

Gyro

Smart Node Street Light



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.



GYRO with Integrated
LoRaWAN Gateway



GYRO with Integrated Edge
AI Processor and Traffic
Detection Camera Sensor



GYRO with Integrated and
Wi-Fi enabled CCTV Camera



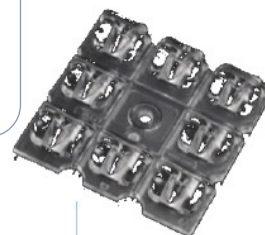
GYRO with Integrated
Wi-Fi Access Point

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Smart Node Street Light

Flexible Photometrical 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
14W-43W Optional Power Setting
10 different optical lenses

Residential, Park, Paths, Driveways

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

EU/DK
ME4, ME5



Gyro-Plus-40

40 pcs. High Power LEDs
50W-72W Optional Power Setting
10 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
73-115W Optional Power Setting
10 optical lenses different

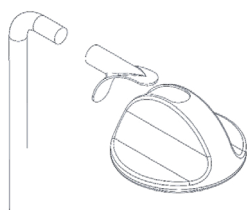
Urban Space, Intersection
Round About, Parking Area

1158 AU/NZ
V1, V2 Roads

EU/DK
ME1, ME2

Modern Yet Classic & 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.



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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.



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.



Interchangeable Mounting- Less Stock and Spare Parts

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.

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Smart Node Street Light

@4000K CCT

Model	LED Qty	LED Current Setting (mA)	Nominal System Power (w)	Lumen* (Lm)	Lumen/Watt (LM/watt)
GYRO-P-20	20	200	14	2000	130
		250	17	2400	135
		300	20	2800	141
		400	26	3500	138
		500	32	4300	136
		600	38	5100	133
		650	42	5500	130
GYRO-P-40	40	350	45	6500	145
		400	50	7150	142
		500	61	8200	138
		600	72	9700	133
GYRO-P-60	60	400	7	10200	140
		500	89	12000	135
		600	107	14231	133
		650	115	14950	130

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

@3000K CCT

Model	LED Qty	LED Current Setting (mA)	Nominal System Power (w)	Lumen* (Lm)	Lumen/Watt (LM/watt)
GYRO-P-20	20	200	14	1700	127
		250	17	2125	130
		300	22	2500	133
		400	27	3300	132
		500	32	4000	130
		600	38	4700	129
		650	42	5200	125
GYRO-P-40	40	400	50	6500	130
		500	61	7600	125
		600	73	9000	125
GYRO-P-60	60	400	73	9490	130
		500	89	11540	130
		600	107	13903	130
		650	115	14375	125

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

Lifetime & Warranty

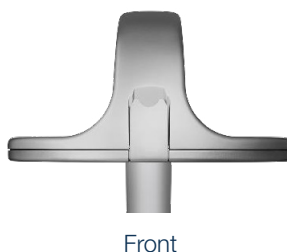
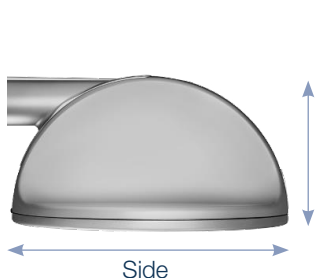
Calculation	L90@25°	Standard Warranty
LLMF	>90.000 hours	10 Years

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Smart Node Street Light

Dimension & Weight

Model	Height (mm)	Width (mm)	Weight
GYRO-P-20	220	440	7,0
GYRO-P-40			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

