

EX-STA SERIES

EXPLOSION-PROOF LIGHT

Class I Division 2, Zone 2, Zone 21

INTRODUCTION

The FGE-EX-STA1/STA2 Series Explosion-Proof Luminaire stands as the premium lighting solution for marine and hazardous-area applications.

Engineered to thrive in harsh operating conditions, it excels in environments exposed to moisture, grime, dust, corrosion and vibration—while also withstanding extreme elements like high winds, heavy precipitation, snow, and elevated ambient temperatures.

Certified for Class I Divison 2, Zone 2, Zone 21, it is ideal for refineries, chemical storage areas, and tunnels where safety and reliability are critical.



STA1



STA2

COMPLIANCE

UL 1598 Wet Locations
UL 844 Luminaires
Class I, Division 2, Groups A, B, C, D
Class I Zone 2 Group IIC
Class II Zone 21 Group IIIC

IP66 IK08

LM-79 | LM-80 | TM-21 | ISTMT | IEC

FEATURES

140 lm/W

High Efficacy & Energy Saving: Up to 140 lm/W, reducing energy consumption by over 60% compared with HID fixtures.

0-10V DIMMABLE

Smart Control Ready: Supports 0-10V/DALI dimming.

EMERGENCY BACKUP

90-Minute Emergency Backup Option: Ensuring safety and visibility during critical moments.

RELIABLE WARRANTY

Reliable Warranty: 5 Years Warranty.

- **Robust Protection:**
  IP66 waterproof & dustproof, IK08 impact resistance for harsh industrial environments.
- **Superior Thermal Management:**
  ADC12 aluminum housing, great corrosion resistance and cooling performance.
- **Versatile Mounting Options:**
  Pole, trunnion, arm, slip fitter, bracket, and stanchion for flexible installation.
- **Wide Input Voltage:**
  AC120-277V, 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.

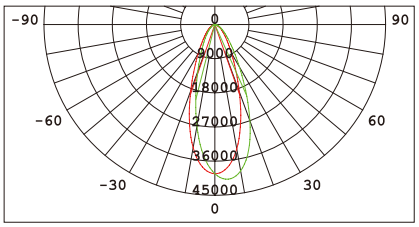
TECHNICAL PARAMETERS

Product Model	EX-STA1	EX-STA2
Electrical Performance		
Wattage	Max. 120W/Max. 200W/Max. 240W	Max. 120W
Input Voltage	AC120-277V	AC120-277V
Frequency	50/60Hz	50/60Hz
Power Factor (PF)	>0.95	>0.95
Surge Protection	10 kV	10 kV
THD	<20%	<20%
Optical Performance		
Luminous Efficacy	140 lm/W	140 lm/W
Luminous Flux	16800lm/28000lm/33600lm	16800lm
CCT	2200K-6500K	2200K-6500K
CRI	Ra>70	Ra>70
Beam Angle	40°/60°/90°/120°/T3/T5	40°/60°/90°/120°/T3/T5
Unified Glare Rating (UGR)	20	20
Reliability		
Lifetime	>100,000 h	>100,000 h
Operating Temperature	-40°C to 40°C / -40°C to 50°C	-40°C to 40°C / -40°C to 50°C
Storage Temperature	-40°C to 70°C	-40°C to 70°C
Ingress Protection	IP66	IP66
Impact Resistance	IK08	IK08
Control		
Dimming	0-10V Dimming	0-10V Dimming
Sensor	-	-
Communication Protocol	-	-
Emergency Kit	Optional	Optional
Mechanical		
Housing Material	ADC12 aluminum	ADC12 aluminum
Lens Material	Tempered glass	Tempered glass
Coating	Grey/RAL7040	Grey/RAL7040
Net Weight	9.5kg	6.5kg
Dimensions	550x329x72mm	415x264x75mm
Warranty	5 Years	5 Years

