

# Kirium Pro

Refined performance







# Designed to perform, built to last

Offering exceptional performance, easy maintenance and a low total cost of ownership, Kirium Pro S is a high quality lighting solution optimised for road lighting applications.

Developed to support operators as they work to lower energy consumption and cut carbon emissions, Kirium Pro S is highly efficient and built to last, helping to lower running costs and deliver a quick return on investment and substantial long-term savings.

## Key advantages

- Highly efficient solution delivering up to 208lm/W to support substantial long-term savings
- Extremely reliable luminaire with an outstanding service life of over 100,000 hours
- Multiple LED configurations and flexible drive currents for tailored performance
- A wide range of Diamond+® light distributions, optimised for road lighting applications
- Easy to install using Universal Entry, for quick switching from direct post to side entry on-site
- Hassle-free maintenance thanks to flat glass glazing and toolless entry
- Futureproofed design using industry-standard platforms and a range of connectivity options
- Zhaga D4i compliant luminaire able to accommodate compatible control devices

## Applications

-  Roads & motorways
-  Residential areas
-  Car parks
-  Footpaths
-  Cycle routes



Certified by DarkSky.org

## DarkSky® Approved

DarkSky is a globally recognised authority on light pollution, offering third-party certification through its DarkSky Approved program for lighting products that don't pollute the night sky.

The DarkSky Approved seal shows that Kirium Pro S has passed certification by the DarkSky technical lighting team and has demonstrated that it does not cause light pollution.







# Flexible lighting for a changing world

Designed to offer comfort and safety without overlighting, Kirium Pro S is a highly efficient lighting solution offering tailored performance thanks to a wide range of precision optics and drive current settings. In addition, multiple LED packages are available across three luminaire sizes which feature a uniform design, providing a consistent appearance across schemes.



## Minimal energy use

Kirium Pro S has been optimised for low energy usage over its 100,000+ hour life, ensuring a low total cost of ownership. Lighting controls can further minimise consumption, helping to increase long term savings.



## Targeted illumination

By offering a choice of precise optics, Kirium Pro S can produce widely different distributions to ensure light is placed just where it's needed, helping to protect local wildlife and the surrounding environment.



## A lightweight solution

Kirium Pro S has been engineered to use the minimum amount of raw materials possible to reduce its overall weight, helping to lower transportation emissions and reduce its overall carbon footprint.