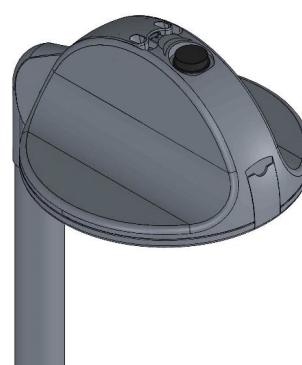
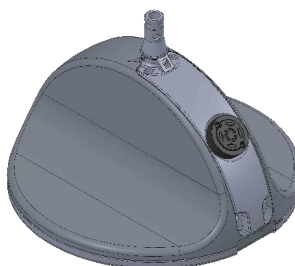
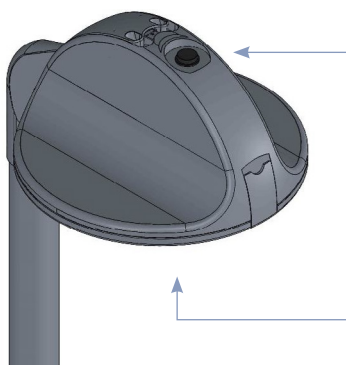


External Control Connectors

Zhaga Book 18 Socket
(ZU/ZD/ZUD) (VDC) (Optional)

Nema For Pendant Mount
(Optional)

Nema For Side and Top Mount
(Optional)



Luminaire Colour Options

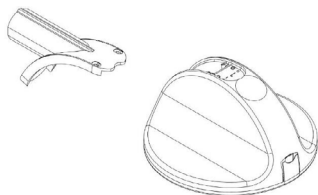
Name	Order Code	RAL Code (Equivalent)
Black	BK	7016
White	WH	9002
Dulux Permanent Green	DPG	170 30 40
Light Grey	LG	7005
Dark Grey	DG	7022

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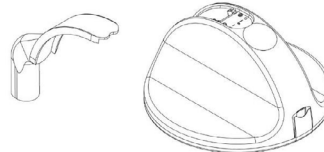
Smart Node Street Light

Mounting Adapters- Tilt Settings

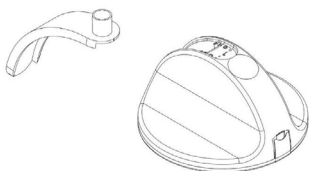
Side Mounting (SM)
Spigot Size: Ø42-60mm
0-15°



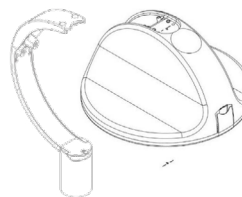
Top Mounting (TM)
Spigot Size: Ø42-60mm
0-15°



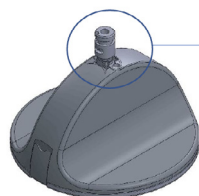
Pendant/ Wire Suspended Mounting (PE/WS)



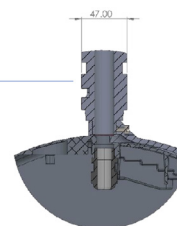
Park Mounting (PM)
Spigot Size: Ø60-80mm



AS 1158.6 "J-Hook" Pendant Spigot Adaptor



Custom Pendant Spigot Adaptors On Request

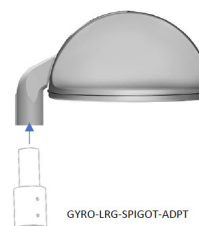


Top Mount & Side Adaptors

Optional
Small Spigot Adaptor
32-42mm



Option
Large Spigot Adaptor
60-80mm

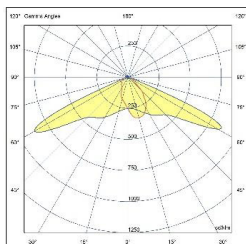


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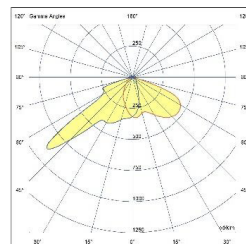
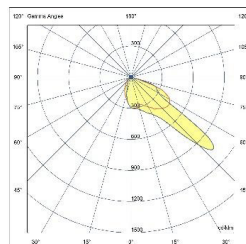
Smart Node Street Light

