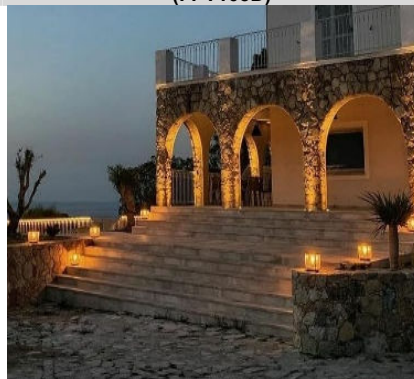


HARALD: CUSTOM LED BOLLARD

						
100-277V	WARRANTY	360°	IP65	IK06	EURO	USA.CA
(FPT801A)		(FPT107C)	(FPT107B)	(FPT651D)	(FPT301A)	



INTRODUCTION

FEATURE

Perfect Luminaires for Driveways and Footpaths
Pleasantly Uniform Light Effects
Suitable for Areas Without Risk of Vandalism
Long Lifespan >50,000hours
Working Temperature: -30℃~50℃

MAIN MATERIAL

LED Brand: GUBO
Driver Brand: GUBO
Housing: Aluminum Profile
Optics: Opal PC Lens
[BDM]: Anti-UV PC Opal Diffuser
[FPT]: Custom Patterns Available

INSTALLATION

Suitable for Garden, Park, Plaza.....
[FFS]: Flush Surface Mounted
[FPS]: Stem Pendant
[FPC]: Catenary Pendant
[FWA]: Wall Surface Mounted
[FWH]: Updown Lighting Wall Surface Mounted
[FSC]: Slip Fitter Mounted
[FJP]: Fixing Plate on JBOX/Outlet Box
[PSA]: Aluminum Straight Bollard

NOTES: Custom Installation and Accessories
Referred to Another Catalogue of Fixing Kits.

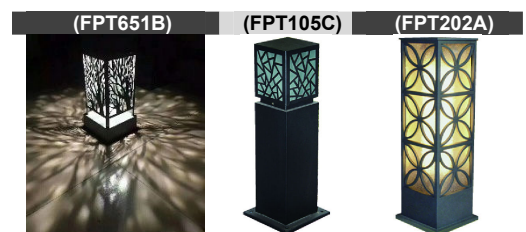
STANDARD

Designed and Manufactured to Comply with
CE/RoHS/TUV/CB/cETL/SAA Standard
IP65 Protection, Class I Electric

CUSTOM OPTION

LED CCT: 1,600K~10,000K/R/G/B/Y
[CRI]: [E] RA80, [G] RA90, [H] RA97(RG0)
Working Temperature[M40C]: -40℃~50℃
[SFH]: Custom Housing Finish by RAL Code
[SFB]: Custom Baffle Finish by RAL Code