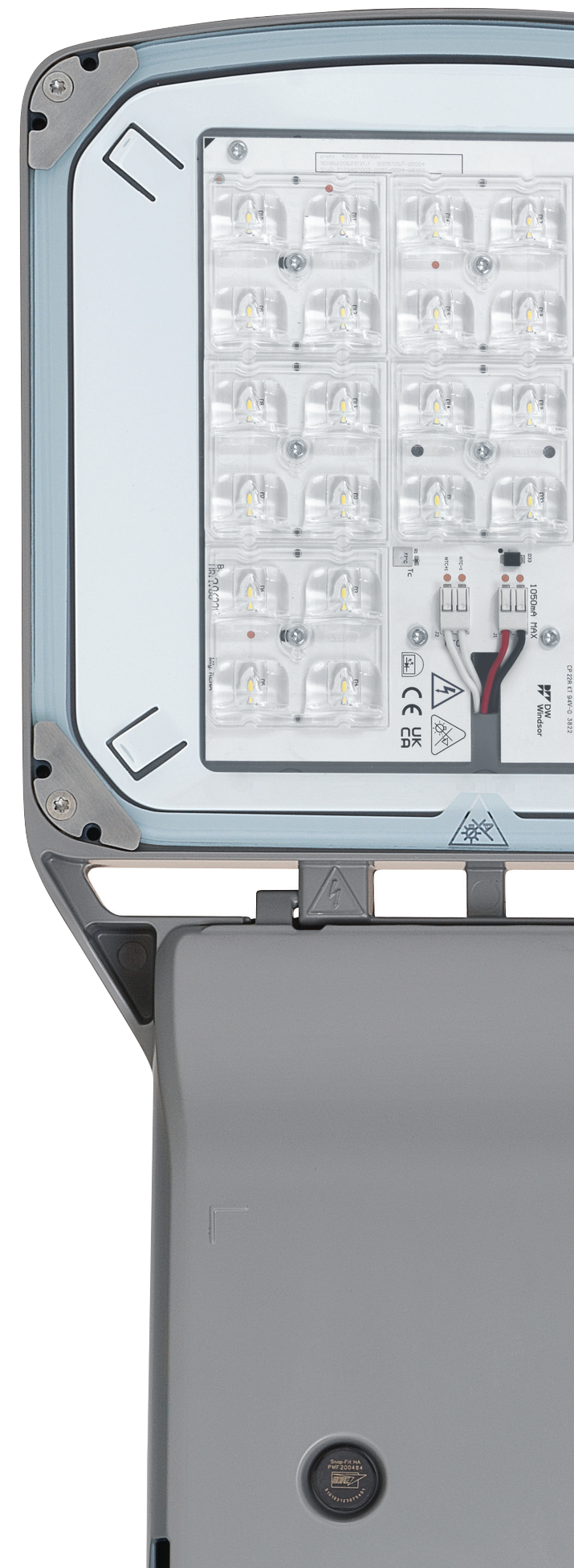
## Circular by design

Designed with circularity in mind, Kirium Pro S is constructed using durable materials for increased longevity, while mechanical fixings and replaceable components reduce waste and maximise service life.



## Easy to maintain

Control gear is easy to access from below without the need for tools using quick-release spring clips, while the optional electrical auto-disconnect feature ensures maintenance can be conducted safely.



### Kirium Pro S Mini

**Lumen Range**  
1,210 – 3,945 lm

**Power Range**  
7 – 28 W

**LED Quantity**  
8

**Mounting Height**  
4 – 6 m

**Typical Applications**  
Footpaths / Cycleways / Residential



### Kirium Pro S1

**Lumen Range**  
2,350 – 14,175 lm

**Power Range**  
12 – 96 W

**LED Quantity**  
16 / 24 / 32

**Mounting Height**  
6 – 8 m

**Typical Applications**  
Residential / Railway Platforms



### Kirium Pro S2

**Lumen Range**  
4,350 – 32,150 lm

**Power Range**  
23 – 187 W

**LED Quantity**  
32 / 48 / 64 / 80

**Mounting Height**  
8 – 12 m

**Typical Applications**  
Car Parks / Roads / Pedestrian Crossings / Motorways



## Design features

Kirium Pro S is a feature-packed, professional lighting solution designed to support a range of applications now, and in the future.

**Durable Construction**  
Manufactured from die-cast LM6 aluminium with a polyester powder coat or marine-grade finish for maximum protection

**Smart City Ready**  
Compatible with the latest lighting control technologies via optional top and bottom sockets, delivering additional energy savings

**Thermally Optimised**  
An innovative finless design and CoolZone™ technology provide a thermal barrier between the driver and LED chamber extending the luminaire's operational lifetime

**Auto-Disconnect Option**  
Automatically disconnects the power supply when the luminaire cover is opened, providing added safety during maintenance

**Exceptional Performance**  
Configurable from 8 to 80 high power LEDs capable of delivering up to 32,150lm, with luminaire efficacy of up to 208lm/W

**Secure Design**  
Hinged electronics cover features a mechanical connection and can be secured using optional tamper-proof screws for added protection

**Easy Installation**  
Hassle-free installation thanks to Universal Entry. Quickly switch between direct post and side entry mountings on-site

**Flat Glass Glazing**  
Easy to clean, ultra-clear toughened glass maintains optimal luminaire performance while also offering added protection against impacts and water ingress

**Futureproofed Solution**  
Utilises Zhaga industry-standard components and circular economy principles to ensure the luminaire is easy to maintain and upgrade throughout its service life

**Dedicated Optics**  
Kirium Pro S is offered with a wide selection of optics for precise beam control, supporting a range of street lighting applications

