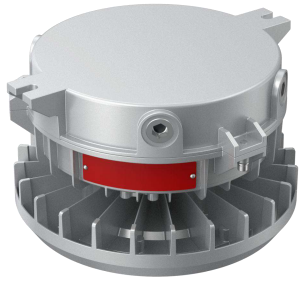
Specifications - HA05 LED Luminaires for Hazardous Locations

Version: 3.0



Description

HA05 is a certified explosion-proof light, which is suitable for gas Zone 2 (international and European explosion-proof "Zone 2") and dust Zone 21 (International and European explosion-proof "Zone 21"). It has superior waterproof, dustproof, anti-corrosion, anti-vibration performance, an ideal solution for all types of harsh and hazardous applications.

Key Features

•Power range
30W/50W/75W/100W/120W/150W/180W/200W/240W, system efficacy up to 140lm/w, lumen packages from 4200lm to 33600lm.
• Warm White-Cool White color(2000K-6500K) and colored LED R/G/B/AMBER optional.
• 1-10V dimmable and DALI control optional.
•Type I, Type III, Type V light distributions to meet various different applications.
• LED chips are separated from the driver cavity, ensures good heat dissipation and longer service life.
• Multiple mounting ways including Ceiling mount, Pendant mount, Wall bracket, 25° Stanchion mount, 90° Stanchion mount, Trunnion mount to satisfy different installation requirements.
• Ceiling mount, bracket mount and wall mount are equipped with multiple conduit holes(cable entry holes), which can realize the interconnection of fixtures, greatly facilitates on-site installation and wiring.
• Easy wiring with self-locking spring terminals.
• Cover on driverbox is designed anti-dislodging.
• The body adopts special design, avoid water being accumulated, easy clean and well heat performance.
• Well sealed with special structure and materials.
•IP66 and IK08 double protection, with super reliability.
•The max.operating ambient temperature range:-40°C to 65°C.
•Equipped with low copper aluminum alloy body and special powder coating, as well as stainless steel components with special anti-corrosion treatment, all those anti-corrosion aspects make it suitable for marine environments for over 10 years.

Applications

- Oil and gas refineries.
- Drilling rigs.
- Petrochemical facilities.
- Food and beverage facilities.
- Indoor/outdoor spotlighting, outdoor wall and stanchion mounted general area lighting.
- Where flammable vapors, gases, ignitable dusts, fibers or flyings are present.

Electrical Information

Model No.	HA05-030	HA05-050	HA05-075	HA05-100	HA05-120	HA05-150	HA05-180	HA05-200	HA05-240
Power Consumption(±5%)	30W	50W	75W	100W	120W	150W	180W	200W	240W
Power Supply	INVENTRONICS								
Input Voltage	100-277Vac, 50 / 60 Hz								
Power Factor	>0.90								
Surge Protection	10kV line-line, 10kV line-earth								
Driver Type	Constant current (CC)								
Control	1-10V Dimmable and DALI dimmable and Non-dimmable /								

Optic Information

LED Type	LED 3030								
Luminous Flux (±10%)	4200lm	7000lm	10500lm	14000lm	16800lm	21000lm	25200lm	28000lm	33600lm
Efficacy(5000K Ra70)	140lm/W								
Correlated Color Temperature	5000K (2000K,2200K,2500K,2700K,3000K,3500K,4000K,4500K,5700K,6500K optional)/Red,Green.Blue,Amber								
Color Rendering Index	Ra70/Ra80/Ra90								
Beam Angle	Type I,Type III,Type Ⅴ								
UGR Level	/								

Dimentions and Mount

Product Dimension	See Table 1 for details	See Table 2 for details
Luminaire Net Weight(±0.3kg)	See Table 1 for details	See Table 2 for details
Export Carton Size	See Table 1 for details	See Table 2 for details
Gross Weight(±0.3kg)	See Table 1 for details	See Table 2 for details
Mounting Option	Ceiling mount/Pendant mount/Wall bracket/25° Stanchion mount/90° Stanchion mount/Trunnion mount	
Material	Aluminum alloy (less than 0.4% copper content) Polycarbonate optical lens/Tempered glass	
Finish	Powder coating	
Fixture Color	Silver (RAL9007)	
EPA	NA	
IK Rating	IK08	
IP Rating	IP66	

