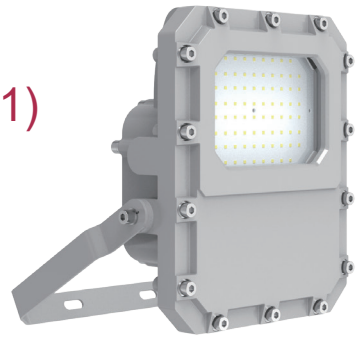
Pan American
Professional Lighting Manufacturer



HAZARDOUS LOCATIONS LED LUMINAIRE

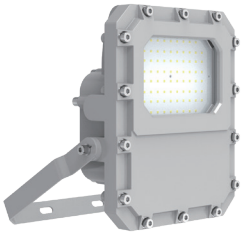
FLA1/FLA1e/FLA2/FLA2e SERIES (Zone 1)



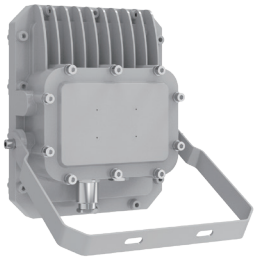
Ex IECEx 3G Vibration NEMA Type 4X IP66 IK10 DIMMABLE 5 YEARS WARRANTY 130 lm/W

Explosion-proof Light FLA1/FLA1e/FLA2/FLA2e Series

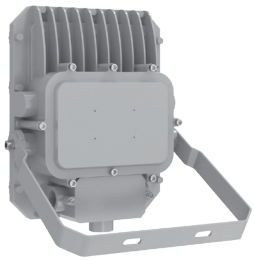
Pan American
Professional Lighting Manufacturer



Front view: FLA1 / FLA1e



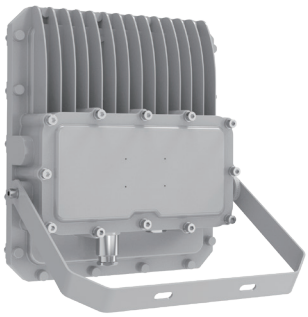
Back view: FLA1



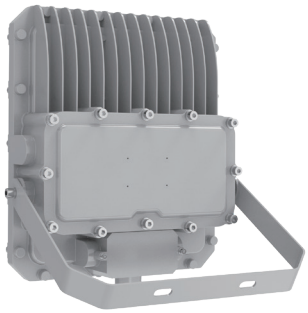
Back view: FLA1e



Front view: FLA1 / FLA1e



Back view: FLA1



Back view: FLA1e

- FLA1: Flame-proof type
- FLA1e: Flame-proof and increased safe type
- FLA2: Flame-proof type
- FLA2e: Flame-proof and increased safe type

Product Description

FLAe series explosion-proof LED lighting fixtures are industrial safety lighting products tailor-made for hazardous explosive environments. The entire product line has obtained dual international explosion-proof certifications of ATEX and IECEx, fully complying with the EN 60079 series explosion-proof standards. Capable of long-term stable operation under extreme harsh industrial working conditions including high humidity, heavy dust, strong corrosion, continuous vibration, rain, snow, and wide temperature fluctuations, this lighting solution is widely applied in high-risk industries such as oil & gas, chemical processing, energy, papermaking, and wastewater treatment, serving as a long-lasting safe lighting option for flammable and explosive factory sites.

Features

- FLA1/FLA2 are pure flameproofluminaires,while FLA1/FLA2e are combined flameproof and increased safety luminaires.
- Equipped with 0-10V/1-10V dimming optional.
- The housing is made of ADC12 aluminum alloy with electrostatic powder coating, offering excellent heat dissipation and corrosion resistance with corrosion protection grade C5.
- The whole unit is certified IK10 for high impact resistance to withstand exteral mechanical shocks.
- Marine-grade anti-corrosion powder coating is applied on the surface for long-term service in corrosive environments.
- Models FLA2, FLA2e are available with emergency function, with a maximum backup duration of 90 minutes.

