

Kirium Pro

**Unequaled performance.
Unrivalled choice.**



2ND GENERATION



Think all street lights are made equal? Think again.



Featuring our latest generation LED technology for increased performance and improved efficiency for greater savings, with Kirium Pro, the best just got better.

Available in five sizes and with 23 standard Diamond+ optical solutions, it's the most innovative, forward-thinking, and future-proof product we've ever developed. Whatever your requirements, we have the solution: from 440 lm – suitable for residential roads and car parks – to 51,940 lm, ideal for larger roads and motorways.

Key advantages

- Our most comprehensive range of LED street lighting luminaires, available in five sizes
- 23 optical solutions with Diamond+ technology for precise lighting control to suit any project
- Exceptional thermal management for optimised performance and product life
- Impressive energy efficiency up to 192 lm/W delivering a minimal whole life cost solution
- Flexible drive current for tailored performance and accurate lighting levels
- Choice of control & connectivity options for even greater energy savings
- Toolless access via quick release latches offers easy installation and maintenance
- Safety first with automatic electrical disconnect for Kirium Pro 1, 2 & 3 models
- 2700K / 3000K / 4000K colour temperatures
- ENEC approved
- Emergency option available for Kirium Pro 1, 2 & 3 models
- Suitable for international markets with operating temperature range -45°C to +50°C

Applications

-  Footpaths
-  Cycleways
-  Residential
-  Car parks
-  Roads
-  Rail
-  Motorways



M1, Junctions 10-12

Full case study available on our website:
dwwindsor.com/m1





Unequaled flexibility, unrivalled choice

Our Kirium Pro range is offered in five distinct sizes which share a unified design aesthetic for a consistent appearance across lighting schemes. With multiple LED configurations, light outputs and mounting heights available, Kirium Pro is suited to a wide range of applications.



Kirium Pro 1

Lumen Range	915 - 13,180 lm
Power Range	6 - 93 W
LED Quantity	8 - 32
Mounting Height	5 - 8 m
Typical Applications	Residential / Railway Platforms



Kirium Pro Mini

Lumen Range	440 - 6,395 lm
Power Range	3 - 40 W
LED Quantity	4 - 16
Mounting Height	4 - 6 m
Typical Applications	Footpaths / Cycleways / Residential



Kirium Pro 2

Lumen Range	5,025 - 27,390 lm
Power Range	27 - 176 W
LED Quantity	48 - 64
Mounting Height	6 - 10 m
Typical Applications	Car Parks / Conflict Areas / Pedestrian Crossings



Kirium Pro Midi

Lumen Range	2,535 - 10,640 lm
Power Range	14 - 70 W
LED Quantity	24
Mounting Height	4 - 8 m
Typical Applications	Footpaths / Cycleways / Residential



Kirium Pro 3

Lumen Range	7,930 - 51,940 lm
Power Range	45 - 351 W
LED Quantity	80 - 128
Mounting Height	8 - 15 m
Typical Applications	Motorways / Roundabouts



Design features

Automatic electrical disconnection
Safety feature; cuts power to the luminaire when opened*



Cooling fins
To aid thermal management and dissipate heat, extend LED lifetime

Cool Zone™ Exceptional thermal performance
Air void and thermal barrier that assists in delivering a long lifetime

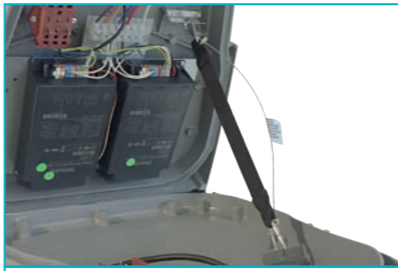
Hinged opening
Easy access to control gear, aiding installation and maintenance. Lift off head on larger models*

Durable construction
High pressure die-cast LM6 aluminium body for corrosion resistance and added strength and durability

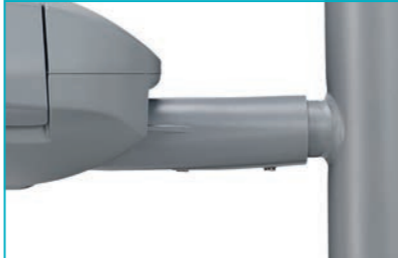
Performance lighting
High power LEDs (from 4 to 128 LED options)

Surge protection device
Maximises the lifetime value and prevents down-time due to storms, lightning strikes etc

Constant Light Output (CLO)
Fully programmable



Safety tether
Supplied with an integral dampening safety tether, and an external fail-safe device as standard (Kirium Pro 3 only)



Flexible mounting
Direct post [Ø60mm / Ø60-76mm]
Side entry [Ø34-42mm / Ø60mm]
Direct post/side entry inclination:
-15° -10° -5° 0° +5° +10° +15°

Toolless entry
Quick-release latches for speedy installation and maintenance



Kirium Pro Mini/Midi

*available on Kirium Pro 1, 2 and 3 only

Optical control

Featuring Diamond+

23 standard optical distributions for ultimate flexibility and precise lighting control.