Lifespan and Warranty

Operating Temperature	-40°C to + 65°C (See the below table for details)
Life Time of LED @Ta=25°C	152000hrs-L80 244000hrs-L70
Warranty	5 years

Certifications and Compliances

• IECEx:
Ex nR IIC T6/T5 Gc
Ex tb IIIC T80℃/T95℃ Db IP66

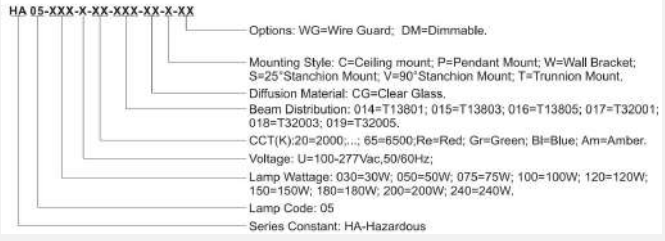
• ATEX:
II 3G Ex nR IIC T6/T5 Gc
II 2D Ex tb IIIC T80℃/T95℃ Db IP66

• IECEx Certificate: IECEx CSAE 22.0036X
ATEX Certificate (Gas): CSANe 22ATEX1059X
ATEX Certificate (Dust): CSANe 22ATEX1079X

SPECIFIC CONDITIONS OF USE:
1.The HA05 series LED luminaries for Hazardous Locations shall be mounted only in accordance with manufacturer's instructions.
2.The aluminium enclosures with a non-metallic coating featuring a non-conducting powder coat may generate an ignition-capable level of electrostatic charges under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done with a damp cloth.
3.All cable entry holes shall be fitted of either suitably approved cable glands or suitably approved stopping plugs that is suitable for the application.
4.As part of the re-lamping procedure the gaskets are to be checked and replaced if found to be degraded.
5.Clean the luminaire regularly to prevent dust accumulation.
6.Under rated conditions, the cable entry point could reach a temperature exceeding 70℃ and the branching point could reach a temperature of 80℃; this shall be considered when installing cable glands and only cables that have temperature rating 90℃ shall be used.

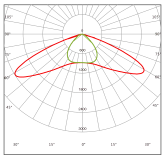
Item	Product model	Input Voltage	Input Current	Rated Power	Tamb	Temperature class Gas("nR")	Maximum surface temperature Dust("tb")
1	HA05-030 series	100-277Vac	0.11-0.3A	30W	-40°C to +65°C	T5	95°C
	HA05-050 series		0.18-0.5A	50W	-40°C to +60°C	T6	80°C
2	HA05-075 series	100-277Vac	0.27-0.75A	75W	-40°C to +60°C	T5	95°C
	HA05-100 series		0.27-1A	100W	-40°C to +50°C	T6	80°C
3	HA05-120 series	100-277Vac	0.43-1.2A	120W	-40°C to +65°C	T5	95°C
					-40°C to +60°C	T6	80°C
4	HA05-150 series	100-277Vac	0.54-1.5A	150W	-40°C to +55°C	T6	80°C
5	HA05-180 series	100-277Vac	0.65-1.8A	180W	-40°C to +45°C	T5	95°C
	HA05-200 series		0.72-2A	200W			
	HA05-240 series		0.87-2.4A	240W	-40°C to +40°C	T6	80°C

Model description

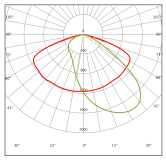


Photometry

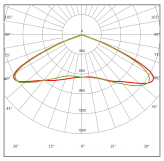
30W-100W



T13801(type Ⅰ)

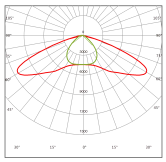


T13803(typeⅢ)

