



EX-I SERIES

EXPLOSION-PROOF LIGHT

Class I Division 1, Class II Division 1 & 2, Zone 1 & 2, Zone 21 & 22

INTRODUCTION

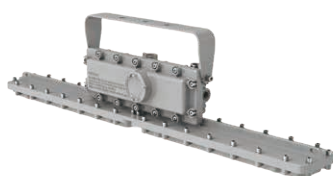
The FGE-EX-I2 / I4 Series Explosion-Proof Lighting is a linear LED fixture engineered for tunnel, corridor, and production line applications in hazardous zones. Its streamlined structure and anti-corrosion design ensure optimal performance in humid, dusty, or gas-prone areas.

Certified for Class I Division 1 & 2, Class II Division 1 & 2, Zone 1 & 2, Zone 21 & 22, the I2/I4 Series delivers uniform, glare-free illumination with up to 170 lm/W efficiency, supporting ceiling, pole, wall, chain, and pendant mounting.

With IP66 & IK08 ratings, it provides robust protection against impact, moisture, and dust, making it a reliable choice for continuous industrial lighting.



I2



I4

COMPLIANCE

UL 844 Hazardous Locations
 Class I Division 1, Group C, D
 Class I Division 2, Group A, B, C, D
 Class II Division 1, Group E, F, G
 Class II Division 2, Group F, G
 Class III
 Class I, Zone 1, Group IIB
 Class II, Zone 21, Group IIIC
 UL 1598 Wet Locations
 UL 1598A Marine Outside Type
 UL 924 Emergency Lighting



FEATURES



170lm/W

High Efficacy & Energy Saving: Up to 170 lm/W, reducing energy consumption by over 60% compared with HID fixtures.



0-10V
DIMMABLE

Smart Control Ready: Compatible with 0-10V/DALI dimming, optional microwave/infrared sensor, and emergency kit.



3 POWER
SELECTABLE

Power Selectable: Multi-wattage options in a single fixture for flexible applications and reduced inventory.



EMERGENCY
BACKUP

90 Minutes EM Back-up Options: Ensuring safety and visibility during critical moments.



RELIABLE
WARRANTY

Reliable Warranty: 5 Years Warranty.



CCT
SELECTABLE

CCT Tunable: Adjustable color temperature to suit diverse environments.

- Robust Protection:

IP66 waterproof & dustproof, IK08 impact resistance for harsh industrial environments.

- Superior Thermal Management:

Copper-free aluminum housing, great corrosion resistance and cooling performance.

- Versatile Mounting Options:

Ceiling, pole, wall, chain, and pendant mounting for flexible installation.

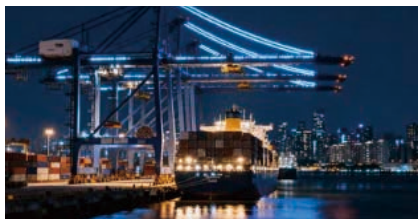
- Wide Input Voltage:

AC100-277V / AC200-480V, suitable for global power grids.

APPLICATIONS



Paper Mills: Providing safe and stable illumination in dust-rich environments to reduce ignition risks and support continuous operation.



Loading Dock Platforms: Delivering durable explosion-proof lighting to withstand vibration and fuel vapors for safer loading and unloading operations.



Chemical Processing Facilities: Ensuring reliable lighting in areas with volatile chemicals to maintain safety and compliance under hazardous conditions.



Coal Mine: Offering explosion-proof illumination for methane- and dust-prone mining zones to protect workers during underground operations.



Power Plants: Providing robust lighting around high-risk equipment to support safe inspection and maintenance in demanding conditions.



Heavy Industrial Facilities: Delivering long-lasting explosion-proof lighting for harsh industrial sites exposed to dust, oil mist, and mechanical impact.