**Breather Valve**  
An anti-condensation valve regulates internal pressure and prevents moisture build-up

**Adjustable Tilt**  
A wide range of tilt adjustment in 2.5° steps allowing for fine-tuning during installation

**SupportTag**  
QR-based system to simplify the luminaire maintenance process, ensures issues are resolved quickly by our dedicated support team

**DarkSky Approved**  
Kirium Pro S has a 0% ULOR (Upward Light Output Ratio) to combat light pollution and minimise sky glow

**Toolless Entry**  
Quick-release spring clips provide access to internal components from below, ensuring the luminaire is easy to install and maintain





## Onsite flexibility

We understand that the ability to make last minute changes and adjustments on-site is crucial for a successful installation programme. This is why we have developed Kirium Pro S to be our most versatile street light to date.

Kirium Pro S can be supplied pre-wired, making the optional Universal Entry a game changer in the ability to have on-site switching from side entry to direct post entry without the need to disconnect the flex. Kirium Pro S also has quick and easy tilting functionality enabling delicate on-site adjustments to the luminaire.

### Universal entry



#### Direct post

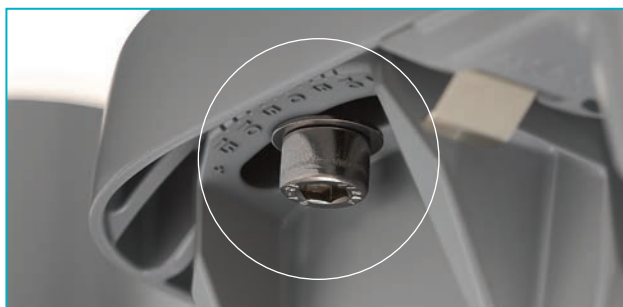
Universal Entry allows Kirium Pro S to accept columns between 60mm to 76mm in diameter for direct post mountings.



#### Side entry

Universal Entry allows Kirium Pro S to accept bracket arms between 34mm to 60mm in diameter for side entry mountings.

### Easy to install and maintain



#### Adjustable tilt

Quickly adjust inclination angle in 2.5° step increments to ensure a level lighting plane regardless of ground elevation