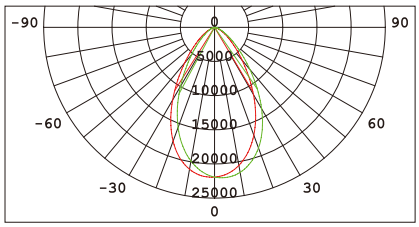
Environmental

Model	Rated Power	Ambient T emperature	Temperature Class (Gas/Dust)
STA1 (Normal)	Max. 240W	-40°C to +40°C	T4/80°C
	Max. 200W	-40°C to +50°C	T4/90°C
	Max. 120W	-40°C to +40°C	T5/80°C
	Max. 120W	-40°C to +56°C	T5/90°C
	Max. 120W	-40°C to +66°C	T4/90°C
STA1 (Emergency)	Max. 120W	0°C to +40°C	T4/80°C
STA2	Max. 100W	-40°C to +40°C	T5/80°C
	Max. 100W	-40°C to +50°C	T5/80°C
	Max. 100W	-40°C to +56°C	T4/90°C
	Max. 50W	-40°C to +40°C	T6/80°C
	Max. 50W	-40°C to +66°C	T5/90°C

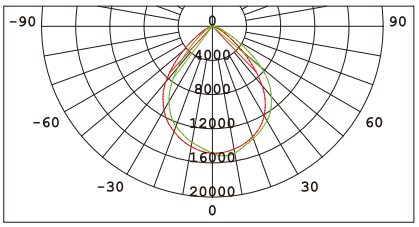
PHOTOMETRICS



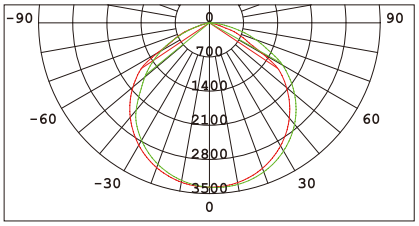
40°



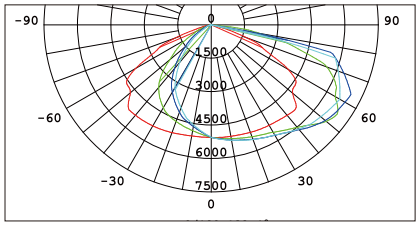
60°



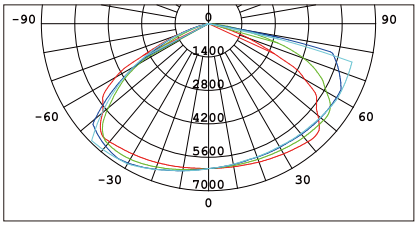
90°



120°

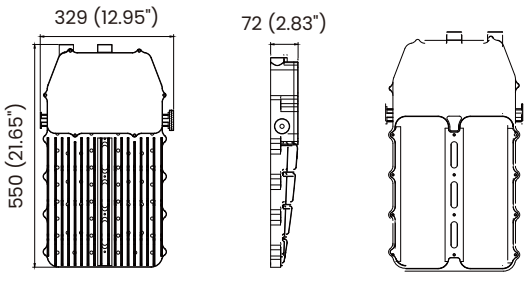


T3 (with Glass)

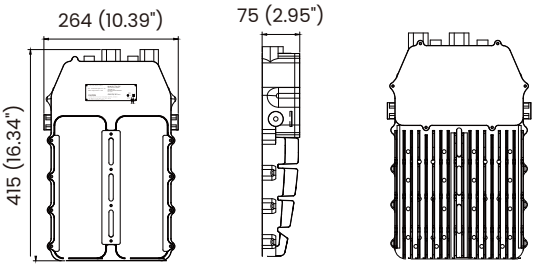


T5 (with Glass)

MECHANICAL DIMENSIONS



STA1



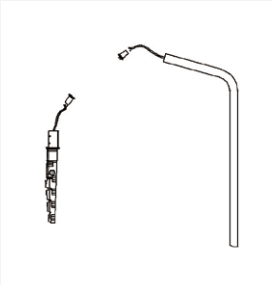
STA2

Product Model	EX-STA1	EX-STA2
Wattage	Max. 120W/Max. 200W/Max. 240W	Max. 120W
Outer box (L*W*H)	692x388x125mm(27.24"x15.27"x4.92")	560x320x127mm(22.05"x12.60"x5.00")
Q'ty/Ctn	1pc	1pc
N.W./Ctn	9.5kg/20.94lbs	6.5kg/14.33lbs
G.W./Ctn	10.5kg/23.15lbs	7.5kg/16.53lbs
Remarks	0.7M cable	0.7M cable