TECHNICAL PARAMETERS

I2 series

Product Model	EX-20W	EX-40W	EX-60W
Electrical Performance			
Wattage	20W	40W	60W
Input Voltage	AC100-277V/200-480V	AC100-277V/200-480V	AC100-277V/200-480V
Frequency	50/60Hz	50/60Hz	50/60Hz
Power Factor (PF)	>0.95	>0.95	>0.95
Surge Protection	10KV	10KV	10KV
THD	<20%	<20%	<20%
Optical Performance			
Luminous Efficacy	140lm/W	140lm/W	140lm/W
Luminous Flux	2800lm	5600lm	8400lm
CCT	2700K-7000K	2700K-7000K	2700K-7000K
CRI	Ra>70	Ra>70	Ra>70
Beam Angle	120°	120°	120°
Unified Glare Rating (UGR)	20	20	20
Reliability			
Lifetime	>150,000h, L70 @55°C	>150,000h, L70 @55°C	>150,000h, L70 @55°C
Operating Temperature	-40 ~ +60°C	-40 ~ +60°C	-40 ~ +60°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C
Ingress Protection	IP66	IP66	IP66
Impact Resistance	IK08	IK08	IK08
Control			
Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming
Sensor	No	No	No
Communication Protocol	-	-	-
Emergency Kit	Optional	Optional	Optional
Mechanical			
Housing Material	Copper-free Aluminum	Copper-free Aluminum	Copper-free Aluminum
Lens Material	Tempered Glass	Tempered Glass	Tempered Glass
Coating	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040
Net Weight	10.5kg	11.5kg	12.5kg
Dimensions	590x140x153mm	590x140x153mm	590x140x153mm
Warranty	5 Years	5 Years	5 Years

I4 series

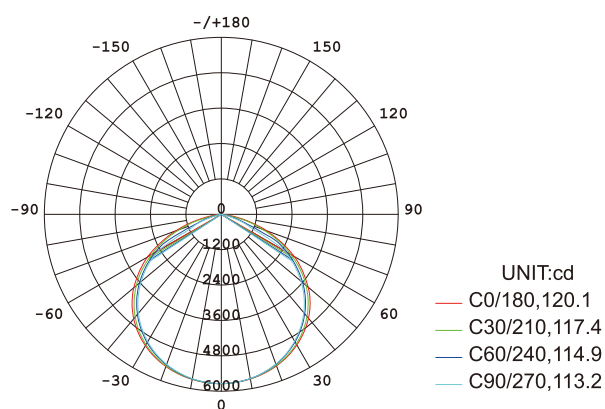
Product Model	EX-40W	EX-60W	EX-80W	EX-100W	EX-120W
Electrical Performance					
Wattage	40W	60W	80W	100W	120W
Input Voltage	AC100-277V/200-480V	AC100-277V/200-480V	AC100-277V/200-480V	AC100-277V/200-480V	AC100-277V/200-480V
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor (PF)	>0.95	>0.95	>0.95	>0.95	>0.95
Surge Protection	10KV	10KV	10KV	10KV	10KV
THD	<20%	<20%	<20%	<20%	<20%
Optical Performance					
Luminous Efficacy	140lm/W	140lm/W	140lm/W	140lm/W	140lm/W
Luminous Flux	5600lm	8400lm	11200lm	14000lm	16800lm
CCT	2700K-7000K	2700K-7000K	2700K-7000K	2700K-7000K	2700K-7000K
CRI	Ra>70	Ra>70	Ra>70	Ra>70	Ra>70
Beam Angle	120°	120°	120°	120°	120°
Unified Glare Rating (UGR)	-	-	-	-	-
Reliability					
Lifetime	>150,000h, L70 @55°C	>150,000h, L70 @55°C	>150,000h, L70 @55°C	>150,000h, L70 @55°C	>150,000h, L70 @55°C
Operating Temperature	-40 ~ +60°C	-40 ~ +60°C	-40 ~ +60°C	-40 ~ +40°C	-40 ~ +40°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C
Ingress Protection	IP66	IP66	IP66	IP66	IP66
Impact Resistance	IK08	IK08	IK08	IK08	IK08
Control					
Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming
Sensor	No	No	No	No	No
Communication Protocol	-	-	-	-	-
Emergency Kit	Optional	Optional	Optional	Optional	Optional
Mechanical					
Housing Material	Copper-free Aluminum	Copper-free Aluminum	Copper-free Aluminum	Copper-free Aluminum	Copper-free Aluminum
Lens Material	Tempered Glass	Tempered Glass	Tempered Glass	Tempered Glass	Tempered Glass
Coating	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040	Grey/RAL7040
Net Weight	17kg	17kg	18kg	18kg	18.6kg
Dimensions	1183.9x140x207mm	1183.9x140x207mm	1183.9x140x207mm	1183.9x140x207mm	1183.9x140x207mm
Warranty	5 Years	5 Years	5 Years	5 Years	5 Years