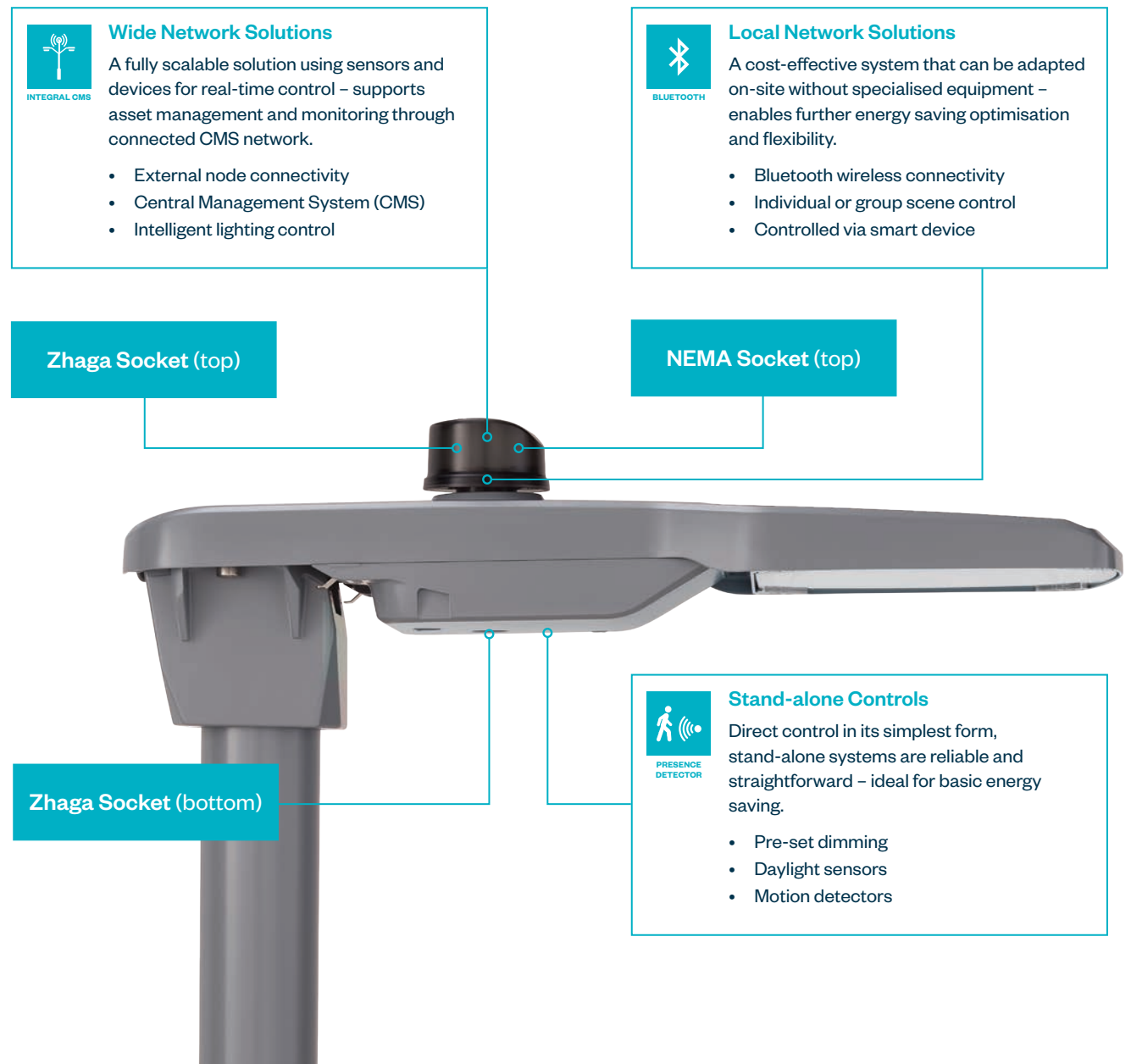
#### Toolless access

Quick-release spring clips provide easy access to control gear and wiring from below to simplify installation and maintenance

## Take control of your lighting

Lighting controls help save energy, extend luminaire life and provide light only when it's needed, ensuring that areas are lit at the right times while also helping to protect our natural environment.

Kirium Pro S can be controlled in a variety of ways, from simple factory-set dimming to full CMS. In addition, Kirium Pro S can be specified with both NEMA and Zhaga sockets mounted in top and bottom locations, helping to future-proof the luminaire.

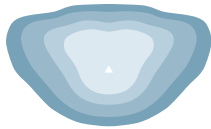
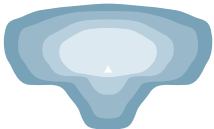






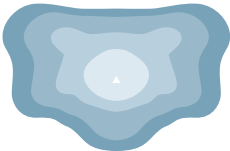
# Diamond+ optics

To ensure the most efficient lighting designs, Kirium Pro S is offered with our Diamond+ optics. Choose from 14 different distributions to ensure light is only placed where needed.

ROADS






Diamond+ Optic - A1Diamond+ Optic - A2Diamond+ Optic - A3






Diamond+ Optic - A5Diamond+ Optic - A6

PATHWAYS






Diamond+ Optic - B1Diamond+ Optic - B2Diamond+ Optic - B3

AREAS



Diamond+ Optic - C1Diamond+ Optic - C2Diamond+ Optic - C6

CROSSINGS

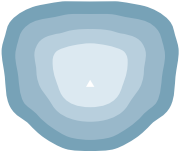
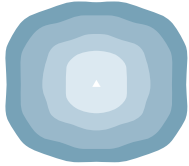



Diamond+ Optic - ZLDiamond+ Optic - ZRDiamond+ Optic - ZF


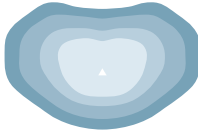

# Highway lighting

To deliver improved photometric performance for high M and C class lighting applications, Kirium Pro S2 80 LED can be specified with our Diamond+ E optics, optimised for highway lighting.