WHITE	BLACK	DARK GREY	GREY	PEARL GREY
RAL9010P	RAL9005P	RAL7016P	RAL7043P	RAL9022P



NOTES: [LM] only for Diffuser without Mask Pattern

HARALD: CUSTOM LED GARDEN LIGHT

MODEL	POWER [W]	LED TYPE	CCT [K]	CRI	FLUX [LM]	POWER FACTOR	BEAM ANGLE	CUSTOM OPTIONAL DIMMING	INPUT [V]		
HARALD-MSA90A-MSA130A-MSA150A-MSA200A-MSA250A-MSA300A-MSA500A-FLD152A	10W [7W]	72x0.5W SMD2835	H2200K	RA97	580	>0.9	360°	Remote Driver [Inside Bollard] [CDN]:Non-dimmable [CDT]: TRIAC(10%) [CDV]: 0/1~10V(8%) [CDV0]:0~10V(1%) [CDV1]:1~10V(10%) [CDA]:DALI(1%) [+CDP]:PWM(1%) [+CDX]:DMX512(1%) [+CDS]:SPI(1%) Following [Sensor] [CSL]: Photocell Lux Sensor  [CSPD]: Big-level PIR Motion Sensor  [CSMD]: Big-level Microwave Motion Sensor  Following by Remote Driver [Outside Fixture] [CRZ]:ZIGBEE(1%) [CRF]:2.4G RF(1%) [CRB]:Bluetooth(1%)	AC100~277V [AC100~240V] [AC100~347V] 50/60Hz [+CV DC12V] [+CV DC24V] [+CV DC42V]		
			H2500K	RA97	650						
			H2700K	RA97	680						
			H3000K	RA97	740						
			H3500K	RA97	740						
			H4000K	RA97	800						
			H5000K	RA97	800						
			H5700K	RA97	780						
	2C@10W	TWH	H2700K	H5700K	RA97	680				>0.9	
	4C@10W	RGBW	620nm	520nm	460nm	H2700K				\	680
HARALD-MSA90A-MSA130A-MSA150A-MSA200A-MSA250A-MSA300A-MSA500A-FLD305A	20W [15W] [10W]	144x0.5W SMD2835	H2200K	RA97	1180	>0.9					
			H2500K	RA97	1310						
			H2700K	RA97	1380						
			H3000K	RA97	1480						
			H3500K	RA97	1480						
			H4000K	RA97	1590						
			H5000K	RA97	1590						
			H5700K	RA97	1560						
	2C@20W	TWH	H2700K	H5700K	RA97	1380				>0.9	
	4C@20W	RGBW	620nm	520nm	460nm	H2700K				\	1380
HARALD-MSA90A-MSA130A-MSA150A-MSA200A-MSA250A-MSA300A-MSA500A-FLD458A	30W [20W] [15W]	216x0.5W SMD2835	H2200K	RA97	1650	>0.9					
			H2500K	RA97	1830						
			H2700K	RA97	1930						
			H3000K	RA97	2080						
			H3500K	RA97	2080						
			H4000K	RA97	2220						
			H5000K	RA97	2220						
			H5700K	RA97	2180						
	2C@30W	TWH	H2700K	H5700K	RA97	1930				>0.9	
	4C@30W	RGBW	620nm	520nm	460nm	H2700K				\	1930
HARALD-MSA90A-MSA130A-MSA150A-MSA200A-MSA250A-MSA300A-MSA500A-FLD610A	40W [30W] [20W]	288x0.5W SMD2835	H2200K	RA97	2350	>0.9					
			H2500K	RA97	2610						
			H2700K	RA97	2750						
			H3000K	RA97	2960						
			H3500K	RA97	2960						
			H4000K	RA97	3180						
			H5000K	RA97	3180						
			H5700K	RA97	3110						
	2C@40W	TWH	H2700K	H5700K	RA97	2750				>0.9	
	4C@40W	RGBW	620nm	520nm	460nm	H2700K				\	2750
HARALD-MSA90A-MSA130A-MSA150A-MSA200A-MSA250A-MSA300A-MSA500A-FLD915A	50W [40W] [30W] [20W]	360x0.5W SMD2835	H2200K	RA97	2830	>0.9					
			H2500K	RA97	3150						
			H2700K	RA97	3310						
			H3000K	RA97	3560						
			H3500K	RA97	3560						
			H4000K	RA97	3810						
			H5000K	RA97	3810						
			H5700K	RA97	3730						
	2C@50W	TWH	H2700K	H5700K	RA97	3310				>0.9	
	4C@50W	RGBW	620nm	520nm	460nm	H2700K				\	3310
HARALD-MSA90A-MSA130A-MSA150A-MSA200A-MSA250A-MSA300A-MSA500A-FLD1220A	60W [50W] [40W] [30W]	480x0.5W SMD2835	H2200K	RA97	3530	>0.9					
			H2500K	RA97	3920						
			H2700K	RA97	4130						
			H3000K	RA97	4450						
			H3500K	RA97	4450						
			H4000K	RA97	4760						
			H5000K	RA97	4760						
			H5700K	RA97	4660						
	2C@60W	TWH	H2700K	H5700K	RA97	4130				>0.9	
	4C@60W	RGBW	620nm	520nm	460nm	H2700K				\	4130
HARALD-MSA90A-MSA130A-MSA150A-MSA200A-MSA250A-MSA300A-MSA500A-FLD1525A	80W [60W] [50W] [40W]	600x0.5W SMD2835	H2200K	RA97	4710	>0.9					
			H2500K	RA97	5230						
			H2700K	RA97	5510						
			H3000K	RA97	5930						
			H3500K	RA97	5930						
			H4000K	RA97	6350						
			H5000K	RA97	6350						
			H5700K	RA97	6220						
	2C@80W	TWH	H2700K	H5700K	RA97	5510				>0.9	
	4C@80W	RGBW	620nm	520nm	460nm	H2700K				\	5510
HARALD-MSA90A-MSA130A-MSA150A-MSA200A-MSA250A-MSA300A-MSA500A-FLD1830A	100W [80W] [60W] [50W] [40W]	720x0.5W SMD2835	H2200K	RA97	5890	>0.9					
			H2500K	RA97	6540						
			H2700K	RA97	6880						
			H3000K	RA97	7410						
			H3500K	RA97	7410						
			H4000K	RA97	7940						
			H5000K	RA97	7940						
			H5700K	RA97	7780						
	2C@100W	TWH	H2700K	H5700K	RA97	6880				>0.9	
	4C@100W	RGBW	620nm	520nm	460nm	H2700K				\	6880