Compliance

- **FLA1**
  Ex db IIB+H2 T6/T5 Gb
  Ex tb IIIC T80°C/T95°C Db
- **FLA1e**
  Ex db eb IIB+H2 T6/T5 Gb
  Ex tb IIIC T80°C/T95°C Db
- **FLA2**
  Ex db IIB T6…T4 Gb
  Ex tb IIIC T80°C…T100°C Db
- **FLA2-EM**
  Ex db IIB T6 Gb
  Ex tb IIIC T80°C Db
- **FLA2e**
  Ex db eb IIB T6…T4 Gb
  Ex tb IIIC T80°C…T100°C Db
- **FLA2e-EM**
  Ex db eb IIB T6 Gb
  Ex tb IIIC T80°C Db
- ABS
  Vibration 3G
  NEMA Type 4X
  IP66
  IK10

Application

- Power Plants
- Heavy Industrials Storage Facility
- Paper mills
- Wastewater Treatment Plants
- Loading Docks Platforms
- Offshore Environments
- Chemical Processing Facility
- Petrochemical Processing Facility
- Metallurgical Industry
- Coal Mine
- Food and Alcohol industry

Technical Parameter

- Electrical

Model	EX-xxxW FLA	EX-xxxW FLA1e	EX-xxxW FLA2	EX-xxxW FLA2e
Rated Power	20-100W	20-100W	50-200W	50-200W
Input Voltage	200-250VAC/36VDC			
Input Frequency	50/60Hz			
Power Factor	>0.9			
Emergency	Without emergency function			

- Optical

Model	EX-xxxW FLA1/FLA1e	EX-xxxW FLA2/FL2Ae
Lumen Output	2600-13000lm	6500-26000m
Lumens Per Watt	130lm/W	
CCT	3000K-6500K	
CRI	>70	
Beam Angle	40°/60°/90°/120°	
Dimming	0-10V/1-10V dimming optional	

- Mechanical

Model	EX-xxxW FLA1/FLA2	EX-xxxW FLA1e/FLA2e
Product Type	Flame-proof type	Flame-proof and increased safe type
Cable Entry	Bottom: standard 2-M20	Sides: standard: 2-M20 ; Bottom: M25 or 3/4 NPT
Housing Material	Copper-free aluminum, powder coated: C5	
Diffuser	Tempered glass	
Hardware	SUS304	
Protection	IP66/IK10	
Mounting	Ceiling mount	
Mounting Accessory*	Bracket	