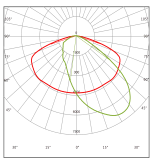


T13805(type Ⅴ)

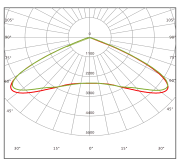
120W-240W



T32001(type Ⅰ)



T32003(typeⅢ)



T32005(type Ⅴ)

Mounting Options



Ceiling mount



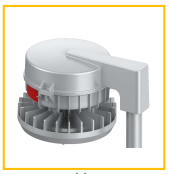
Pendant mount



Wall bracket



25° Stanchion mount



90° Stanchion mount

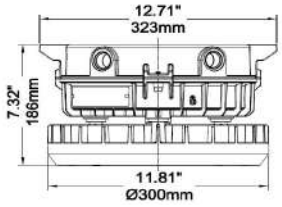


Trunnion mount

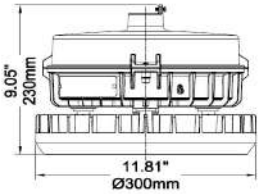
Dimensions

Unit: mm/inch

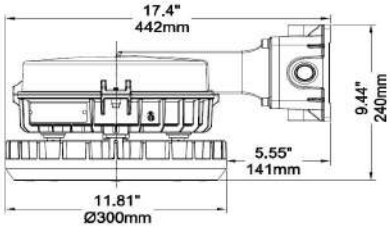
30W/50W/75W/100W



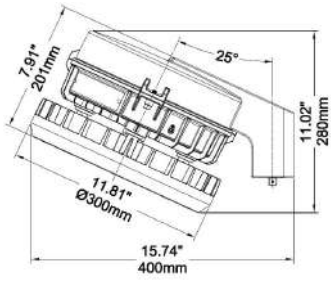
Ceiling mount



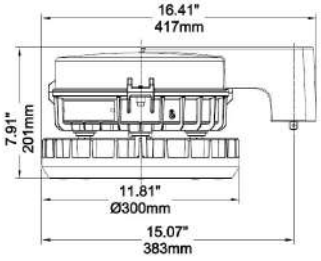
Pendant mount



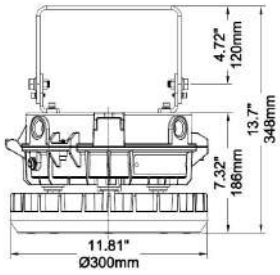
Wall bracket



25° Stanchion mount

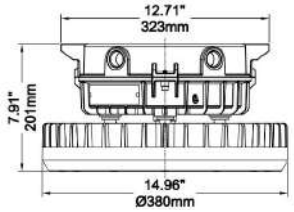


90° Stanchion mount

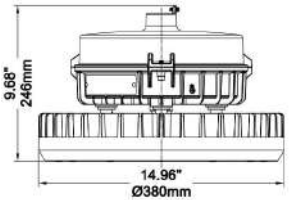


Trunnion mount

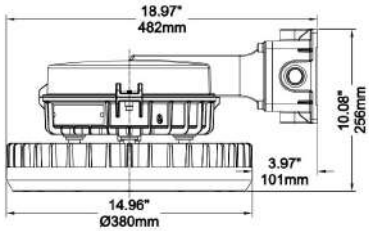
120W/150W/180W/200W/240W



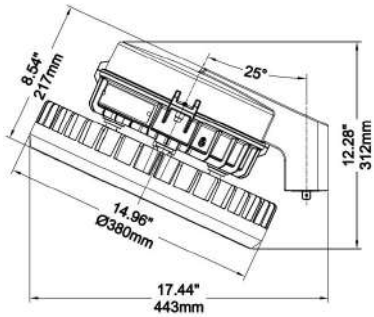
Ceiling mount



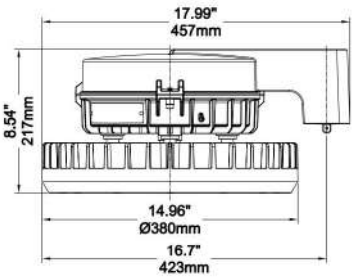
Pendant mount



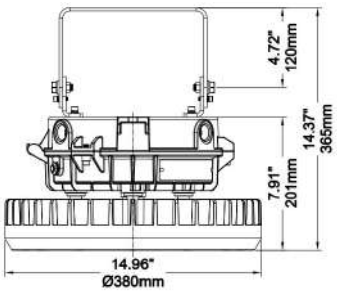
Wall bracket



25° Stanchion mount



90° Stanchion mount



Trunnion mount

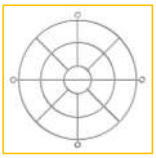
Table 1(30W-100W)

Mounting	Product dimension	Export carton size	Luminaire net weight(±0.3kg)	Gross weight (±0.3kg)
Ceiling mount	Φ300x186mm (11.81"x7.32")	360x360x335mm (14.17"x14.17"x13.19")	6.5±0.3kg (14.33±0.66Lbs)	7.5±0.3kg (16.53±0.66Lbs)
Pendant mount	Φ300x230mm (11.81"x9.05")		6.1±0.3kg (13.45±0.66Lbs)	7.1±0.3kg (15.65±0.66Lbs)