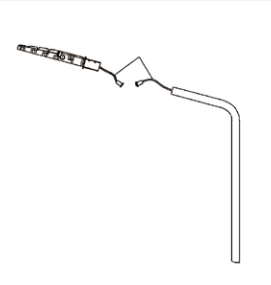
OPERATION INSTRUCTIONS

Slip Mount

1. Drill two 8mm holes for expanded screws.



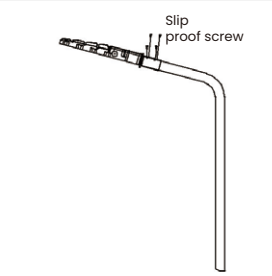
2. Connect the water proof connector.



3. Tighten the expanded screws.

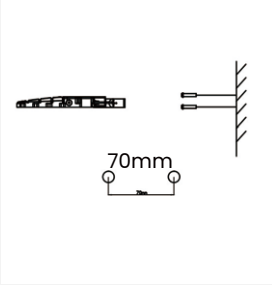


4. Adjust the bracket for suitable angle.

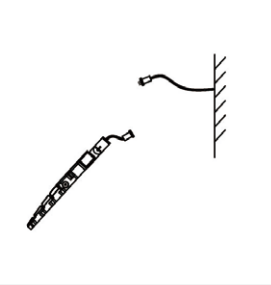


Trunnion Mount

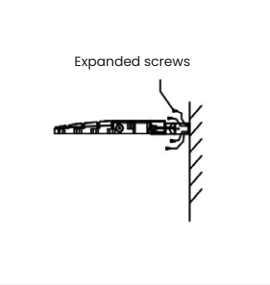
1. Drill two 8mm holes for expanded screws.



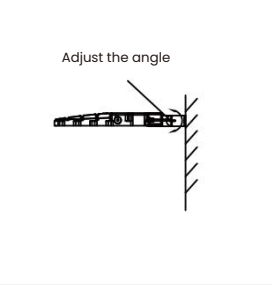
2. Connect the water proof connector.



3. Tighten the expanded screws.

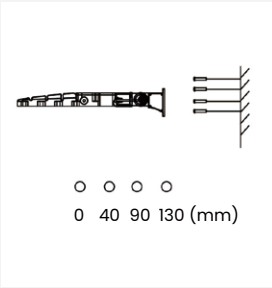


4. Adjust the bracket for suitable angle.

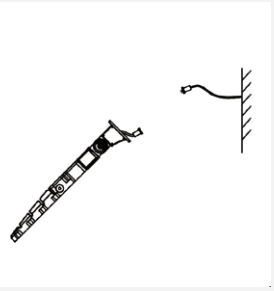


Arm Mount

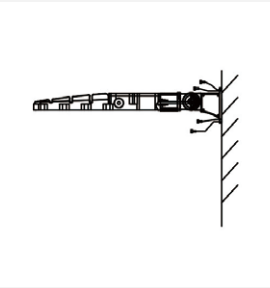
1. Drill 4× holes, the distance as per above dimensions.



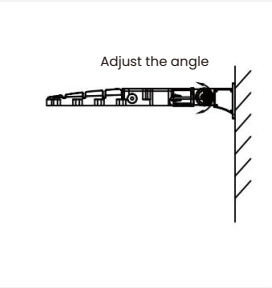
2. Connect the water proof connector.



