

EX-ES03 SERIES

EXPLOSION-PROOF EMERGENCY LIGHT

Class I Division 1 & 2, Class II Division 1 & 2, Class III

INTRODUCTION

The FGE-EX-ES03C Series Explosion-Proof Lighting is a compact emergency LED unit for hazardous zones. Featuring a dual-head adjustable design, it provides directional lighting during emergency situations.

Built with anti-corrosion materials and a sealed battery compartment, it ensures stable performance and long service life.

Certified for Class I Division 1 & 2, Class II Division 1 & 2, Class III, ES03C is ideal for escape routes, tunnels, and control rooms requiring reliable emergency illumination.



ES03-A1



ES03-A2



ES03-A3



ES03-C1

COMPLIANCE

ES03-A1
Class I, Division 1, Groups C, D
Class I, Division 2, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class II, Division 2, Groups F, G
Class III
UL 844 Hazardous Locations
UL 924 Emergency Lighting
UL 1598A Marine Outside Type
UL 1598 Wet Locations
UL 8750 LED Safety

ES03-A2
Class I, Division 1, Groups C, D
Class I, Division 2, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class II, Division 2, Groups F, G
Class III
UL 844 Hazardous Locations
UL 924 Emergency Lighting

ES03-A3
Class I, Division 1, Groups C, D
Class I, Division 2, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class II, Division 2, Groups F, G
Class III
UL 844 Hazardous Locations

ES03-C1
Class I, Division 1, Groups C, D
Class I, Division 2, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class II, Division 2, Groups F, G
Class III
UL 844 Hazardous Locations
UL 924 Emergency Lighting

Intertek NOM HazLoc ABS IP66 IK10

LM-79 LM-80 TM-21 ISTMT IEC

FEATURES

80 lm/W

High Efficacy & Energy Saving: Up to 80 lm/W, reducing energy consumption by over 60% compared with HID fixtures.

Discharge Time: 180 minutes
Provides up to 180 minutes of continuous illumination during power failure.

90°

Bidirectional Adjustability: Two high-lumen spot lights can be adjusted in horizontal and vertical directions.

RELIABLE WARRANTY

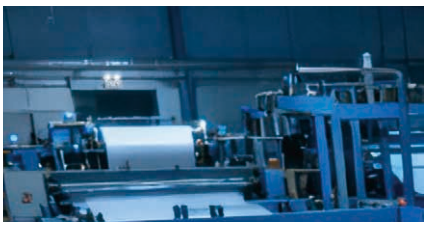
Reliable Warranty:
5 Years Warranty.

- **Robust Protection:**
  IP66 waterproof & dustproof, IK10 impact resistance for harsh industrial environments.

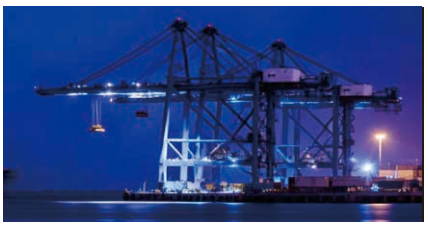
- **Superior Thermal Management:**
  A360 die-casting aluminum housing, great corrosion resistance and cooling performance.

- **Wide Input Voltage:**
  AC100-277V, suitable for global power grids.

APPLICATIONS



Paper Mills: Providing dependable emergency illumination in dust-heavy paper production areas to ensure safe evacuation during power outages.



Loading Dock Platforms: Ensuring clear and stable emergency lighting for busy loading zones to guide workers safely through high-traffic areas during power interruptions.



Chemical Processing Facilities: Delivering reliable emergency lighting in hazardous chemical environments to support safe movement and quick response when normal power fails.



Coal Mine: Offering essential backup illumination for dark and confined mining areas to enhance worker safety during unexpected power losses.



Power Plants: Maintaining critical visibility across high-risk equipment areas to support safe operations when power interruptions occur.