Remote Driver [Inside Bollard]

[CDN]:Non-dimmable
[CDT]:TRIAC(10%)
[CDV]:0/1~10V(8%)
[CDV0]:0~10V(1%)
[CDV1]:1~10V(10%)
[CDA]:DALI(1%)
+CDP]:PWM(1%)
+CDX]:DMX512(1%)
+CDS]:SPI(1%)

Following [Sensor]

[CSL]: Photocell
Lux Sensor



[CSPD]: Big-level
PIR Motion Sensor



[CSMD]: Big-level
Microwave Motion Sensor



Following by Remote Driver [Outside Fixture]

[CRZ]:ZIGBEE(1%)
[CRF]:2.4G RF(1%)
[CRB]:Bluetooth(1%)

AC100~277V
[AC100~240V]
[AC100~347V]
50/60Hz

+CV DC12V]
+CV DC24V]
+CV DC42V]

NOTE:

All parameters are measured at 25℃ ambient temperature, 35% humidity experimental environment.
Tolerances of power and luminous flux are ±10%, tolerance of color rendering index is ±5.

HARALD: LED GARDEN LIGHT

SPECIFICATION

[PSA] LED BOLLARD LIGHT

DIMENSION:[UNIT: MM]

NOTES: Custom Installation and Accessories Referred to Another Catalogue of Fixing Kits.

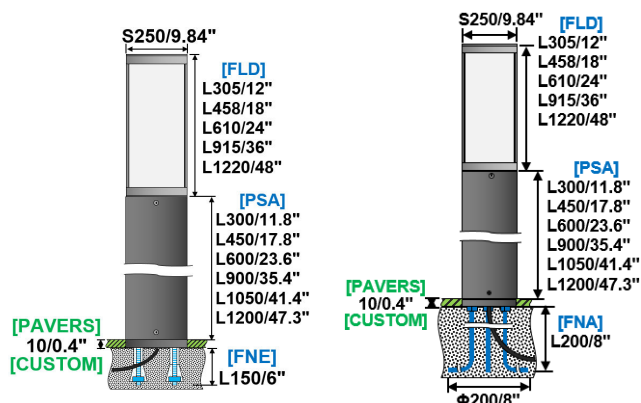
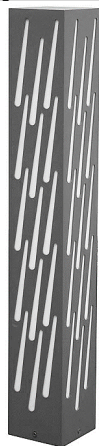
(MSA250A)
[FPT721A]

[FNE-L150]

[FNA-L200]

CASE STUDY: [FPT721A]

Total Height need be lower than 1690mm/67"



[PSA] LED TALL BOLLARD LIGHT

DIMENSION: [UNIT: MM]

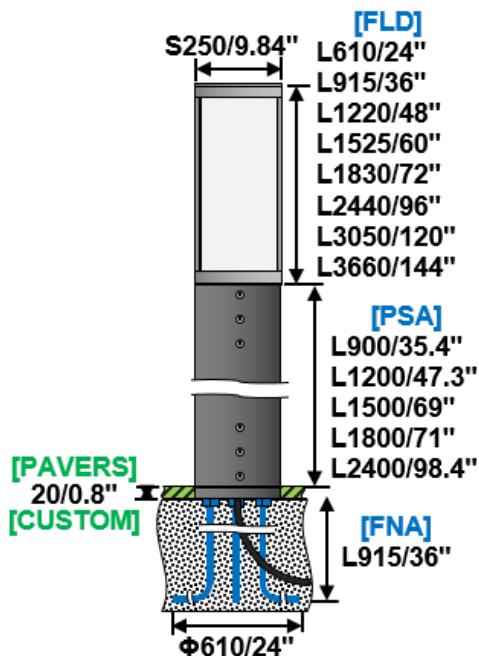
NOTES: Custom Installation and Accessories Referred to Another Catalogue of Fixing Kits.

(MSA250A)
[FPT107C]

[FNA-L915]

CASE STUDY: [FPT721A]

Total Height need be lower than 5000mm/196"



CASE STUDY: [FPT107C]

