

Felicity

LIGHTING



GYRO™

SMART NODE STREET LIGHT

FROM STREET LIGHT TO SMART CITY NODE

With GYRO™ Streetlights used as “Smart Nodes” your lighting infrastructure is transformed from a single purpose asset to a smart edge network or real estate space of infinite possibilities and value.



The GYRO design facilitates a seamless and feasible “as you grow” migration from simple streetlights to advanced Smart City Nodes.

Luminaire integration of LPWAN based smart lighting control and as well as high value infrastructure such as WiFi, Cameras, Sensors, 5G and much more is finally possible and feasible.

Contact us today to learn more about our pre integrated Smart City Kits (SCK) for GYRO™ with market leading smart element manufacturers – or ask us to ingrate your smart city element...

GYRO with Integrated
LoRaWAN Gateway

GYRO with Integrated Edge AI Processor
and Traffic Detection Camera

GYRO with Integrated and Wi-Fi enabled
CCTV Camera

GYRO with Integrated
Wi-Fi Access Point



TEKTELIC
communications
ufiSpace
kerlink
communication is everything

NVIDIA
GRAZPER

MOBOTIX
AXIS
COMMUNICATIONS

RUCKUS
an ARRIS company



IN COMPLETE CONTROL - ANYWHERE YOU ARE

GYRO™ PLUS comes fully equipped with an NFC programmable DALI2 LED driver with advanced local and standalone dimming and control features like Astro dimming, Constant Lumen Output and much more.

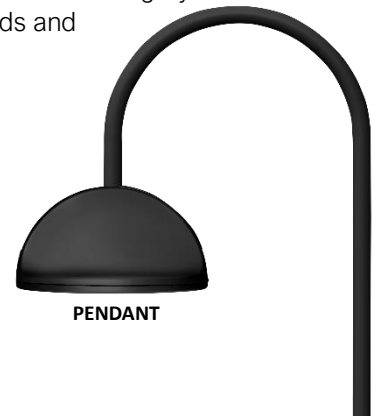
Combined with optional pre-installed NEMA or ZHAGA socket, any wireless Lighting Control Unit can be added for centralized Control Management Systems.



For remote and central Control Management System, check out FELICITY CONNECT™, our Lighting Control and IoT Smart City Solution.

ANY ROAD AND ANY POLE – ONE SIZE FITS ALL

GYRO™ is designed specifically to offer a diverse range of interchangeable fittings and installation options to suit any existing pole infrastructure, making it the ideal LED replacement choice. Design your streets with GYRO™ to increase safety and atmosphere for all road types from traffic roads and highways to residential streets and urban spaces



INTERCHANGEABLE MOUNTING – LESS STOCK AND SPAREPARTS

With GYRO's unique mounting and tilt system, a side mounted road light can quickly and easily be transformed into a park light and vice versa and etc. This flexibility enables a completely new approach to city wide deployments and maintenance planning while also achieving a using a single and consistent luminaire design experience.



FLEXIBLE ILLUMINATION DESIGN

The innovative and highly flexible lighting system of GYRO™ cover all Traffic Category Roads both in terms of power as well as optics. In addition, the LED modules are easily replaceable and thus a GYRO can easily be converted from one category to another.



GYRO-PLUS-20

20 pcs. High Power LEDs
17W-40W Optional Power Setting
8 different optical lenses

Residential , Park, Paths, Driveways

1158 AU/NZ
P1, P2, P3, P4 Roads

EU/DK
ME4, ME5



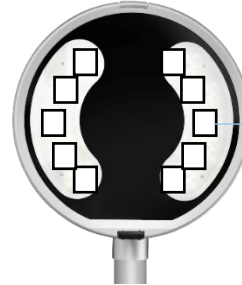
GYRO-PLUS-42

42 pcs. High Power LEDs
40W-85W Optional Power Setting
8 different optical lenses

**Urban Space, Intersection
Round About, Parking Area**

1158 AU/NZ
V4,V3,V2 Roads

EU/DK
ME2, ME3



GYRO-PLUS-60

60 pcs. High Power LEDs
90-110W Optional Power Setting
8 optical lenses different