Power and CCT Selectable

Product Model	EX-60W/50W/40W	EX-100W/80W/60W
Electrical Performance		
Wattage	60W/50W/40W	100W/80W/60W
Input Voltage	AC100-277V/200-480V	AC100-277V/200-480V
Frequency	50/60Hz	50/60Hz
Power Factor (PF)	>0.95	>0.95
Surge Protection	10KV	10KV
THD	<20%	<20%
Optical Performance		
Luminous Efficacy	170lm/W	170lm/W
Luminous Flux	10200lm/8500lm/6800lm	17000lm/13600lm/10200lm
CCT	4000K/5000K/6500K	4000K/5000K/6500K
CRI	Ra>70	Ra>70
Beam Angle	120°	120°
Unified Glare Rating (UGR)	20	-

Reliability		
Lifetime	>150,000h, L70 @55°C	>150,000h, L70 @55°C
Operating Temperature	-40 ~ +60°C	-40 ~ +40°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C
Ingress Protection	IP66	IP66
Impact Resistance	IK08	IK08
Control		
Dimming	0-10V Dimming	0-10V Dimming
Sensor	No	No
Communication Protocol	-	-
Emergency Kit	Optional	Optional
Mechanical		
Housing Material	Copper-free Aluminum	Copper-free Aluminum
Lens Material	Tempered Glass	Tempered Glass
Coating	Grey/RAL7040	Grey/RAL7040
Net Weight	12.5kg	18kg
Dimensions	590x140x153mm	1183.9x140x207mm
Warranty	5 Years	5 Years

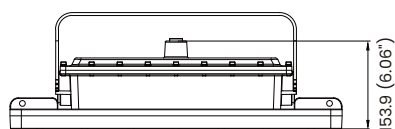
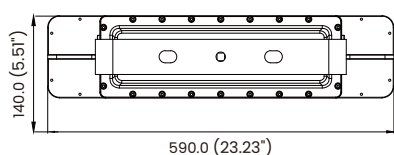
PHOTOMETRICS



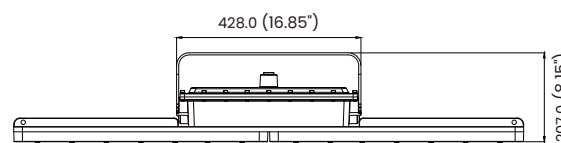
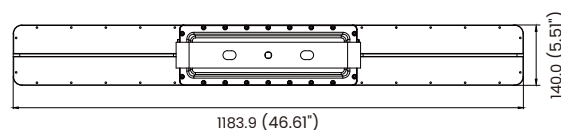
AVERAGE BEAM ANGLE(50%):116.4 DEG

120°

MECHANICAL DIMENSIONS



I2

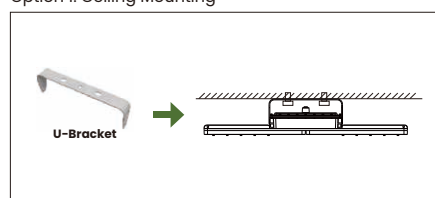


I4

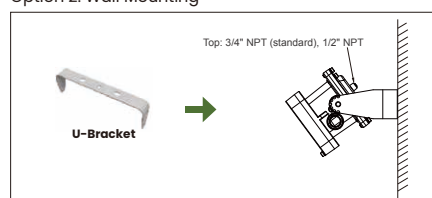
Product Model	EX-I2	EX-I4
Wattage	20W/40W/60W	40W/60W/80W/100W/120W
Outer box (L*W*H)	710x430x320mm (30.31"x13.39"x10.43")	1320x420x330mm (53.94"x14.17"x11.42")
Q'ty/Ctn	1pc	1pc
N.W./Ctn	12.00kg/26.46lbs	18.50kg/40.79lbs
G.W./Ctn	13.00kg/28.66lbs	21.50kg/47.40lbs
Remarks	0.7M cable	0.7M cable

