



Hazardous area lighting technology developed for application in volatile warehouse, factory, workshop, & production environments - Ideally suited to the petro-chemical, marine, oil & gas, & heavy industry sectors

30W, 45W, & 60W power classes - Impact, ingress, & corrosion, resistant fitting - >95lm/W family efficacy - 3no. general purpose & task-specific optics - 4no. mounting options

CE, RoHS, ATEX, & IECEx, international product marks

Product marking summary

Ex II 2 GD
Ex db IICT* Gb
Ex tb IICT* Db



Stirling 3 Series

Explosion Proof, Pendant & Floodlights

CDN:SPEC135REV11

Technical Specifications Summary



Performance Summary:

Code (Series-Wattage/Size)	STI3-30	STI3-45	STI3-60
Nominal Power	30W	45W	60W
Luminaire Efficacy @ CRI>70, 5700K CCT	127lm/W	128lm/W	128lm/W
Lumen Output @ CRI>70, 5700K CCT	3,810lm	5,760lm	7,680lm
Chip Lumen Maintenance (TM21 Reported)	L80B10 ≥67,029 hours @ 25°C Ambient		
Chip Lumen Maintenance (TM21 Calculated)	L80B10 ≥86,468 hours @ 25°C Ambient		
Certification	CE, RoHS, ATEX, IECEx		
Product Warranty	5 Years		

Light Source and Photometric Parameters:

Chip Brand, Model, & Size	Luxeon 5050
Chip Efficacy @ CRI>70, 5700K CCT	166 lm/W @ 160mA, Tj=25°C
Light Emission	Direct
CCT	5700K, (3000K, 4000K, 5000K optional)
CRI	≥70Ra, (≥80Ra optional)
Diffusers	Clear
Symmetric Light Distribution	120°, (15°, 80° optional)

Electrical Parameters¹:

System Operating Power	30W	45W	60W
Input Voltage	100-277VAC, (24-48VAC, 10-30VAC optional)		
Input Frequency	50-60Hz		
Inrush Current @ 100-277VAC	30A	30A	30A
Power Factor	>0.98		
THD	<10% (100VAC-277VAC)		
Insulation Class	I (100-277VAC), III (24-48VAC, 10-30VAC)		
Surge Protection/Fusing	6kV		

Environmental Parameters:

IP Rating	IP66
IK Rating ²	IK10/IK08 or IK10/IK10
Ambient Usage Tolerance	-40°C to 55°C
Ambient Storage Tolerance	-40°C to 55°C
Ambient Humidity Tolerance	0% to 90% RH

Physical/Mechanical Parameters:

Product Dimensions: LxWxH (mm)	236 x 220 x 303	236 x 220 x 303	236 x 220 x 303
Qty of LED Chips	20	24	30
Electrical Connection	Terminal Block 1mm ² to 4mm ²		
Inlet Thread	M25 (M25x1.5), NPT3/4"		
Gland Type ^{3,4}	Brass with Nickel Plated Non-Armoured (Armoured optional)		
Suitable Cable Size (ø) ⁵	M25 = 9.5-15.9mm, NPT3/4" = 12.5-20.5mm		
Fixture Weight ⁶	5kg	5kg	5kg
Fixture Primary Material(s)	ADC12 Aluminium Alloy (1.5-3.5% Copper) and 316 Stainless Steel Fixings		
Fixture Finish	Epoxy Powder Coated		
Lens(es) Materials	Tempered Glass		
Protection Method	Flame proof		

Technical Specifications Summary

Code (Series-Wattage/Size)	STI3-30	STI3-45	STI3-60
Options/Accessories:			
Mounting Styles	Universal Bracket, Eye Bolt, Surface Mount Bracket, In-Line Pipe Connector		
Miscellaneous Accessories	Wire Grill		
Available Product Colours	Orange (RAL2011), Grey (RAL7040)		

¹ Details are for standard non-dimming driver

² (Format: "IK Rating: Housing" / "IK Rating: Front Face") – IK10 if fitted with wire guard accessory

³ Wire-in-wire-out compatible products supplied with one non-armoured ATEX certified gland and one ATEX certified blanking plug.

⁴ Armoured Cable gland available as an optional accessory. Please contact Kellwood for more information.

⁵ Stated cable size is applicable to standard gland. Armoured cable may vary, contact Kellwood for more information.