An evolution of our award-winning and patented Diamond Optic® reflector technology, Diamond+ gives you the ability to create widely different lighting distributions from a single luminaire.

Choose Diamond+ for refined lighting distribution

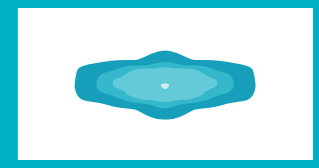
Diamond+ A Optic



Options
A1 / A2 / A3 / A4 / A5

Typical Applications
Wide roads and dual carriageways (M classes)

Diamond+ B Optic



Options
B1 / B2 / B3 / B4 / B5

Typical Applications
Narrow roads and footpaths

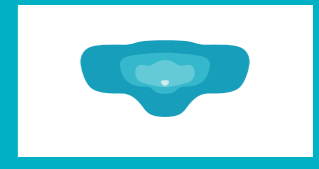
Diamond+ C Optic



Options
C1 / C2 / C3 / C4 / C5

Typical Applications
Area applications and open spaces

Diamond+ D Optic



Options
B1 / B2 / B3 / B4 / B5

Typical Applications
Standard roads and wide footpaths

Diamond+ Z Optic



Options
ZL / ZR / ZF

Typical Applications
Zebra and pedestrian crossings

Further Information
Please refer to our website for full optical configurations at dwwindsor.com/diamond



Control & connectivity

From simple factory-set dimming to full CMS: enhance your luminaire through intelligent, connected sensors and control systems. Kirium Pro is now available with more connectivity options than ever and can be specified with both NEMA and Zhaga sockets mounted in top and bottom locations.

The benefits of smart control

- Adjust light levels remotely to adapt to environmental and social changes
- Reduced energy consumption and lower carbon footprint
- Longer luminaire life
- Lower maintenance and energy costs over the life of the product
- Energy metering: paying for actual consumption
- Ability to collect data



Wide Network Solutions

Integral CMS via internal or external nodes for real-time control, monitoring, metering and dynamic management of lighting infrastructure. Connected (or Smart) assets use wireless communications networks, offering optimal flexibility. Control a single luminaire or group switch remotely.



Local Network Solutions

Switch, dim and configure luminaires wirelessly via Bluetooth for increased convenience and flexibility. Manage luminaires individually or in a group using scenes. Controlled directly from a smart device, no additional controls cabling required.

Zhaga Socket (top)
4-pin option

NEMA Socket (top)
3 / 5 / 6 / 7-pin options

Zhaga Socket (bottom)
4-pin option



Stand-alone controls

Direct control in its simplest form, stand-alone systems are reliable and straightforward, utilising devices such as photocells to manage the lighting. Full manual and dependable control, including factory-set dimming, time switches and presence detectors.





Kirium Pro Vision

Kirium Pro Vision is a high-performance street lighting solution with integrated CCTV technology. Designed as an intelligent solution for a safer world, Kirium Pro Vision consolidates multiple services into a single product, offering increased security with lower complexity.

Learn more at dwwindsor.com/kirium-pro-vision

Key features

- 3 different camera solutions to suit a range of urban applications from high streets to car parks
- Wired or wireless connectivity, secure encryption and authentication
- ONVIF compliant to ensure interoperability with IP-based CCTV security systems
- Reduces visual clutter and provides a more subtle solution in areas subject to high vandalism
- Camera data and recordings can be internally stored via a standard 128GB micro SD card
- An alarm can be set up to activate in the event of unauthorised access to the column door

Camera solutions



Static

A discreet, all-round solution for monitoring any environment

A fixed position camera, which can be manually adjusted by hand, to offer a great general overview of any area



Pan Tilt Zoom

A flexible, fully-motorised solution for covering large, open areas

With a 360° continuous rotation, -5° to 90° tilt and built-in infrared, perfect in emergency response scenarios



Fisheye

A 360°, panoramic solution with added sensors for analytical insights

Features a wide field of view, built-in microphone and infrared, ideal for town centres and urbanised areas