**The bracket is the standard accessory packed together with the fixture*

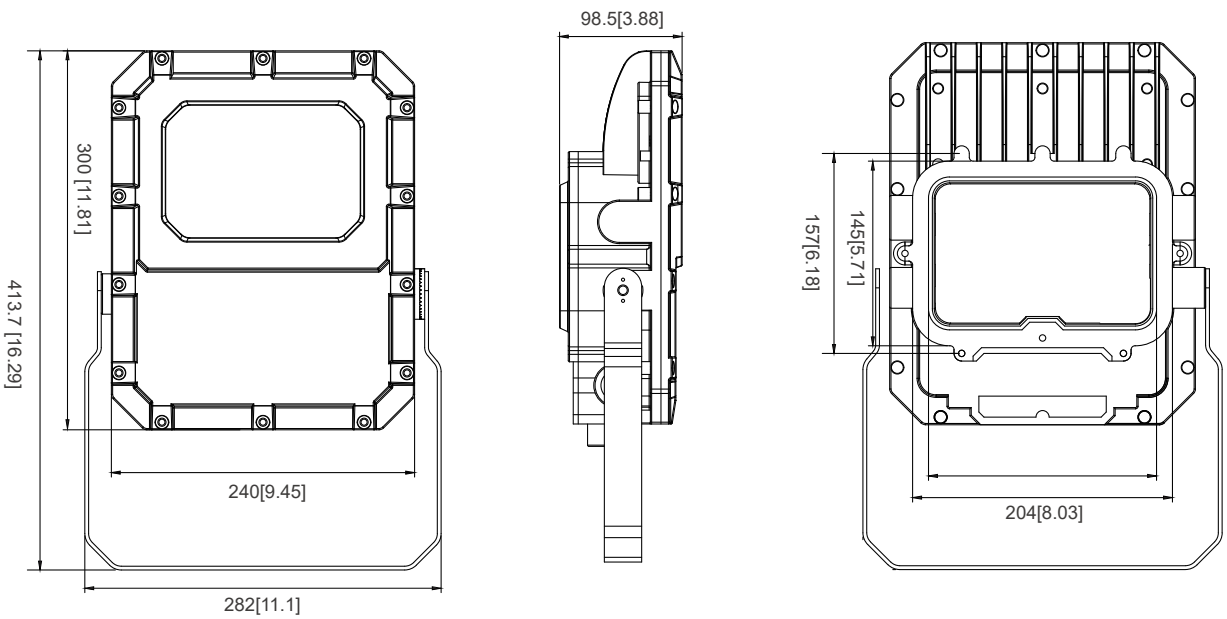
- Environmental

Model	Rated power	Ambient Temp.	Temp. Class(Gas/Dust)
EX-xxxW FLA1	20-100W	-40°C to +40°C	T6 / T80°C
		-40°C to +55°C	T5 / T95°C
EX-xxxW FLA1e	20-100W	-40°C to +40°C	T6 / T80°C
		-40°C to +55°C	T5 / T95°C
	20-50W	-40°C to +65°C	T5 / T95°C
EX-xxxW FLA2	50W-180W	−40°C to +55°C	T5 / T95°C
EX-xxxW FLA2-EM	50-100W / 50-130W	0°C to +40°C	T6 / T80°C
EX-xxxW FLA2e	50W-180W	−40°C to +55°C	T5 / T95°C
EX-xxxW FLA2-EM	50-100W	0°C to +40°C	T6 / T80°C

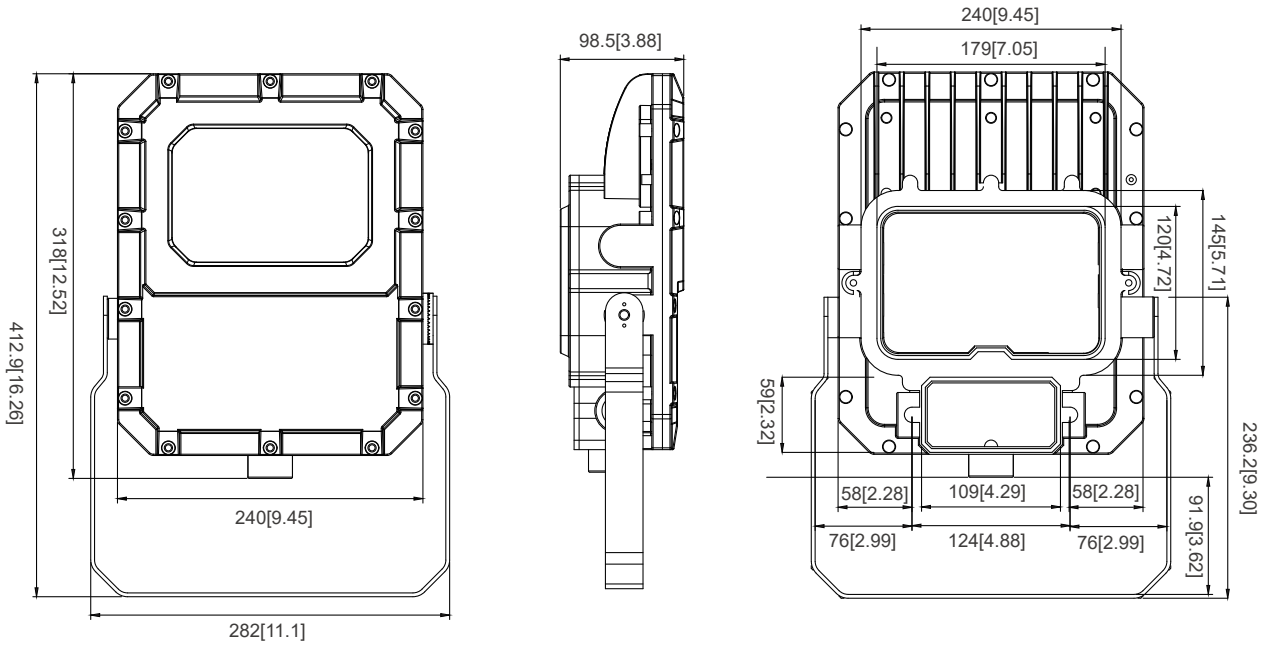
**Refer the IECEx certificate for exact temperature and T-code information.*

Dimensions: mm [inch]