⁶ Excludes bracketry. Refer to the Packaging Weights & Dimensions data sheet for bracketry and accessory weights

Certifications					
Division	ATEX Zone 1 & 21 and 2 & 22				
Product Marking	⚠ II 2 G D Ex db IICT* Gb Ex tb IICT* Db *for further information please see temperate table				
Temperature Table					
Product	Rated Power (Watts)	Temperature Class			
		-40° to 40°C (Ta)		-40°C to 55°C (Ta)	
		Gas	Dust	Gas	Dust
Stirling Series	30W	T6	T80°C	T5	T95°C
	45W	T6	T80°C	T5	T95°C
	60W	T5	T95°C	T4	T130°C
Certificate Number					
ATEX	EPT 18 ATEX 2977 X issue 2				
IECEX	IECEX CQM 15.0039X				

All stated values should be considered indicative only. Technical data is provided from sample luminaires and construction components as assessed by OEM(s) under industry-standard, laboratory conditions. In practice, stated values can vary. Kellwood Lighting operates a policy of continual product improvement. Our luminaires' capabilities are regularly enhanced to outperform in-class market alternatives. Please contact our technical team directly for clarifications prior to purchase. All images depicted should be considered indicative only. Stated product warranty periods do not include associated labour costs. Stated product warranty periods are for UK projects only. For international projects, please contact our offices directly. Optional upgrades can often affect or supersede unit technical parameters, capabilities, and warranties. It is the responsibility of the purchasing authority to ensure selected hardware is suitable for application. For further documentation, including Returns Policy and Conditions of Unit Failure, please contact our offices. Hazardous area documentation (eg. ATEX) are issued to OEM codes. WEEE compliance reference code: WEE/MP3838PR/SCH. Please do not look directly at LED lighting products during operation.

This datasheet & corresponding certification should be reviewed by a competent person to ensure project suitability.

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Features Summary



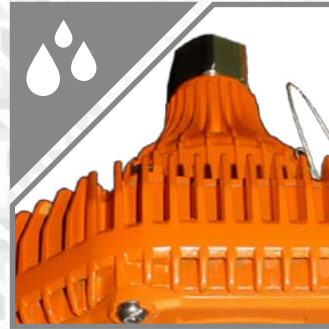
Mounting Options

Surface mount bracket, universal bracket, eye bolt, in-line pipe connector



Optional Fitting Colours

Orange, grey, custom (subject to MOQ)



Environmental Protection

IP66, aluminium chassis c/w corrosion-resistant powder coat - Salt spray testing reports available - 304 stainless steel exposed fixtures



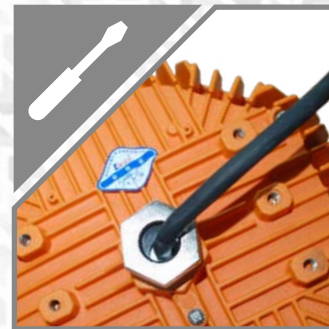
Impact Protection

IK09 body, IK08 tempered glass front-face - IK10 front-face wire guard accessory available



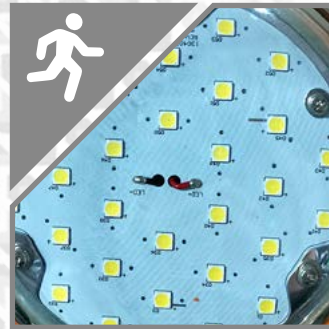
Portable Task Lighting

Cable-powered temporary flood-lighting configuration available - See 'Stirling 2 Portable' Series



Cable Entry

Rear cable entry only



Distribution

General purpose symmetrical dispersion pattern suitable for most applications



Electrical Protection

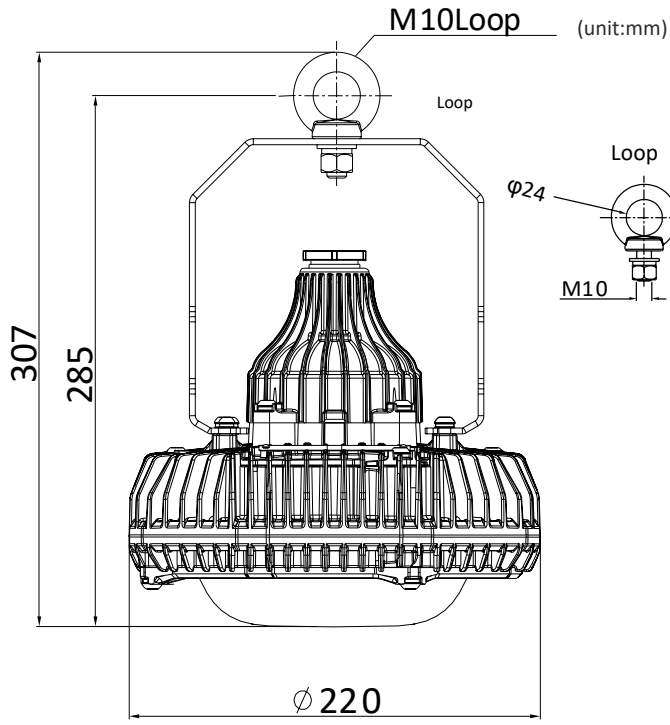
Custom-built PSU incorporates 6kV surge protection - Onboard output voltage overload protection 48-51VDC



