and annual self-test, and manual emergency activation.

The MCU-based control system precisely manages battery charge and discharge, provides fault self-diagnosis, and ensures fast, reliable transfer to emergency mode upon mains failure.

Product Features

- Flameproof enclosure — die-cast aluminum body with tempered glass / PC diffuser; precision-machined flameproof joints contain any internal explosion without transmitting it to the outside;

- Corrosion resistance — epoxy powder-coated or e-coating finish, corrosion grade WF2, suitable for coastal and chemical environments;
- Two mounting options are supported — chain-hung (pendant) and wall-mounted — to fit pipes, trusses, walls and other on-site structures, meeting the installation conditions of various hazardous locations.
- High ingress protection — rated IP66, dust-tight and protected against powerful water jets, for indoor, outdoor and wash-down areas;
- Long emergency duration — standard $LiFePO_4$ battery, emergency time ≥ 3 hours, long cycle life and high-temperature safety;
- High-efficiency optics — high-brightness LED , even illumination, low power consumption, lifetime ≥ 50,000 hours;
- Tempered glass front panel — impact-resistant, heat-resistant and built to last.

Applicable Scenarios



Chemical plant



Petrol station



Underground mine

Electrical Specificatins

Note: All parameters are measured at an input voltage of 230 Vac and an ambient temperature 25 ℃ . Special explanations will be given if there are special circumstances.

ITEM	Specification	ITEM	Specification
Input voltage	85-265Vac 50/60Hz	Emergency Switching Test	Manual Test (Test Button) / Auto-test (Monthly/Annually)
Rated Input Current	0.02 A Max.@230Vac	Abnormal Protection	Over-voltage, Over-current, Over-temperature, Short-circuit, and Open-circuit protection and Current limitation
Input Power	3W @ 230Vac	Body	Die-cast aluminum enclosure
Operating Mode	Continuous	Body Color	Silver
Battery Pack	Li-ion 3.7V	Ingress Protection	IP65 (Indoor use)
Charge Current	200mA	Classification	Class I
Charge Time	≤ 15 hours (MAX)	IK Rating	IK07
Charging Voltage	4.2V ± 0.1V enter constant current/constant voltage charging; 4.2V cut off charging.	Operating Temperature	0°C to 45°C
Battery Cycle Life	≥ 500 cycles (at 0.5C charge/discharge, 25°C, to 80% of initial capacity); Replacement recommended every 3 years.	Extreme Temperature	-5°C to 50°C (Short-term Operation)
Emergency Duration	≥ 180min	Warranty	Battery Pack: 3-Year Warranty; Other Parts: 5-Year Warranty
Light source	DIP 5MM 12 PCS LED	Certifications	
Load power	3W	Product Dimensions	AS-F001: 370 X 70 X 170 (mm) Single-sided AS-F001-2: 300 X 75 X 190 (mm) Double-sided

Operation

- After the main power is connected, the red indicator light turns on, indicating that the system is charging.
- When the main power is in fault or blackout, emergency power kits will switch to emergency mode automatically and supply power to the load with a rated emergency power.
- After the main power is ON, the power kits will resume AC power supply mode, and the battery starts charging mode.

To ensure normal operation, performing the following tests periodically is advised:

Visually inspect the indicator light monthly; it should be green and stay on after being connected to the AC main power.

Switch off the AC main power to perform 30 seconds of discharging monthly.

Perform a full discharge annually.

Maintenance

 Charging-Red light on

 Fully charged-Green light on

 Analog Emergency Mode — The green indicator light will flash slowly (1 Hz)

 Fault-Red light flashes quickly

Function

Function	State
Auto-test Function	When the AC main power is in fault or blackout, emergency power kits will switch to emergency mode automatically and supply power to the load with a rated emergency power
Auto-test settings after installation	A. After the initial power-on, the device will perform the first monthly automatic test, and thereafter a monthly test every 30 days. If a power interruption occurs during the interval, the timing will restart. The simulated emergency duration each month is approximately 60 seconds. When entering the simulated monthly test mode, the power supply can smoothly switch to emergency mode, and the green indicator light will flash slowly (1 Hz). After the timing ends, it can return to charging mode normally. B. After the initial power-on and continuous charging for 24 hours to full charge, the device shall perform the annual automatic test every 52 weeks. If a power interruption occurs during the interval, the timing shall restart. During the annual test mode, the power supply shall smoothly switch to emergency mode, and the green indicator shall flash rapidly at 3 Hz. After the timing cycle ends, the device shall return to normal charging mode, and the battery voltage shall not fall below the over-discharge protection threshold. If low voltage is detected, it indicates severe battery degradation, and the battery must be replaced. At the same time, the orange indicator will flash rapidly to alert maintenance personnel.
Manually Test	A. Press and hold the test button for 4 seconds to force a 60-second monthly test. After the test is completed, the next monthly test (30 days) will be counted from that day. B. After the device has been powered on for at least 24 hours, press and hold the test button for 6 seconds to force a 30-minute annual test. After the test is completed, the next annual test (52 weeks) will be counted from that day.

Important Safety Notes

- The batteries should be charged and discharged once every six months (under normal conditions).
- Do not connect the battery to the circuit when it is not in use to prevent battery over-discharge due to self-consumption of the circuit board.
- The storage temperature should range from 0℃ to 35℃, and the humidity should be less than 85% to avoid shortening the battery storage time.
- For lithium batteries that are not used for a long time, it is recommended to discharge them at least once every six months.
- Avoid mechanical shock to the battery.
- Avoid putting the battery near fire or trying to remove it. The electrolyte in the battery is strong alkaline, which will damage the skin and clothes.
- Ensure that the battery polarity (+/−) is insulated to prevent short circuits.

Packaging Information

Model	Quantity per carton	Unit Weight	Inner Box Dimensions (L×W×H)	Carton Dimensions (L×W×H)	N.W	G.W
AS-F001	5	1.75	370 X 75 X 170 (mm）	38 X 39 X 20 (cm)	8.8 kg	10.5 kg
AS-F001-2	5	2.65	310 X 80 X 195 (mm）	41 X 32 X 22 (cm)	13.3 kg	15.1kg

Pattern Selection or Customization

- **Custom Light Color Available**

  Light color is customizable to red, green, blue, or white LED options, coordinated with the panel process (engraving, printing, film overlay, etc.) and printing color.

- **Custom Panel Pattern Available**

Choose from the patterns shown below, or let us know your requirements for custom colors and patterns.



More patterns available — contact us for the full catalog