MOUNTING METHODS AND ACCESSORIES

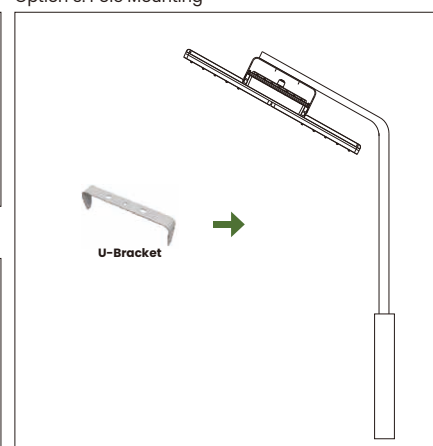
Option 1: Ceiling Mounting



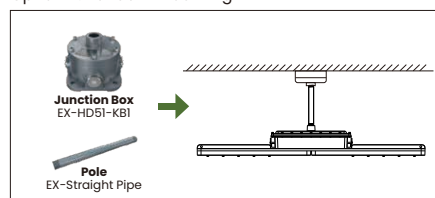
Option 2: Wall Mounting



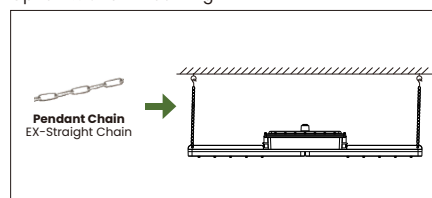
Option 3: Pole Mounting



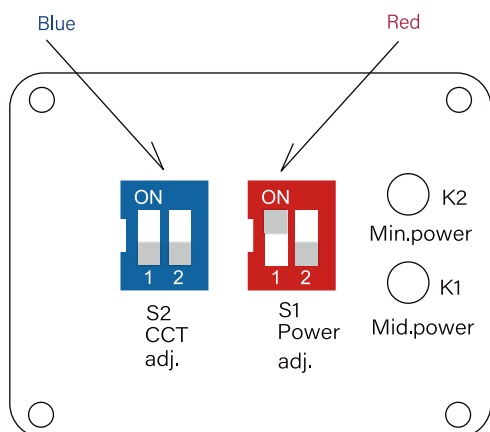
Option 4: Pendant Mounting



Option 5: Chain Mounting



POWER & CCT SELECTABLE



Power Selectable	CCT Selectable
60W/50W/40W	4000K/5000K/6500K
100W/80W/60W	4000K/5000K/6500K

Operating Instructions

• S1 DIP switch - Red (S1 Power adj.)

The luminaire incorporates a dual-dial power configuration switch enabling three selectable output ratings. Factory default settings and power levels can be customized based on project requirements.

1. Maximum Output (100% nominal power)
Switch configuration: Dial 1 = OFF, Dial 2 = OFF;



2. Medium Output (70%-90% of nominal power, depending on specification) Switch configuration: Dial 1 = ON, Dial 2 = OFF



3. Minimum Output (50%-70% of nominal power, depending on specification) Switch configuration: Dial 1 = OFF, Dial 2 = ON



• S2 DIP switch - Blue (S2 CCT adj.)

The luminaire incorporates a dual-dial power configuration switch enabling three preset color temperature options. The factory default setting can be customized according to order requirements.

1. Cool white, e.g. 6500K
Switch configuration: Dial 1 = OFF, Dial 2 = OFF



2. Neutral white, e.g. 5000K
Switch configuration: Dial 1 = ON, Dial 2 = OFF



3. Warm white, e.g. 4000K
Switch configuration: Dial 1 = ON, Dial 2 = ON



ORDER INFORMATION

EX-YY-YY-YY-Y

1 2 3 4 5 6 7 8

1 EX = Explosion Proof Light

2 Wattage

20W	20W
40W	40W
60W	60W
80W	80W
100W	100W
120W	120W

3 Shell Shape Series

I2	I2
I4	I4

4 Color Temperature

27	2700K
30	3000K
35	3500K
40	4000K
50	5000K
57	5700K
65	6500K

5 Voltage

(Blank)	100-277V
H	277-480V

6 Dimmable

D	0-10V Dimming
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7 Optics

120	120°
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8 Options

(Blank)	0.7M cord
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WARRANTY PERIOD
**5 YEARS
WARRANTY**



WARRANTY COVERAGE
**LED LIGHT SOURCE,
DRIVER**



AFTER-SALES
SERVICE COMMITMENT
24H RESPONSE



AFTER-SALES
SERVICE COMMITMENT
72H RESOLUTION/REPLACEMENT