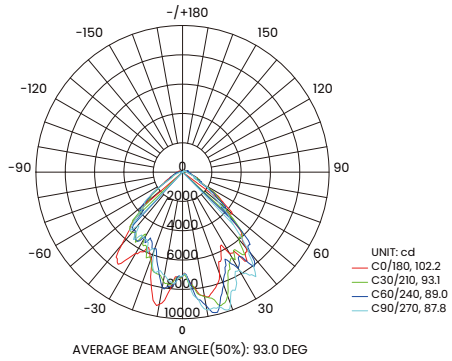
Heavy Industrial Facilities: Supporting safe evacuation and operational continuity in large industrial environments during unexpected power failures.

TECHNICAL PARAMETERS

Product Model	EX-ES03-A1	EX-ES03-A2	EX-ES03-A3	EX-ES03-C1
Electrical Performance				
Wattage	10W	15W	5W	10W
Input Voltage	AC100-277V	AC100-277V	AC100-277V	AC100-277V
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor (PF)	>0.9	>0.9	>0.9	>0.9
Surge Protection	-	-	-	-
THD	<20%	<20%	<20%	<20%
Optical Performance				
Luminous Efficacy	80 lm/W	80 lm/W	80 lm/W	80 lm/W
Luminous Flux	800lm	1200lm	400lm	800lm
CCT	5000K	3000K-6500K	3000K-6500K	3000K-6500K
CRI	Ra>70	Ra>70	Ra>70	Ra>70
Beam Angle	90°/120°	90°/120°	90°/120°	90°/120°
Unified Glare Rating (UGR)	-	-	-	-
Reliability				
Lifetime	50,000 h	50,000 h	50,000 h	50,000 h
Operating Temperature	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Storage Temperature	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C
Ingress Protection	IP66	IP66	IP66	IP66
Impact Resistance	IK10	IK10	IK10	IK10
Control				
Dimming	Non Dimmable	Non Dimmable	Non Dimmable	Non Dimmable
Sensor	-	-	-	-
Communication Protocol	-	-	-	-
Emergency Kit	3 Hours Emergency Time	3 Hours Emergency Time	3 Hours Emergency Time	3 Hours Emergency Time
Mechanical				
Housing Material	A360 Die-casting Aluminum	A360 Die-casting Aluminum	A360 Die-casting Aluminum	A360 Die-casting Aluminum
Lens Material	Tempered Glass	Tempered Glass	Tempered Glass	Tempered Glass
Coating	Grey/7040	Grey/7040	Grey/7040	Grey/7040
Net Weight	8kg	25kg	8kg	8kg
Dimensions	546x539x159mm	546x539x159mm	546x539x159mm	305x165.5x320.5mm
Warranty	5 Years	5 Years	5 Years	5 Years

PHOTOMETRICS

Luminous Intensity Distribution Diagram

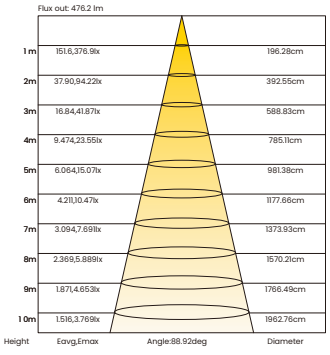


AVERAGE BEAM ANGLE(50%): 93.0 DEG

90°

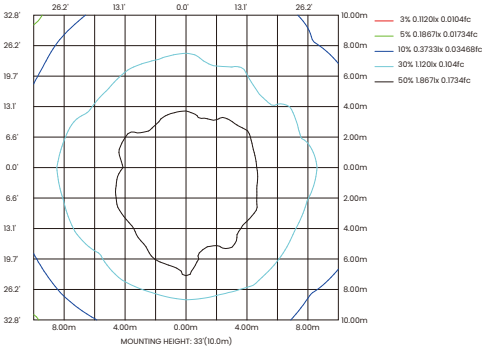
ILLUMINANCE DISTRIBUTION

Illuminance at A Distance



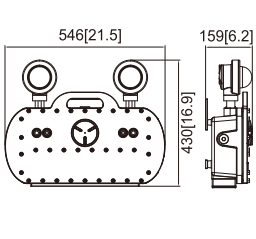
90°

Iso-illuminance Diagram (Iso-lux)