Trunnion mount	Φ300x348mm (11.81"x13.7")		8.1±0.3kg (17.86±0.66Lbs)	9.1±0.3kg (20.06±0.66Lbs)
25° Stanchion mount	400xΦ300x280mm (15.74"x11.81x11.02")	530x360x305mm (20.86"x14.17"x12.00")	7.6±0.3kg (16.76±0.66Lbs)	8.6±0.3kg (18.96±0.66Lbs)
90° Stanchion mount	417xΦ300x201mm (16.41"x11.81"x7.91")		7.8±0.3kg (17.20±0.66Lbs)	8.8kg±0.3kg (19.40±0.66Lbs)
Wall bracket	Φ300x442mm (11.81"x17.4")		8.5±0.3kg (18.74±0.66Lbs)	9.5±0.3kg (20.94±0.66Lbs)

Table 2(120W-240W)

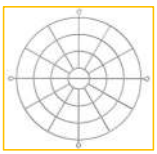
Mounting	Product dimension	Export carton size	Luminaire net weight(±0.3kg)	Gross weight (±0.3kg)
Ceiling mount	Φ380x201mm (14.96"x7.91")	470x470x350mm (18.50"x18.50"x13.78")	9.7±0.3kg (21.38±0.66Lbs)	11.4±0.3kg (25.13±0.66Lbs)
Pendant mount	Φ380x246mm (14.96"x9.68")		9.4±0.3kg (20.72±0.66Lbs)	11.1±0.3kg (24.47±0.66Lbs)
Trunnion mount	Φ380x365mm (14.96"x14.37")		11.3±0.3kg (24.91±0.66Lbs)	13.0±0.3kg (28.66±0.66Lbs)
25° Stanchion mount	443xΦ380x312mm (17.44"x14.96"x12.28")	570x460x320mm (22.44"x18.11"x12.59")	10.8±0.3kg (23.80±0.66Lbs)	12.5±0.3kg (27.56±0.66Lbs)
90° Stanchion mount	457xΦ380x217mm (17.99"x14.96"x8.54")		11.1±0.3kg (24.47±0.66Lbs)	12.8±0.3kg (28.22±0.66Lbs)
Wall bracket	482xΦ380x256mm (18.97x14.96"x10.08")		11.7±0.3kg (25.79±0.66Lbs)	13.4±0.3kg (29.54±0.66Lbs)

Accessories



Wire Guard
Wire Guard 235x235x6mm
Surface Treatment: Nickel Plating
Color: Nickel Color
Material: SUS304

Code: BC-HA05-01(30W-100W)



Wire Guard
Wire Guard 319x319x6mm
Surface Treatment: Nickel Plating
Color: Nickel Color
Material: SUS304

Code: BC-HA05-02(120W-240W)