Installation and maintenance



Toolless entry via quick-release latches for simple maintenance



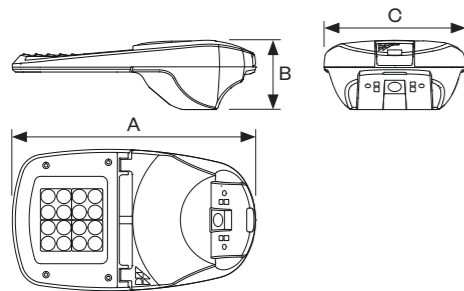
Hinged opening for easy access to internal control gear



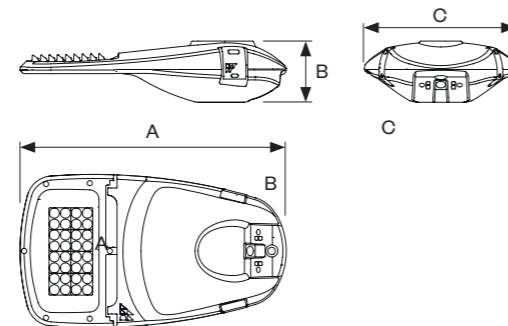
Lift-off head, with automatic electrical disconnect (Kirium Pro 1, 2 and 3 only)

Luminaire Dimensions

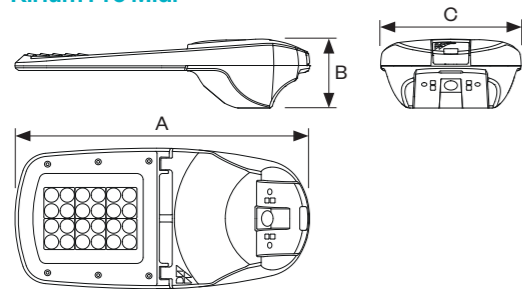
Kirium Pro Mini



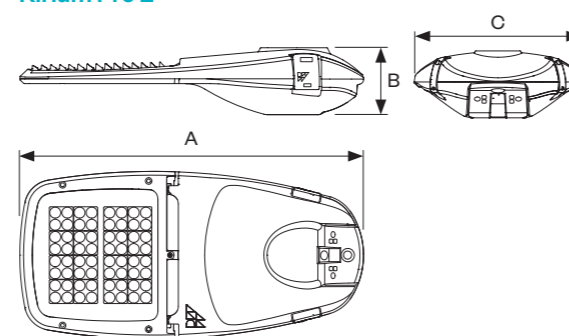
Kirium Pro 1



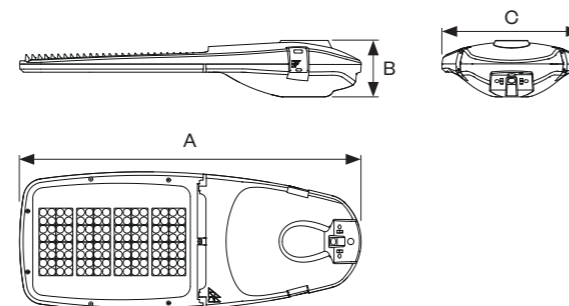
Kirium Pro Midi



Kirium Pro 2



Kirium Pro 3



	Dimensions (mm)			Weight (kg)	Windage (m ²)
	A	B	C		
Kirium Pro Mini	390	110	227	3.6	0.032 (CxS = 0.021)
Kirium Pro Midi	451	119	227	5.0	0.034 (CxS = 0.026)
Kirium Pro 1	610	140	350	7.1	0.054 (CxS = 0.029)
Kirium Pro 2	720	140	350	9.5	0.059 (CxS = 0.034)
Kirium Pro 3	1010	167	415	17.5	0.094 (CxS = 0.056)