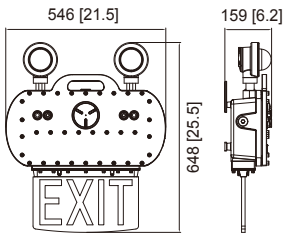


90°

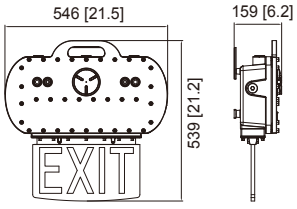
MECHANICAL DIMENSIONS



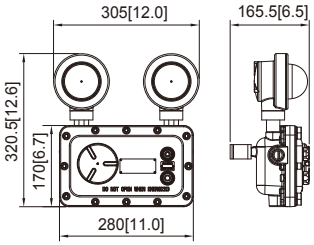
ES03-A1



ES03-A2



ES03-A3



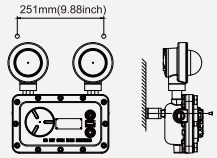
ES03-C1

Product Model	EX-ES03-A1	EX-ES03-A2	EX-ES03-A3	EX-ES03-C1
Wattage	10W	15W	5W	10W
Outer box (L*W*H)	566x525x290mm (22.28"x20.67"x11.45")	760x650x360mm (29.92"x25.59"x14.17")	760x650x360mm (29.92"x25.59"x14.17")	440x450x310mm (7.32"x17.72"x12.20")
Q'ty/Ctn	1pc	1pc	1pc	1pc
N.W./Ctn	8.0kg/17.64lbs	25kg/55.12lbs	8.0kg/17.64lbs	8.0kg/17.64lbs
G.W./Ctn	9.8kg/21.61lbs	30.0kg/66.14lbs	9.8kg/21.61lbs	9.8kg/21.61lbs
Remarks	-	-	-	-

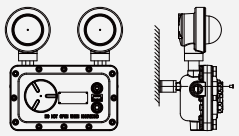
INSTALLATION

Wall Mounting

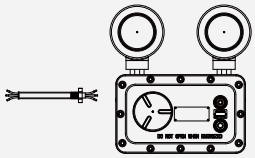
1. Drill two holes as fig. 1, the distance as per 251mm(9.88inch). Then install the lamp to the wall using 7/16" bolts (bolts are not provided).



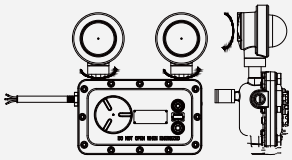
2. Select any one of the three 3/4 "NPT plugs as the interface for the cable input line.



3. Remove the junction box cover (spiral cover) and insert the power cable into the junction box. Then connect the AC cable: black joins to L, white joins to N, green joins to grounding. Further, fill 16mm of chemical filler into the conduit and fix the conduit to the lamp body (it must be confirmed whether there are suitable gaskets before installation).



4. Lock the screw.



ORDER INFORMATION

EX-ES03-Y-YY-YY

❶ ❷ ❸ ❹ ❺ ❻

❶ EX-ES03C Series Explosion-proof Emergency Light

❷ Series

A1	A1
A2	A2
A3	A3
C1	C1

❸ Wattage

5W	5W
10W	10W
15W	15W

❹ Color Temperature

30	3000K
40	4000K
50	5000K
57	5700K
65	6500K

❺ Dimmable

(Blank)	Non-Dimmable

❻ Optics

(Blank)	90°
120	120°

WARRANTY PERIOD
5 YEARS WARRANTY

WARRANTY COVERAGE
LED LIGHT SOURCE, DRIVER

24h
AFTER-SALES SERVICE COMMITMENT
24H RESPONSE

72h
AFTER-SALES SERVICE COMMITMENT
72H RESOLUTION/REPLACEMENT