HIGHWAYS



Diamond+ Optic - E1Diamond+ Optic - E2Diamond+ Optic - E3



Diamond+ Optic - E4Diamond+ Optic - E5Diamond+ Optic - E6

Optic	Glare Rating
E1	G2
E2	G6
E3	G6
E4	G6
E5	G6
E6	G4

## Reduced glare

Reducing glare in road lighting applications is crucial for enhancing safety while helping to improve visibility and comfort for drivers and pedestrians.

Our Diamond+ Highway Optics have been optimised to offer high glare ratings, with excellent control over light distribution and minimal light spill outside of the intending illumination area.

## Excellent uniformity

Our Highway Optics range includes six optimised light distributions designed to deliver excellent uniformity across wide spacings and help to minimise variations in light levels for enhanced safety and visibility.

## Lighting Reality

All our photometric files for Kirium Pro S, including our Diamond+ E Optics are available at [lightingreality.com](https://lightingreality.com).







## Light Responsibly®

At DW Windsor, we're committed to supporting responsible lighting practices by delivering the right light, in the right place, at the right time. Our mission is to provide specifiers with the tools and guidance needed to eliminate light pollution and help protect biodiversity.

Learn more at  
[dwwindsor.com/light-responsibly](https://dwwindsor.com/light-responsibly)

A47 Longthorpe 1800K scheme  
National Highways / Mott MacDonald



Kirium Pro S lumen packages and wattages matrix

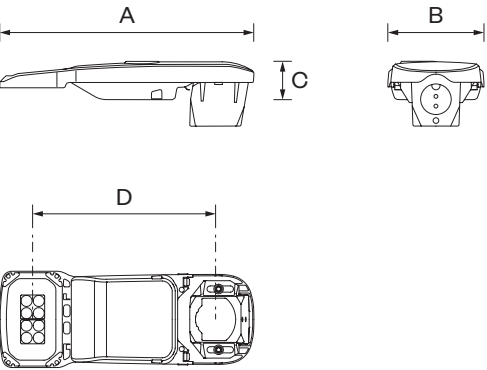
Model	No of LEDs	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	
Kirium Pro S Mini	8	Im	1,211	1,431	1,644	1,851	2,051	2,245	2,432	2,612	2,786	2,953	3,114	3,269	3,417	3,558	3,694	3,823	3,945
		W	7	8	9	10	12	13	14	16	17	18	20	21	22	24	25	27	28
Kirium Pro S1	16	Im	2,352	2,780	3,194	3,596	3,984	4,360	4,724	5,074	5,412	5,737	6,049	6,349	6,637	6,912	7,175	7,425	7,663
		W	12	15	17	19	22	24	26	29	31	34	36	39	41	44	47	49	52
	24	Im	3,370	3,983	4,577	5,152	5,710	6,248	6,769	7,271	7,755	8,221	8,668	9,098	9,510	9,904	10,281	10,640	10,981
		W	17	20	24	27	30	34	37	41	44	48	51	55	58	62	66	69	73
Kirium Pro S1 Kirium Pro S2	32	Im	4,350	5,141	5,908	6,651	7,370	8,066	8,737	9,385	10,010	10,612	11,190	11,745	12,276	12,785	13,271	13,735	14,175
		W	23	27	31	36	40	44	49	53	58	63	67	72	77	81	86	91	96
Kirium Pro S2	48	Im	6,673	7,886	9,062	10,201	11,304	12,371	13,401	14,395	15,353	16,272	17,162	18,013	18,829	19,610	20,355	21,065	21,741
		W	36	43	50	57	64	71	78	85	92	99	107	114	122	129	137	145	153
	64	Im	8,341	9,857	11,327	12,751	14,130	15,463	16,751	17,994	19,191	20,344	21,453	22,517	23,536	24,512	25,443	26,332	27,176
		W	44	52	61	69	78	86	95	104	113	122	131	140	149	159	168	177	187
	80	Im	10,839	12,880	14,874	16,820	18,717	20,567	22,368	24,121	25,825	27,480	29,085	30,642	32,148	-	-	-	-
		W	52	62	72	83	94	104	115	127	138	149	161	172	184	-	-	-	-

Lumen data based on 4000K with A2/E4 optic and no Light Output Reduction (LOR) factor applied. Data provided as indication of performance. Please refer to photometric files for individual optic results.