Kirium Pro lumen packages and wattages matrix

Model	No of LEDs	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	
Kirium Pro Mini	4	Im	440	544	645	743	839	932	1,022	1,109	1,194	1,276	1,355	1,430	1,503	1,572	1,638	1,701	1,760	1,848
		W	3	4	5	5	6	7	7	8	9	9	10	11	11	12	13	14	15	16
Kirium Pro Mini Kirium Pro 1	8	Im	915	1,130	1,340	1,544	1,743	1,936	2,124	2,306	2,482	2,652	2,815	2,972	3,123	3,267	3,404	3,535	3,658	3,841
		W	6	7	8	9	10	11	12	14	15	16	18	19	20	22	23	25	26	27
Kirium Pro Mini Kirium Pro 1	16	Im	1,791	2,212	2,622	3,022	3,412	3,790	4,157	4,513	4,858	5,190	5,510	5,818	6,113	6,395	6,663*	6,919*	7,160*	7,518*
		W	10	12	14	17	19	21	23	26	28	30	33	35	37	40	42*	45*	47*	49*
Kirium Pro Midi Kirium Pro 1	24	Im	2,535	3,130	3,711	4,278	4,829	5,365	5,885	6,388	6,876	7,346	7,799	8,235	8,652	9,051	9,431	9,793	10,134	10,641
		W	14	17	20	23	27	30	33	36	39	42	46	49	53	56	60	63	67	70
Kirium Pro 1 Kirium Pro 2	32	Im	3,297	4,071	4,827	5,563	6,280	6,977	7,653	8,308	8,942	9,554	10,143	10,709	11,252	11,771	12,266	12,735	13,180	13,839
		W	19	23	27	31	35	39	43	48	52	56	61	65	70	75	79	84	89	93
Kirium Pro 2	48	Im	5,023	6,202	7,353	8,475	9,567	10,628	11,659	12,657	13,622	14,554	15,452	16,315	17,142	17,932	18,686	19,401	20,078	21,082
		W	27	33	39	45	51	57	64	70	76	82	89	95	102	109	116	123	131	137
Kirium Pro 2 Kirium Pro 3	64	Im	6,525	8,058	9,553	11,010	12,429	13,808	15,147	16,443	17,698	18,908	20,075	21,196	22,270	23,297	24,276	25,206	26,085	27,389
		W	35	42	50	58	66	74	82	91	99	108	116	125	134	142	151	160	168	176
Kirium Pro 3	80	Im	7,930	9,792	11,609	13,380	15,104	16,780	18,406	19,982	21,506	22,978	24,395	25,757	27,063	28,311	29,501	30,630	31,699	33,284
		W	45	55	65	75	86	96	106	117	127	138	149	160	171	182	193	205	216	226
	96	Im	9,289	11,470	13,599	15,673	17,693	19,656	21,561	23,407	25,193	26,916	28,577	30,172	31,702	33,164	34,557	35,881	37,133	38,990
		W	53	65	77	89	101	113	126	139	151	164	177	190	203	216	229	242	255	266
	128	Im	12,374	15,280	18,115	20,879	23,570	26,185	28,723	31,182	33,561	35,857	38,068	40,194	42,231	44,179	46,036	47,798	49,466	51,939
		W	70	85	101	117	132	149	165	181	198	215	231	249	266	283	301	318	336	351

Calculations based on 4000K with A2 optic and no Light Output Reduction (LOR) factor applied

* only applies to Kirium Pro 1 (16 LED)

Glare ratings

Optic	Rating	Optic	Rating	Optic	Rating	Optic	Rating	Optic	Rating
A1	None	B1	G3	C1	G6	D1	None	ZL	G6
A2	G3	B2	G3	C2	G3	D2	G3	ZR	G6
A3	G3	B3	G3	C3	G6	D3	G3	ZF	None
A4	G3	B4	G3	C4	G6	D4	G2		
A5	None	B5	G4	C5	G4	D5	None		

CCT details

	Light output reduction factor	S/P Ratio
4000K	1.00	1.5
3000K	0.93	1.3
2700K	0.86	1.2

Equivalent LED specifications for HID replacement schemes

Lamp and LED Equivalent	Power (W)	Energy Saving (%)
SOX	35W SOX	54
	8 LED @ 750mA	19
	55W SOX	75
	16 LED @ 650mA	30
	90W SOX	127
	32 LED @ 550mA	48
	135W SOX	179
	48 LED @ 600mA	76
	180W SOX	246
24 LED @ 650mA	99	
SON-T+	50W SON-T+	65
	16 LED @ 350mA	17
SON-T+ / CDO-TT	70W SON-T+ / CDO-TT	85
	16 LED @ 550mA	26
	100W SON-T+ / CDO-TT	118
	24 LED @ 700mA	46
	150W SON-T+ / CDO-TT	172
	48 LED @ 600mA	76
	250W SON-T+ / CDO-TT	280
	80 LED @ 750mA	160
CPO-TW	45W CPO-TW	52
	8 LED @ 950mA	25
	60W CPO-TW	66
	16 LED @ 650mA	30
	90W CPO-TW	100
	24 LED @ 700mA	46
	140W CPO-TW	154
32 LED @ 850mA	75	