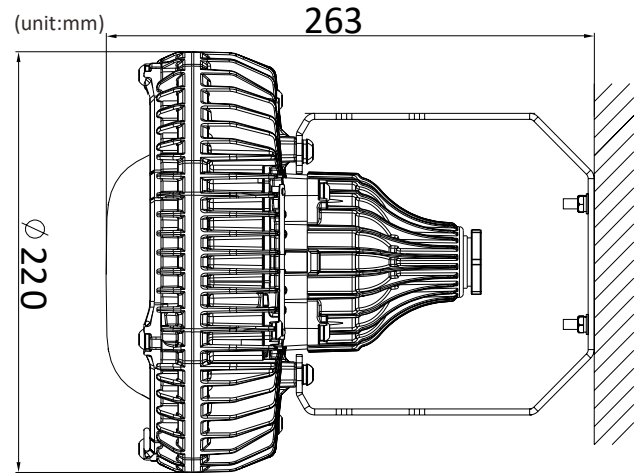


Dimensional Drawings

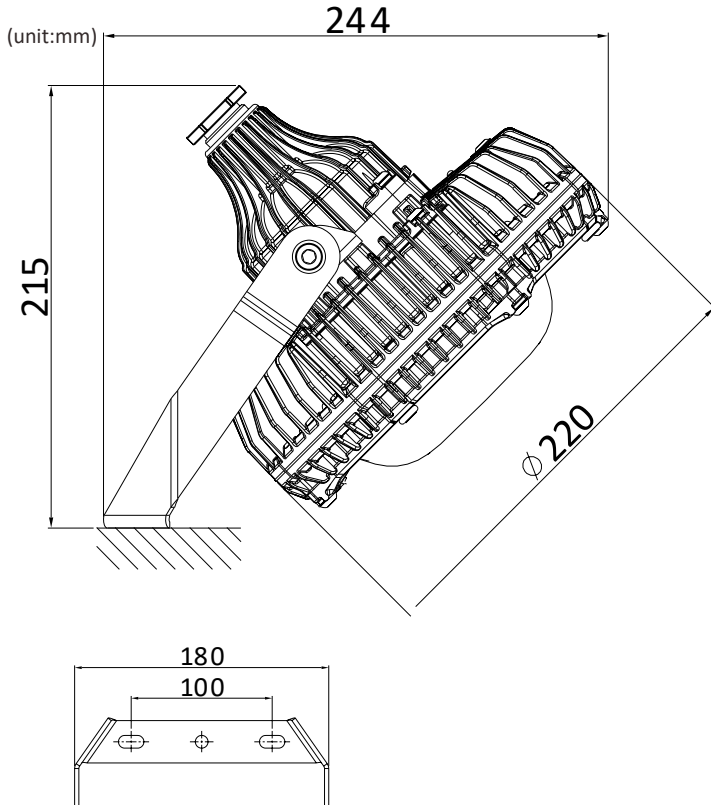
Eye Bolt



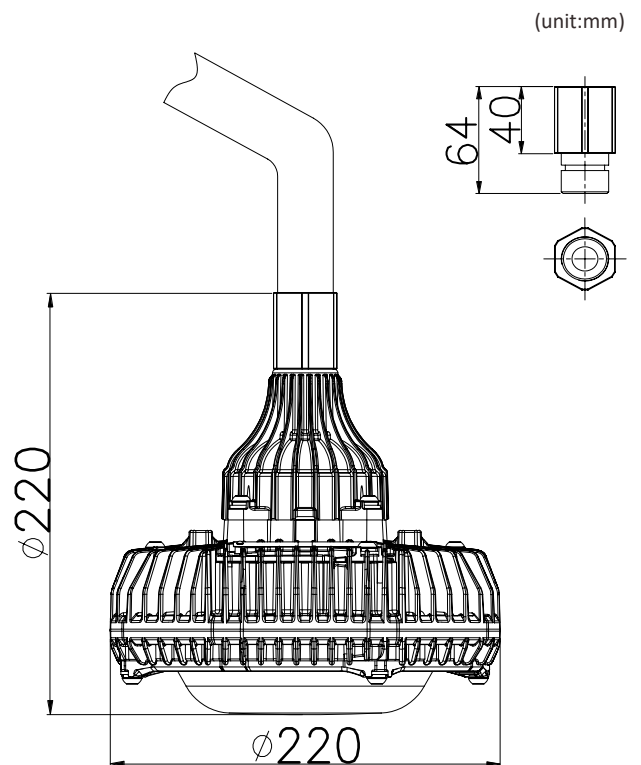
Surface Mount Bracket



Universal Bracket

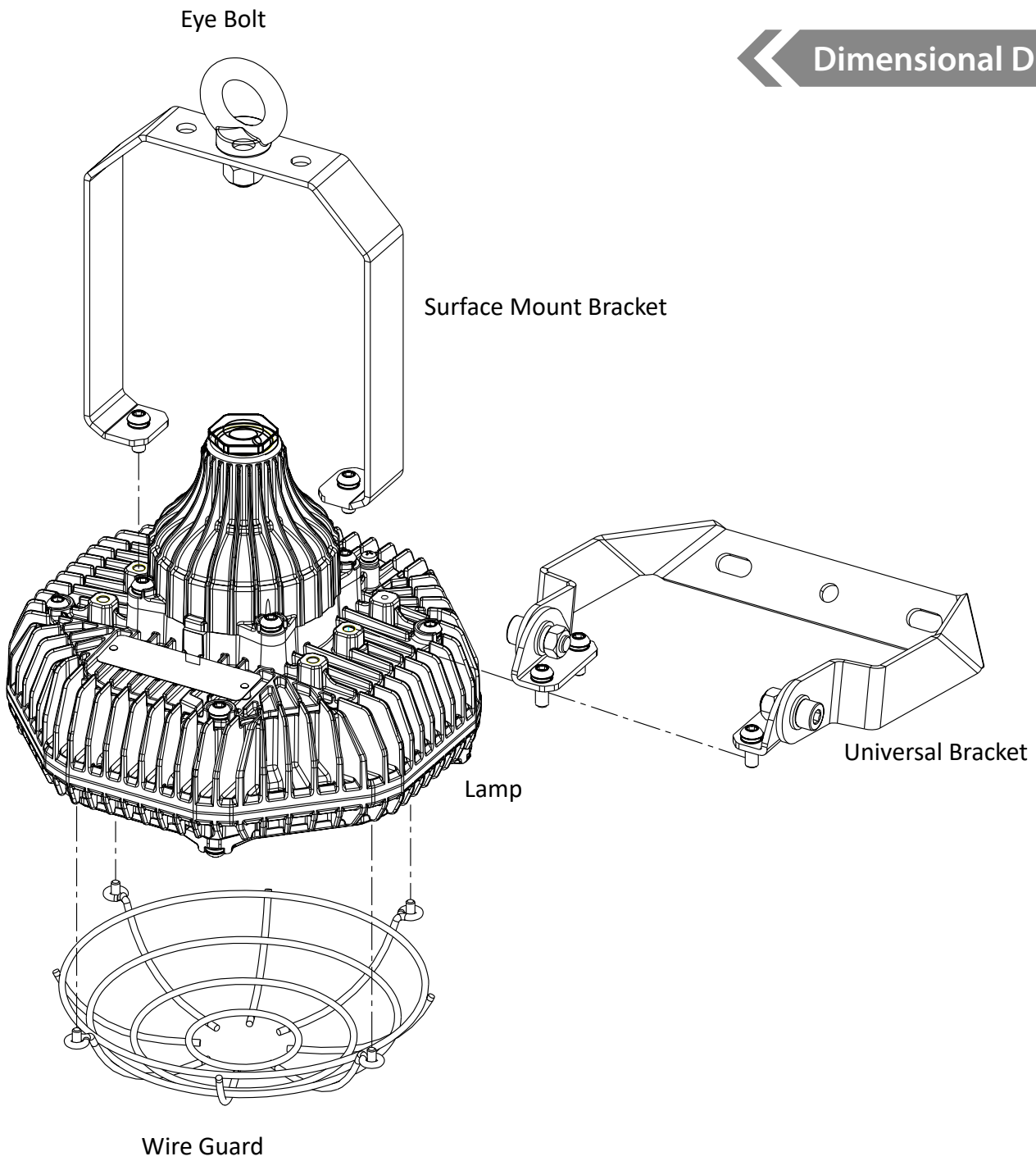


In-Line Pipe Connector





◀ Dimensional Drawings



Eye Bolt

Surface Mount Bracket

Lamp

Universal Bracket

Wire Guard

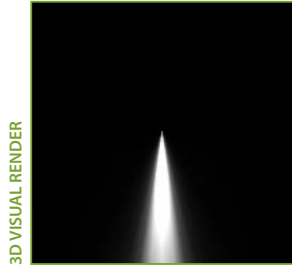
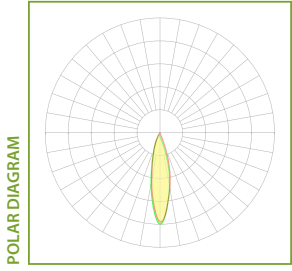