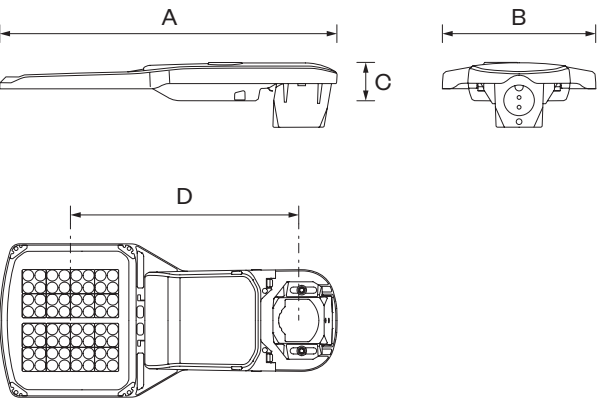
Luminaire dimensions

	Dimensions (mm)				Weight (kg)	Windage (m²)
	A	B	C	D		
Kirium Pro S Mini	532	200	80	378	4.8	0.039
Kirium Pro S1	632	246	80	432	5.5	0.053
Kirium Pro S2	704	320	80	478	7.2	0.059

Kirium Pro S Mini



Kirium Pro S2



CCT details

	Light Output Reduction Factor	S/P Ratio
4000K	1.00	1.5
3000K	0.93	1.4
2700K	0.86	1.3

Product codes

				Code	Example
Family					
Kirium Pro S Mini				KPSM	KPS1
	Kirium Pro S1			KPS1	
		Kirium Pro S2		KPS2	
Light Engine					
8 LED	-	-	-	8	24
-	16 LED	-	-	16	
-	24 LED	-	-	24	
-	32 LED	32 LED	-	32	
-	-	48 LED	-	48	
-	-	64 LED	-	64	
-	-	-	80 LED	80	
Housing					
Full die-cast aluminium				A	A
Die-cast aluminium with polycarbonate lower cover				H	
Mounting					
Universal entry preset for direct post				A	A
Universal entry preset for side entry				B	
Colour Temperature					
2700K	2700K	2700K	-	27	30
3000K	3000K	3000K	3000K	30	
4000K	4000K	4000K	4000K	40	
Drive Current					
Drive currents from 250mA to 1050mA are available in 50mA increments Insert drive current value (eg 750mA - 750)				250 / 300 / 350 400 / 450 / 500 550 / 600 / 650 700 / 750 / 800 850 / 900 / 950 1000 / 1050	700
<u>Note:</u> Kirium Pro S2 80 LED = 850mA maximum					
Light Distribution					
Roads – Diamond+ A Optic	Roads – Diamond+ A Optic	Roads – Diamond+ A Optic	-	A1 / A2 / A3 / A5 / A6	A1
Pathways – Diamond+ B Optic	Pathways – Diamond+ B Optic	Pathways – Diamond+ B Optic	-	B1 / B2 / B3	
Areas – Diamond+ C Optic	Areas – Diamond+ C Optic	Areas – Diamond+ C Optic	-	C1 / C2 / C6	
Crossings – Diamond+ Z Optic	Crossings – Diamond+ Z Optic	Crossings – Diamond+ Z Optic	-	ZL / ZR / ZF	
-	-	-	Highways - Diamond+ E Optic	E1 / E2 / E3 / E4 / E5 / E6	
Colour Finish					
RAL 7046 Mid grey				CF	CF
RAL 7035 Light grey				29	
RAL 9005 Black				10	
Other RAL colour [on request]				RAL [specify]	
Paint Finish					
Polyester powder coat				PP	PP
Marine-grade coating				MG	
Connectivity & Control					
No connectivity or control				N	U20
Miniature photocell 20 lux (1:1)				U20	
Miniature photocell 20 lux (1:1) [top] with 4-pin Zhaga Book 18 socket [bottom]				U20Z	
Miniature photocell 35 lux (1:0.5)				U35	
Miniature photocell 35 lux (1:0.5) [top] with 4-pin Zhaga Book 18 socket [bottom]				U35Z	
6-pin NEMA socket				B1	
7-pin NEMA socket				D2	
7-pin NEMA socket [top] with 4-pin Zhaga Book 18 socket [bottom]				D2Z	
4-pin Zhaga Book 18 socket [top]				Z4	
4-pin Zhaga Book 18 socket [bottom]				Z4A	
4-pin Zhaga Book 18 socket [top and bottom]				Z4B	
Knife Switch (optional)					
Knife switch (electrical disconnection block)				KS	-
Tamper-Proof Screws (optional)					
Tamper-proof screws on toolless entry points				TP	-
Emergency (optional)					
3-hour emergency version				EM	-
Example Code: KPS1 24 A A 30 700 A1 CF PP U20					