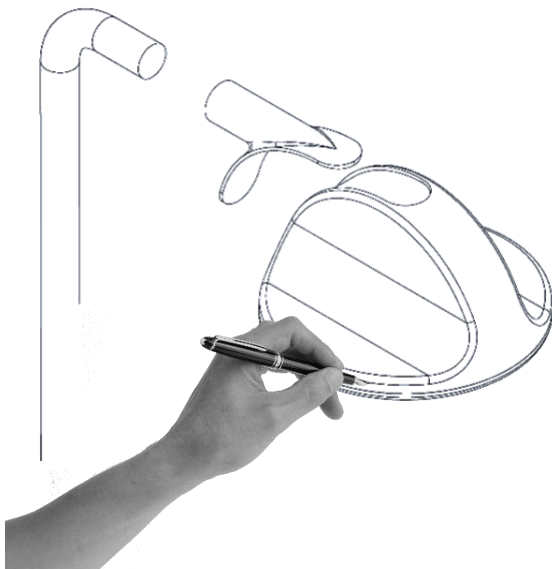
**Urban Space, Intersection
Round About, Parking Area**

1158 AU/NZ
V1, V2 Roads

EU/DK
ME1, ME2

MODERN YET CLASSIC AND TIMELESS

GYRO™ is distinct and bold, yet classic in its expression. The design is a result of both Scandinavian and Italian traditions for minimalism and organic lines.



EASY ACCESS – REPAIR IN THE AIR

GYRO™ offer tool free and immediate access to all internal active parts of the luminaire. The unique gear access system makes upgrades and site repair a feasible option.





LUMEN AND EFFICIENCY @4000K CCT

MODEL	LED QTY	LED CURRENT SETTING	SYSTEM POWER	LUMEN*	LUMEN/WATT
		mA	W	LM	LM/Watt
GYRO-P-20	20	200	14	1676	120
		250	17	2125	125
		300	20	2500	125
		400	27	3268	121
		600	39	5569	119
GYRO-P-40	40	400	51	6000	143
		550	65	8823	136
		600	74	9930	134
GYRO-P-60	60	400	72	9400	130
		500	89	11540	130
		600	107	13903	130
		650	115	14500	125

*Lumen result will vary up to +/- 3% between lens types used.

Lumen results for 3000K LEDs can vary up to - 3% while Lumen for 5000K LEDs is the same.



LIFETIME AND WARRANTY

CALCULATION	L90@25°	STANADARD WARRANTY
LLMF	>90.000 hours	10 Years
TM-21	>54.000 hours	



DIMENSIONS AND WEIGHT

MODEL	HEIGHT	WIDTH	WEIGHT
	Mm	mm	Kg
GYRO-P-20	220	440	7,0
GYRO-P-42			7,1
GYRO-P-60			7,6
GYRO-TOP MOUNTING (TM)	-	-	+1,4
GYRO-SIDE MOUNTING (SM)	-	-	+1,0
GYRO-PARK MOUNTING (PM)	-	-	+1,7
GYRO-PENDANT/WIRE SUSPENDED (PE/WS)	-	-	+0,8
GYRO + SCK-WIFI	-	-	+0,9
GYRO + SCK-CAM	-	-	+0,7



SIDE



FRONT



STREET FACING



LIGHT DISTRIBUTION

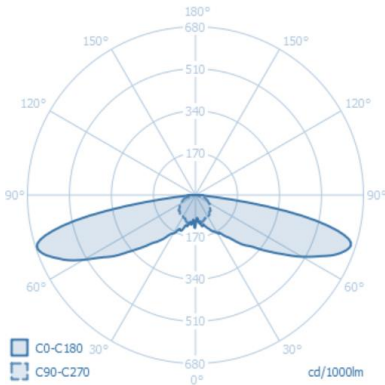
Felicity
LIGHTING

LENS TYPE

ROAD CATEGORY

LENS TYPE

ROAD CATEGORY

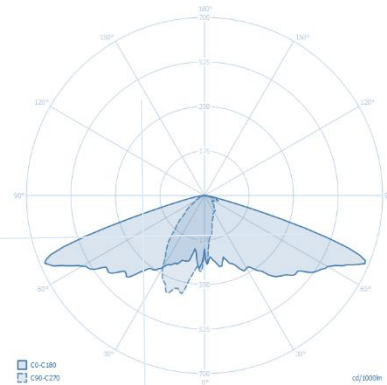


L1

IESNA (US/CAN):
Type 1
EN13201

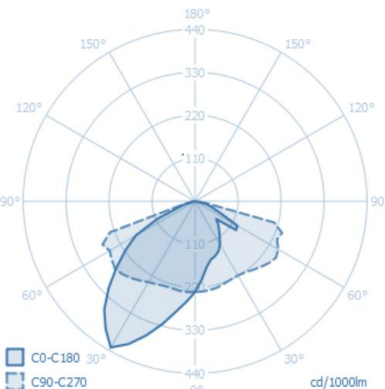
GENERAL APPLICATION
Middle Road Suspension