Light Distribution- Photoemtric Lenses

Bicycle Paths and Path Ways
L1

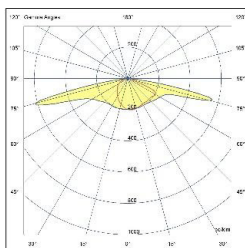


Bicycle Paths and Path Ways
TPL TPR

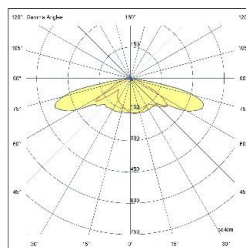


L5

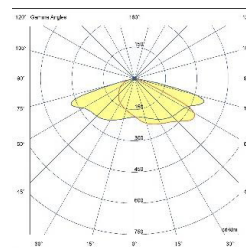
Park, Area Lighting
L6 (Au)



Au/NZ P Cat
L8

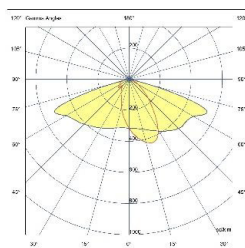


L9 (NZ)

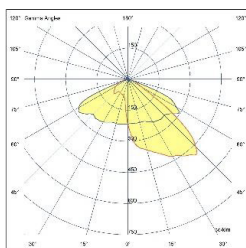


Road Lighting – Short poles distance, low glare , EU standard

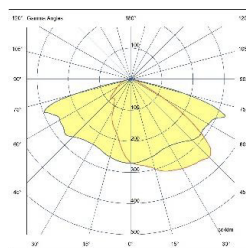
L2



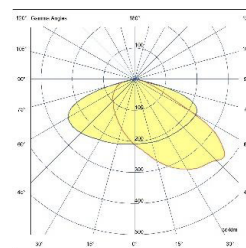
L3



T4

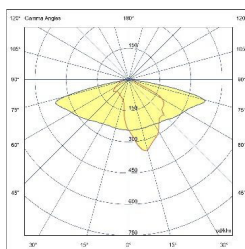


TEW (Wet)

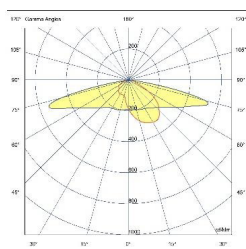


Road Lighting – Long poles distance, V Cat

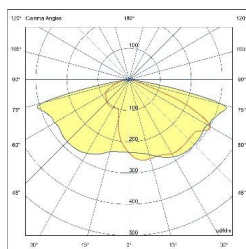
L7



L12



L13



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General Specifications for All Gyro Plus Versions

Model	Height (mm)
Frequency (Hz)	50/60
Power Factor (COS)	>90
Voltage	AC 200-240V
Driver Control Interface	DALI2
Colour	Dark Grey, Light Grey, Custom Colour 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	0.098m ²
Impact Protection	IK8
Operating Temperature	-20°C/+50°C

Certification/ 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) NEM Load Table (AEMO) PowerCor/CitiPower Approved	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

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Order Code- Luminaire Configuration

Order Code Position	Code Type	Options	What Is This?
1	Product Family	CRUX GYRO RAZO-S RAZO-M	Name of Product Family
2	Quality	P E	P= PLUS = Programmable Driver + High Power LEDs E=ESSENTIAL= Dimmable Driver + Medium Power LEDs
3	LED Qty	Look up in Data Sheet Lumen Table	Choose your LED Qty for desired wattage and lumen area.
4	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
5	CRI + CCT	730 740 750	Colour Rendering Index (Ra) =70 Choose Colour Temperature: 30= 3000K 40=4000K 50=5000K
6	Body Colour	DG LG DPG C	DG=Dark Grey (RAL XXX) LG= Light Grey (RAL XXX) DPG= Dulux Permanent Green (RAL 170 30 40) C = Custom Colour (Specify in Order Text)
7	Lens Type	L1, L2, L3, L4 L5, L7, L9	Choose Lens Type for desired lighting distribution according to your Lighting Design Requirements
8	Mounting Type	SM TM PM SU PE	SM=Side Mounted TM=Top Mounted PM=Park Mounted WS=Wire Suspended PE=Pendant Mounted
9	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	SCK
GYRO	P	20	350	740	LG	L9	TM	N	SCK-WIFI-MESH



GYRO-P-20-350-740-LG-L9-TM-N-(SCK-WIFI-MESH)

Top 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