Key Features

Highly efficient luminaire available in three sizes and multiple LED configurations to support a wide range of road lighting applications

Offered with our full range of Diamond+ Optics to ensure light is placed only where its needed for improved comfort and safety

Quick to install using Universal Entry which allows for easy switching between direct post and side entry on-site, with cable fitted

Easy and safe to maintain thanks to flat glass glazing and toolless entry via hinged cover plus electrical auto-disconnect option

Futureproofed design using standardised components and a range of connectivity options in top and bottom locations

Zhaga D4i compliant luminaire able to accommodate compatible control devices

Options

**Kirium Pro S Mini:** ( 8 LEDs ) for mounting at 4-6 metres

**Kirium Pro S1:** (16 - 32 LEDs ) for mounting at 6-8 metres

**Kirium Pro S2:** (32 - 80 LEDs) for mounting at 8-12 metres

Optical Control

**Diamond+ A Optic:** Roads ( A1 / A2 / A3 / A5 / A6 )

**Diamond+ B Optic:** Pathways ( B1 / B2 / B3 )

**Diamond+ C Optic:** Areas ( C1 / C2 / C6 )

**Diamond+ Z Optic:** Crossings ( ZL / ZR / ZF )

**Diamond+ E Optic:** Highways ( E1 / E2 / E3 / E4 / E5 / E6 )

Lifetime

> 100,000 hours L90 B10

Total Luminaire Lumens

**Kirium Pro S Mini:** 1,210 - 3,945 lm

**Kirium Pro S1:** 2,350 - 14,175 lm

**Kirium Pro S2:** 4,350 - 32,150 lm

Colour Temperature

2700K / 3000K / 4000K

Colour Rendering Index

70Ra

Luminaire Efficacy

Up to 208lm/W

Drive Current

250mA - 1050mA (in 50mA increments)

Mounting

**Universal Entry (direct post):** Ø60 - 76mm

**Universal Entry (side entry):** Ø34 - 60mm

**Inclination (direct post):** -10° -to +15° in 2.5° increments

**Inclination (side entry):** -15° -to +10° in 2.5° increments

Control

**CLO:** Constant Light Output enabled - for energy savings and dependable light throughout the lifetime of the luminaire

**Switch:** On/off through conventional miniature or NEMA photocell

**Dim:** Factory set pre-programmed dimming profiles

**CMS:** Compatible with all available CMS systems

**Smart City Ready:** Supports Smart City equipment and Zhaga compliant connectors

Colours

RAL 9005 Black (smooth finish)

RAL 7046 Mid grey (smooth finish)

RAL 7035 Light grey (smooth finish)

(Other RAL colours available on request)

Materials

**Body:** High-pressure die-cast aluminium (LM6)

**Glazing:** Toughened glass

**Seals:** Silicone

**Finish:** Polyester powder coat / Marine-grade coating

Accessories

Optional obtusive light shield(s) available and can be fitted after installation without opening the luminaire

Installation & Maintenance

Available with various cable tail options prefitted

Includes Support Tag® for easy luminaire maintenance

Operational temperature range: -40°C to +40°C

Surge protection: 10kV

\* Class II on request