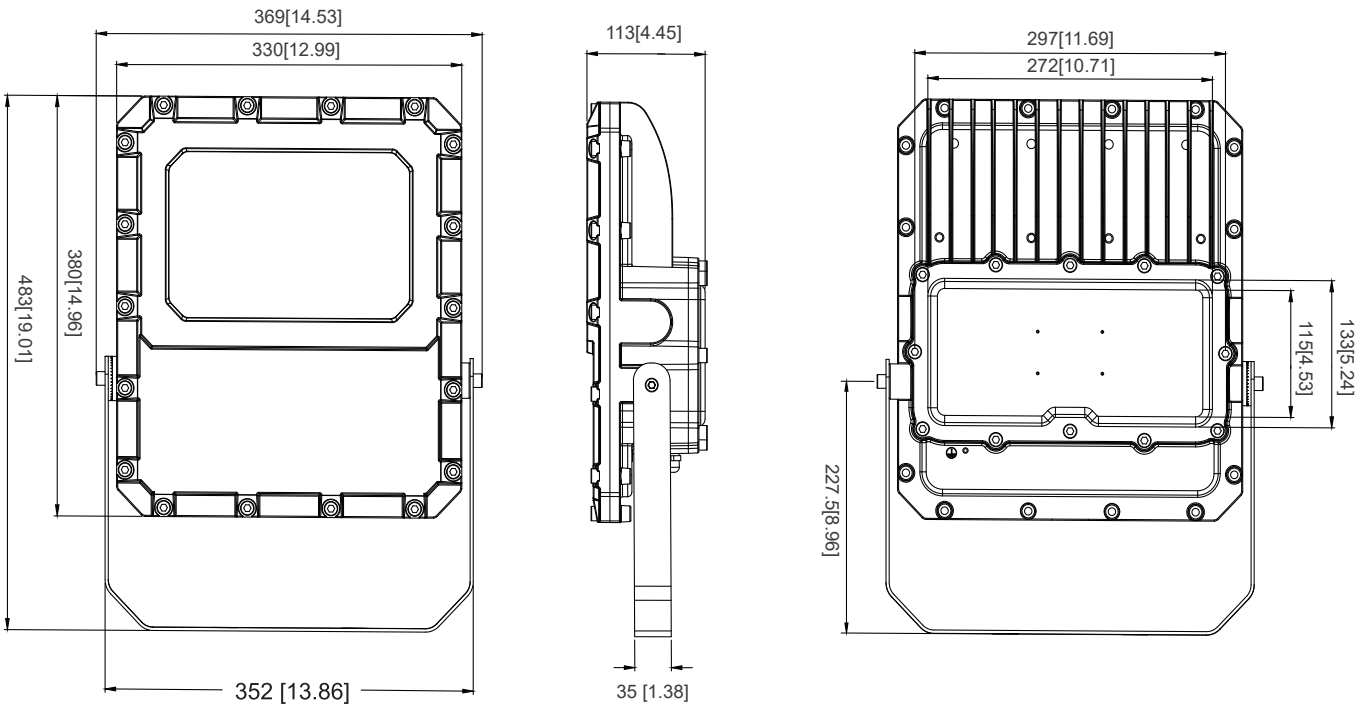
- FLA1



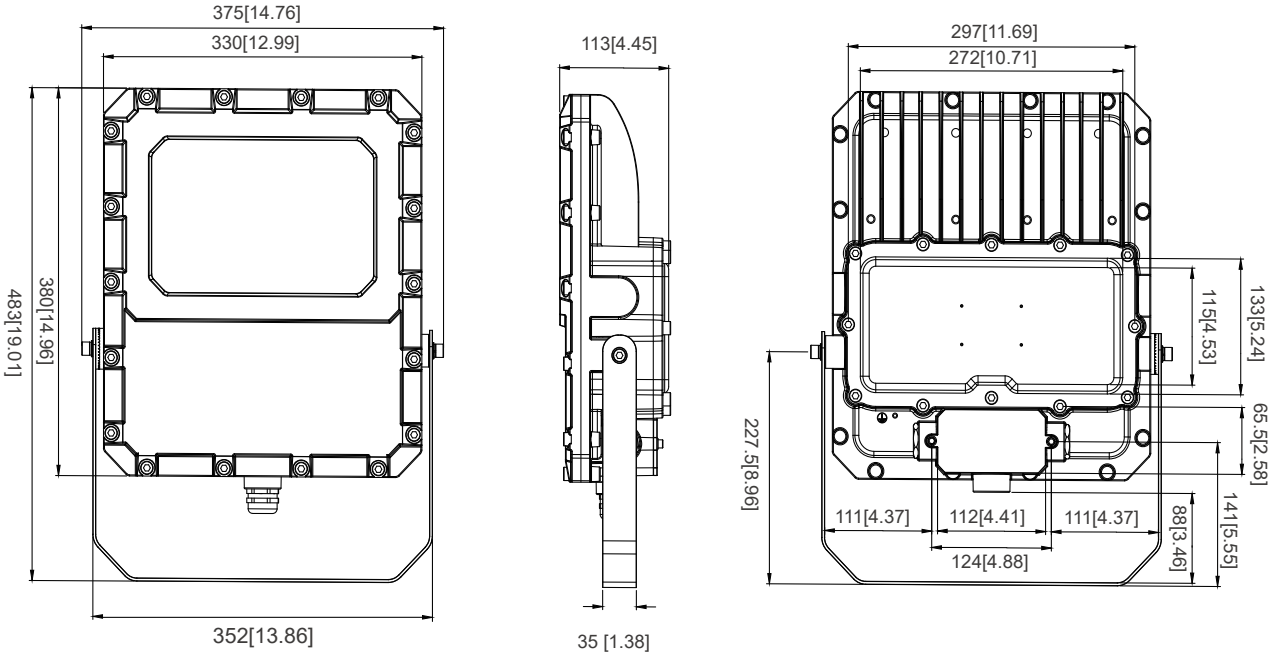
- FLA1e


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412.9[16.26]
240[9.45]
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98.5[3.88]
240[9.45]
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120[4.72]
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91.9[3.62]
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76[2.99]

- FLA2


369[14.53]
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483[19.01]
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113[4.45]
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115[4.53]
133[5.24]
227.5[8.96]

- FLA2e

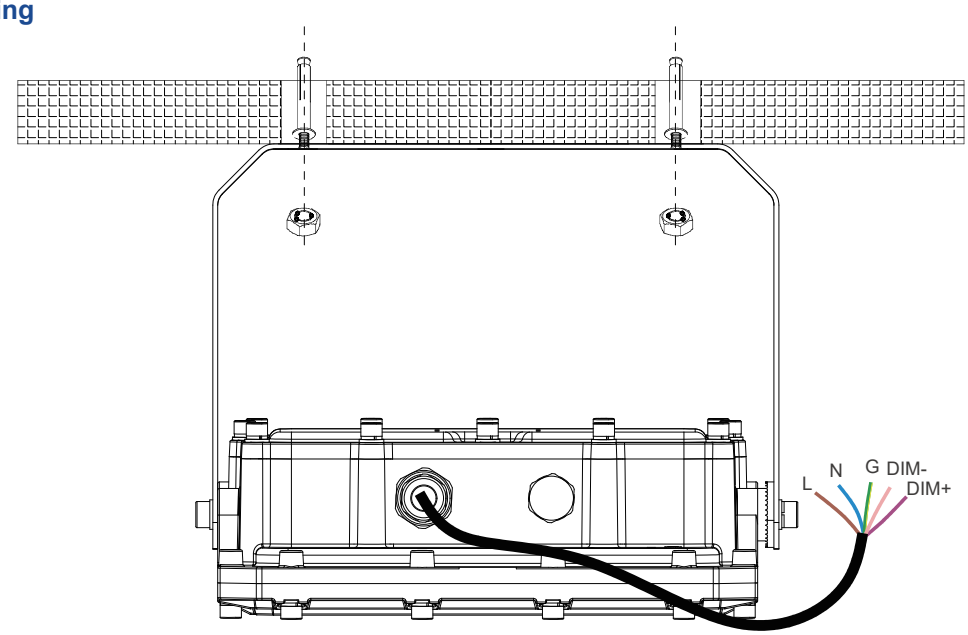


Packing Information