INTENSITY:
Gamma 90°: 0 Cd



L2

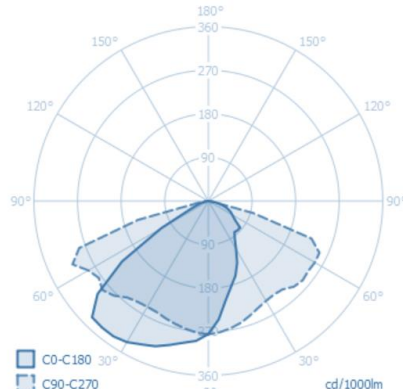
IESNA (US/CAN):
Type 2
EN13201
Traffic Roads
AS/NZS 1158:
V-CAT/P-CAT
GENERAL APPLICATION
Pole/Width Ratio >2
Narrow Roads
INTENSITY:
Gamma 90°: 0 Cd



L3

IESNA (US/CAN):
Type 3
EN13201:
Traffic Roads
AS/NZS 1158:
V-CAT
GENERAL APPLICATION
Pole/Width Ratio: 1><2
Wide Roads

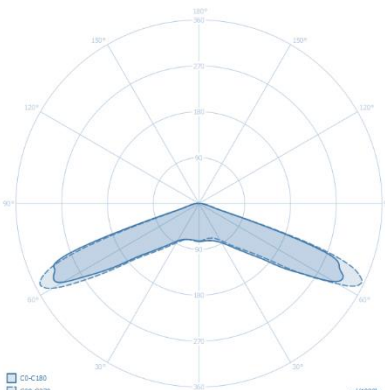
INTENSITY:
Gamma 90°: 0 Cd



L4

IESNA (US/CAN):
Type 3
EN13201:
ME4
AS/NZS 1158:
V-CAT
GENERAL APPLICATION
Pole/Width Ratio: 1><2
Wide Roads

INTENSITY:
Gamma 90°: 0 Cd



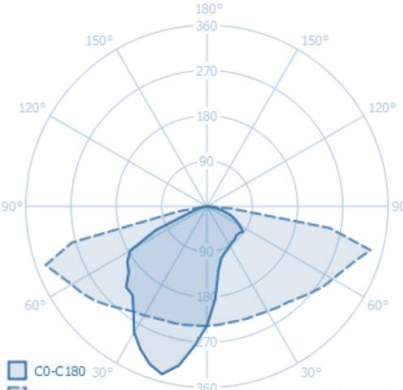
L5

IESNA (US/CAN):
Type 5

AS/NZS 1158:
P-CAT

GENERAL APPLICATION
Park/path lighting
Parking Areas

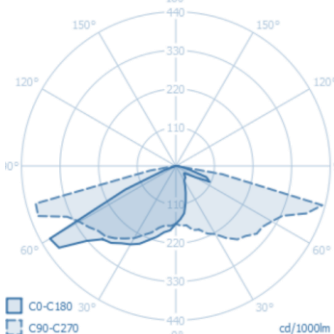
INTENSITY:
Gamma 90°: 0 Cd



L7

IESNA (US/CAN):
Type 3
EN13201:
Traffic Roads
AS/NZS 1158:
V-CAT
GENERAL APPLICATION
Pole/Width Ratio: 1><2
Wide Roads

INTENSITY:
Gamma 90°: 0 Cd



L9

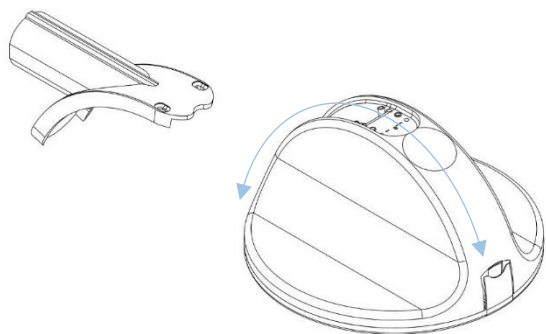
IESNA (US/CAN):
Type 3
EN13201:
Traffic Roads
AS/NZS 1158:
P-CAT
GENERAL APPLICATION
Pole/Width Ratio: <1
Wide Roads