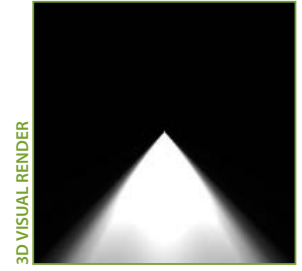
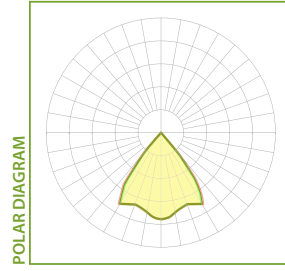
Please note - images shown are intended to be illustrative only. For exact data, please refer to specific product photometry, available for download from our website.

Indicative Product Photometry

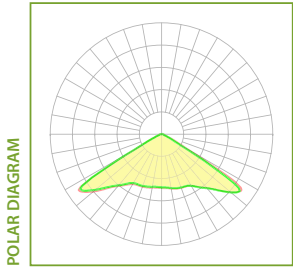
H1V1 - 15°



H5V5 - 80°



H6V6 - 120°





Standard product code fields are presented as:
Further customisation may be available - please contact us if required



Product Ordering Codes

PRODUCT	POWER	CRI & CCT	OPTIC	DRIVER	MOUNTING	COLOUR	THREAD	CONFIGURABLE OPTIONS
STI3	30 30W	740 CRI >70, 4000K	15 15° CIRCULAR	V4 INPUT VOLTAGE 100-277VAC	UB UNIVERSAL BRACKET	OR ORANGE	I1 M25 INLET THREAD	WG WIRE GRILL
	45 45W	750 CRI >70, 5000K	80 80° CIRCULAR	V5 INPUT VOLTAGE 24-48VAC/DC	EB EYE BOLT	GR GREY	I2 NPT3/4" INLET THREAD	
	60 60W	757 CRI >70, 5700K	120 120° CIRCULAR	V6 INPUT VOLTAGE 10-30 VDC	SM SURFACE MOUNT BRACKET			
		830 CRI >80, 3000K			IP IN-LINE PIPE CONNECTOR			

Product Ordering Code Examples:

STI3-30-757-120-V4-UB-OR-I1

STI3-60-740-120-V4-EB-GR-I2-WG

BRACKETS & ACCESSORIES	
CODE	DESCRIPTION
STI3-UB	UNIVERSAL BRACKET FOR STIRLING 3 SERIES
STI3-EB	EYE BOLT FOR STIRLING 3 SERIES
STI3-SM	SURFACE MOUNT FOR STIRLING 3 SERIES
STI3-IP	IN-LINE PIPE CONNECTOR
STI3-WG	WIRE GRILL

CONTACT OUR OFFICE FOR FURTHER INFORMATION ON DRIVER PARAMETERS

GENERAL NOTES:

1. IF MORE THAN ONE MODIFICATION IS REQUIRED, SEPARATE EACH MODIFICATION WITH A HYPHEN AT THE END OF THE PRODUCT CODE
2. PLEASE ENSURE SELECTION OF COMPATIBLE DRIVER FOR OCCUPANCY SENSORS WITH DIMMING FUNCTIONALITY
3. PLEASE NOTE THAT MODIFICATIONS WHICH AFFECT LIGHT OUTPUT HAVE SEPARATE PHOTOMETRIC FILES IDENTIFIED WITH "...+(MODIFICATION)"
4. ALTERNATIVE DRIVERS MAY BE AVAILABLE - PLEASE CONTACT OUR OFFICE FOR FURTHER DETAILS
5. IF PRODUCT IS CUSTOMISED, CODES WILL BE ALTERED AS NECESSARY - HAZARDOUS AREA CERTIFIED PRODUCT MODIFICATIONS ARE TYPICALLY LIMITED TO BRACKETRY (TO ENSURE COMPLIANCE WITH CERTIFICATION)
6. HAZARDOUS AREA CERTIFIED PRODUCTS ARE LISTED USING KELLWOOD'S STANDARD ORDERING CODE TEMPLATE FOR MARKETING PURPOSES. PRODUCTS WILL BE SUPPLIED WITH OEM NAMEPLATES, CODES & DOCUMENTATION CORRESPONDING TO PRODUCT CERTIFICATION