Model	Net Weight	Gross Weight	Quantity/Carton	Package Dimensions (LxWxH)
FLA1/FLA1e	8.5 kg/ 18.74 lb	10 kg/ 22.05 lb	1 pc	544x376x240mm/21.42x14.80x9.45inch
FLA2/FLA2e	12.5 kg/ 27.56 lb	14.5 kg/ 31.97 lb	1 pc	612x482x255mm/24.09x18.97x10.04inch

Mounting Methods

Ceiling Mounting



Ordering Guide

EX - xxxW FLA * * D***

① ② ③ ④ ⑤ ⑥

1.EX	Explosion Proof Light
2.Wattage	FLA1/ FLA1e : 20/ 30/40/50/60/70/80/90/100W FLA2/ FLA2e : 50/60/70/80/90/100/110/120/130 140/150/160/170/180/190/200W FLA2-EM/ FLA2e-EM : 50/60/70/80/90/100W
3.Original Series	FLA1, FLA1e, FLA2, FLA2-EM, FLA2e, FLA2e-EM （e: Increased safety chamber ； EM: Emergency power supply ）
4.Dimming Option	D: Dimmable N: non-dimmable
5.CCT	30, 35, 40, 50, 57, 65 : 3000K, 3500K … to 6500K
6.Beam angle	D40 = 40° D60 = 60° D90 = 90° D120 = 120°