INTENSITY:
Gamma 90°: 0 Cd

MOUNTING ADAPTERS – TILT SETTINGS

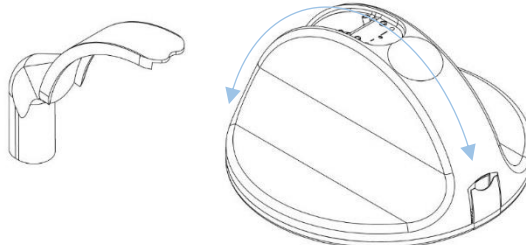
SIDE MOUNTING (SM)

Spigot Size: Ø42-60mm
0-15°

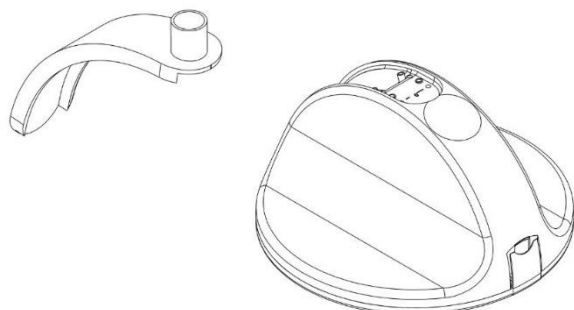


TOP MOUNTING (TM)

Spigot Size: Ø42-60mm
0-5°

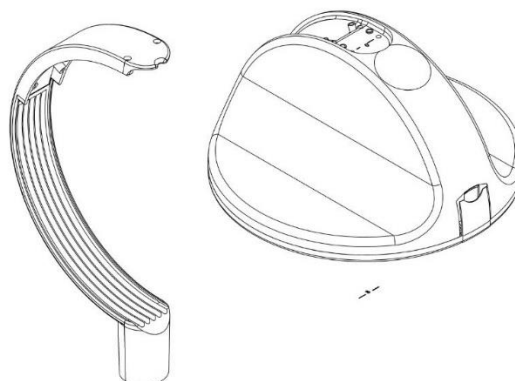


PENDANT/WIRE SUSPENDED MOUNTING (PE/WS)



PARK MOUNTING (PM)

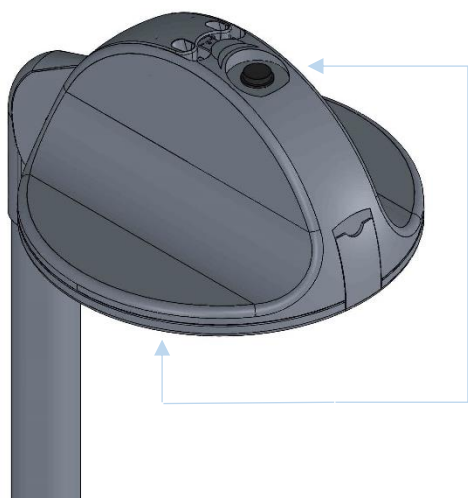
Spigot Size: Ø60-76mm



EXTERNAL CONTROL CONNECTORS

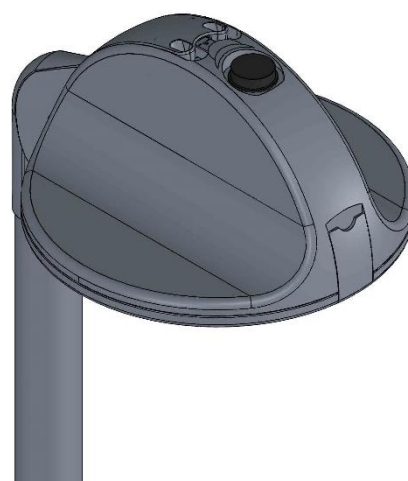
ZHAGA BOOK 18 SOCKET (ZU/ZD/ZUD)

(VDC)
(OPTIONAL)



NEMA (7-PIN) (N)

(VAC)
(OPTIONAL)



GENERAL SPECIFICATIONS FOR ALL GYRO PLUS VERSIONS

FREQUENCY (Hz)	50/60
POWER FACTOR (COS)	>90
VOLTAGE	AC 100-270 V
DRIVER CONTROL INTERFACE	DALI2
COLOR	DARK GREY, LIGHT GRAY, CUSTOM COLOR ON REQUEST
BODY PARTS MATERIAL	Alu Alloy: YLD104 (Die Cast)
ISOLATION CLASS	CLASS I / CLASS II
SURGE PROTECTION	(SetFuse SD10C277LM) Max Surge Current: 15kA – with fault indicator (LED)
INGRESS PROTECTION	IP66
WIND LOAD FACTOR	<0.06m2
IMPACT PROTECTION	IK8
OPERATING TEMPERATURE	-20°C /+50°C



