Product Specification



Product Description

Designed for hazardous locations with explosive gases or combustible dust (e.g., oil & gas, petrochemical, and storage facilities), this emergency light features wall-mount installation adaptable to pipes, trusses, and walls. Operating in maintained mode, it integrates power failure simulation, self-testing, and manual activation. Its MCU-based control system precisely manages battery charging/discharging and fault diagnostics, ensuring rapid and reliable switching to emergency mode during AC power failure to provide critical escape illumination.

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;
- 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	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	IP66 (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	SMT 505 1*2 PCS LED	Certifications	
Load power	3W	Product Dimensions	280 X 115 X 250 (mm)

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.

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. 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. 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.

Packaging Information

Model	Quantity per carton	Unit Weight	Inner Box Dimensions (L×W×H)	Carton Dimensions (L×W×H)	N.W	G.W
AS-F002	5	1.35	370 X 75 X 170 (mm）	38 X 39 X 19.5 (cm)	6.8 kg	8.5 kg