3. Tighten the 4× screws for fixing arm.

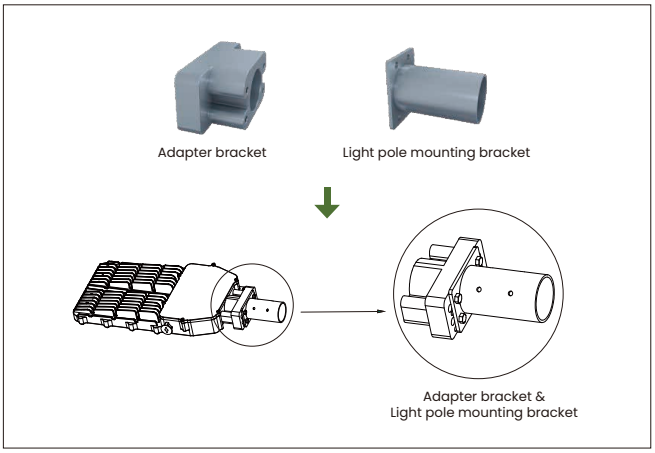


4. Adjust the arm for suitable angle.

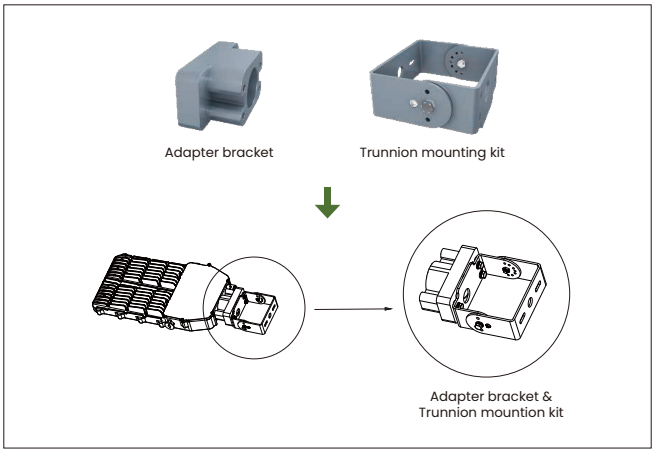


MOUNTING METHODS AND ACCESSORIES

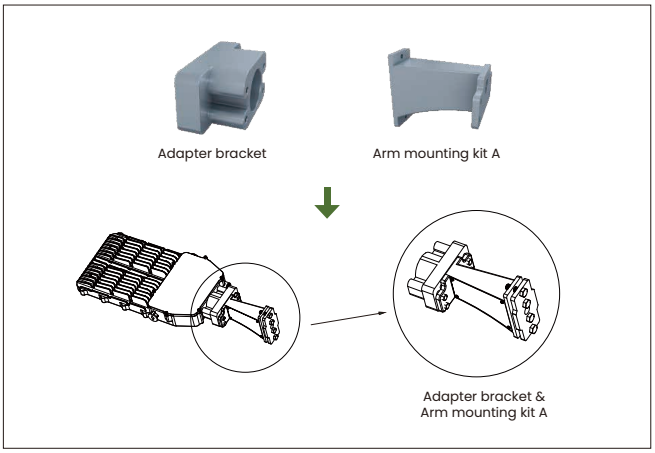
Option 1: Pole Mounting



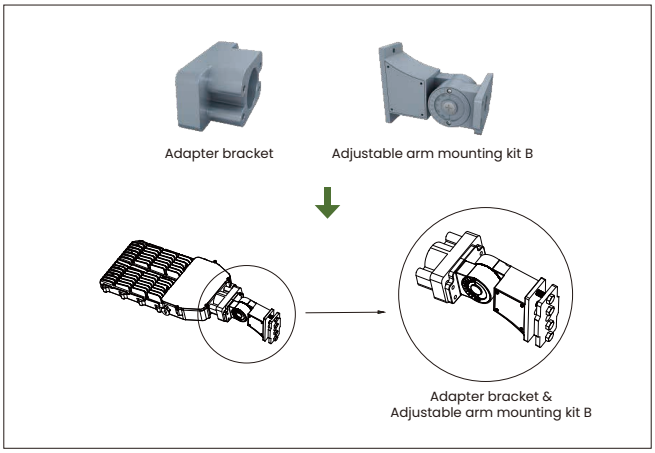
Option 2: Trunnion Mounting



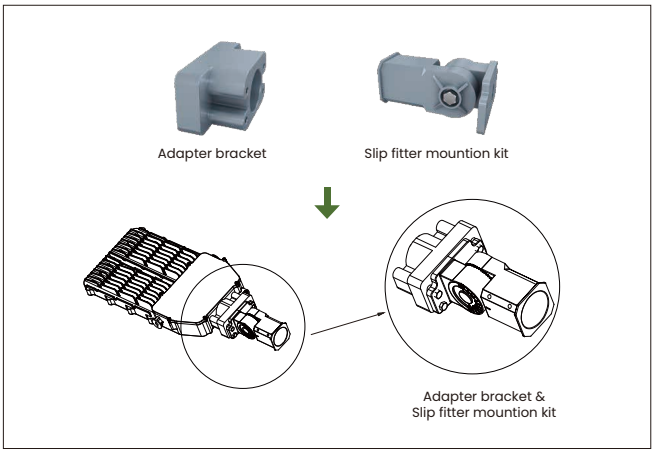
Option 3: Arm Mounting (A)



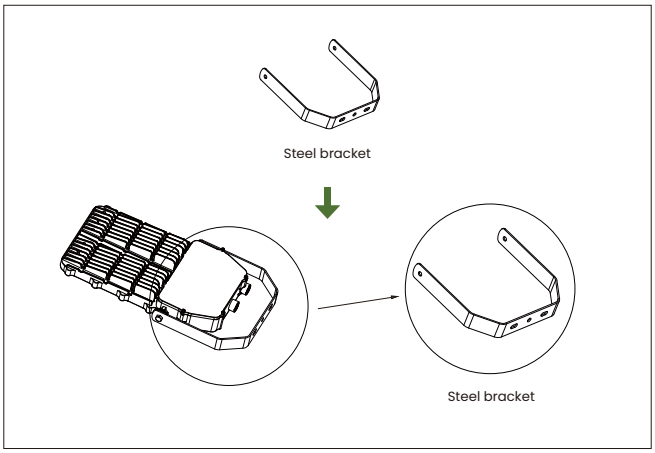
Option 4: Arm Mounting (B)



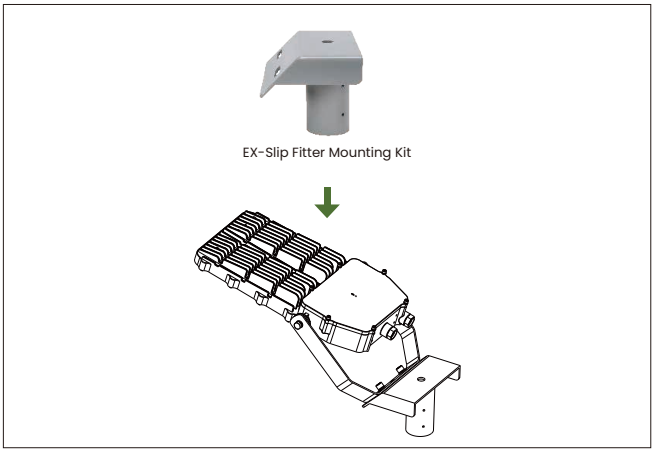
Option 5: Slip Fitter Mounting



Option 6: Bracket Mounting



Option 7: Trunnion Mounting



ORDER INFORMATION

EX-YY-YY-YY-YY

1 2 3 4 5 6 7 8 9

1 EX = Explosion Proof Light

2 Wattage

120W	120W
200W	200W
240W	240W

3 Shell Shape Series

STA1	STA1
STA2	STA2

4 Color Temperature

22	2200K
30	3000K
40	4000K
45	4500K
50	5000K
55	5500K
60	6000K
65	6500K

5 Dimmable

D	0-10V Dimming

6 Optics

120	120°

7 EM Back-up

(Blank)	Without EM Back-up
EM	With EM Back-up

8 Zone

2	Zone 2

9 Options

(Blank)	0.7M cord

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