CERTIFICATIONS/TEST REPORTS

AS/NZS	IEC (CB) LVD	CE LVD	CE EMC
AS/NZS 1158.6:2015 AS/NZS 60958.1:2013 AS/NZS 60958.2.3:2015 AT Approved M30 listed (NZTA)	IEC 60958-1:2014 IEC EN60958-2-3:2002 IEC 60958-2-3:2002/AMD1:2011 IEC 62471:2006 IEC 62493:2015 IEC LM-80-08	EN 60958-1:2015 EN 60958-2-3:2003/A1:2011 EN 62471:2008 EN 62493:2015	EN 55015:2013/A1:2015 EN 61547:2009 EN 61000-3-2:2014 EN 61000-3-3:2013
Lighting Tests	Salt Spray Test >1000 hrs	Vibration Test	EU RoHS
IESNA LM-79-2008	ISO 9227	IEC60068-2-6:2007	EN 62321:2009

ORDER CODE – LUMINAIRE CONFIGURATION

ORDER CODE POSITION	CODE TYPE	OPTIONS	WHAT IS THIS?
1	Company	FL	Short for Felicity Lighting or your OEM Partner Code
2	Luminaire Type	SL FL AL	SL=Street Light FL= Flood Light AL= Architectural Light
3	Product Family	CRUX GYRO RAZO-S RAZO-M	Name of Product Family
4	Quality Model	P E	P= PLUS = Programmable Driver + High Power LEDs E=ESSENTIAL= Dimmable Driver + Medium Power LEDs
5	LED Qty	Look up in Data Sheet Lumen Table	Choose your LED Qty for desired wattage and lumen area
6	LED Current Setting	Look up in Data Sheet Lumen Table	Choose your LED Current Setting and corresponding System Power for exact wattage and lumen required. The driver will then be pre-programmed to this specific setting during production or installation
7	CRI + CCT	730 740 750	Colour Rendering Index (Ra) = 70 Choose Colour Temperature: 30= 3000K 40=4000K 50=5000K
8	Body Colour	DG LG C	DG=Dark Grey (RAL XXX) LG= Light Grey (RAL XXX) C = Custom Colour (Specify in Order Text)
9	Lens Type	L1, L2, L3, L4 L5, L7, L9	Choose Lens Type for desired lighting distribution according to your Lighting Design Requirements
10	Mounting Type	SM TM PM SU PE	SM=Side Mounted TM=Top Mounted PM=Park Mounted WS=Wire Suspended PE=Pendant Mounted
11	External Control Connector	N ZU ZD ZUD	N =NEMA ZU =ZHAGA – facing UP ZD = ZHAGA – facing DOWN ZUD = ZHAGA – 2 pcs. facing UP and DOWN
SCK	Smart City Kit	See Smart City options and codes in respective Datasheets for GYRO and CRUX	CRUX: Chose Smart City Module (SCM) with Camera, WIFI, Sensors etc. GYRO: Choose Smart City Kit (SCK) with Camera, WiFi, Sensors etc.



1	2	3	4	5	6	7	8	9	10	11	SCK
NB	SL	GYRO	PLUS	20	350	740	LG	L9	SM	N	SCK-WIFI-MESH

NB-SL-GYRO-P-20-350-740-LG-L9-SM-N-(SCK-WIFI-MESH)



Side Mounted GYRO PLUS Street Light with Integrated WiFi Access Point

Side Mounted Street Light with Programmable Driver for 20 LEDs in 4000K Colour Temperature set at 350 mA. Equipped with L9 optical lenses. Light Grey Die-Cast Alu Body. Fitted with NEMA 7-PIN for external control device.

Integrated WiFi Access Point (Ruckus E510, with internal PoE Inserter) – for MESH connectivity to CORE Access Point

GET IN TOUCH...

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IMPORTANT!

Due to continuous technological innovation, changes in external conditions, and availability of parts and services, the products and specifications displayed in this data sheet are subject to change. Please ask your Felicity Smart Infrastructure representative for full up-to-date technical details.