Product codes

	Code	Example	
Model			
Kirium Pro Mini	KPM	KP2	
Kirium Pro Midi	KPD		
Kirium Pro 1	KP1		
Kirium Pro 2	KP2		
Kirium Pro 3	KP3		
LED Quantity			
4 LED		004	
8 LED	8 LED	008	
16 LED	16 LED	016	
24 LED	24 LED	024	
32 LED		032	
48 LED		048	
64 LED		064	
80 LED		080	
96 LED		096	
128 LED		128	
Mounting			
Ø34-42mm Side entry [not available on Kirium Pro 3]	S	D	
Ø60mm Side entry / Direct post adaptor	I		
Ø76mm Direct post	D		
Colour Temperature			
2700K	27	30	
3000K	30		
4000K	40		
Light Distribution			
Diamond+ A Optic - Wide Road (A1 / A2 / A3 / A4 / A5)	A1 / A2 / A3 / A4 / A5	D1	
Diamond+ B Optic - Footpath (B1 / B2 / B3 / B4 / B5)	B1 / B2 / B3 / B4 / B5		
Diamond+ C Optic - Area (C1 / C2 / C3 / C4 / C5)	C1 / C2 / C3 / C4 / C5		
Diamond+ D Optic - Standard Road (D1 / D2 / D3 / D4 / D5)	D1 / D2 / D3 / D4 / D5		
Diamond+ Z Optic - Pedestrian Crossing (ZL / ZR / ZF)	ZL / ZR / ZF		
Light Output			
Drive currents from 200mA to 1050mA are available in 50mA increments Insert drive current value in 4-digit format (eg 250mA = 0250)	0200 / 0250 / 0300 0350 / 0400 / 0450 0500 / 0550 / 0600 0650 / 0700 / 0750 0800 / 0850 / 0900 0950 / 1000 / 1050	0550	
Glazing			
Toughened glass	FG	FG	
Polycarbonate [Kirium Pro Mini, Kirium Pro Midi & Kirium Pro 1 only]	RA		
Colour Finish			
RAL 9005 Black	10	29	
RAL 7046 Mid grey	CF		
RAL 7035 Light grey	29		
Other RAL colour	RAL [specify]		
Control			
No connectivity or control	N	U20	
Miniature photocell - 20 lux (1:0.5)	U20		
Miniature photocell - 35 lux (1:0.5)	U35		
3-pin NEMA socket	E		
5-pin NEMA socket	C3		
6-pin NEMA socket	B1		
7-pin NEMA socket	D2		
4-pin Zhaga Book 18 socket (top)	Z4		
4-pin Zhaga Book 18 socket (bottom) [can be combined with top NEMA or miniature photocell]	Z4A		
4-pin Zhaga Book 18 socket (top and bottom)	Z4B		
CMS			
Integral CMS - Urban Control (AC node with puck antenna)	UAC		-
Integral CMS - Urban Control (DC node with puck antenna)	UDC		
Integral CMS - Telensa (with monopole antenna)	ITE		
Integral CMS - Mayflower (with stub antenna)	IMA		
Presence Detector			
Miniature presence detector	PD	-	

Example Code: KP2 048 D 30 D1 0550 FG 29 U20

IP66 | IK10 | CLASS I or CLASS II

Key Features

- Our most comprehensive range of high performance LED street lighting luminaires, available in five sizes
- Extensive optical solutions; introducing Diamond+ the ultimate in flexible, precise lighting control. 23 standard optical solutions available
- Quick and safe installation and maintenance via toolless, quick-release latches. Lift-off head and automatic electrical disconnect
- Emergency option available (Kirium Pro 1, 2 and 3 only)
- Environmentally tested to BS EN 60068-2-6 2008
- Complementary bollard and wall luminaire available

Options

- Kirium Pro Mini:** (4 / 8 / 16 LEDs) for mounting at 4-6 metres
- Kirium Pro Midi:** (24 LEDs) for mounting at 4-8 metres
- Kirium Pro 1:** (8 / 16 / 24 / 32 LEDs) for mounting at 5-8 metres
- Kirium Pro 2:** (48 / 64 LEDs) for mounting at 6-10 metres
- Kirium Pro 3:** (80 / 96 / 128 LEDs) for mounting at 8-15 metres

Optical Control

- Diamond+ A Optic:** Wide Road (A1 / A2 / A3 / A4 / A5)
- Diamond+ B Optic:** Footpath (B1 / B2 / B3 / B4 / B5)
- Diamond+ C Optic:** Area (C1 / C2 / C3 / C4 / C5)
- Diamond+ D Optic:** Standard Road (D1 / D2 / D3 / D4 / D5)
- Diamond+ Z Optic:** Pedestrian Crossing (ZL / ZR / ZF)

Lifetime

> 100,000 hours L90 B10

Total Luminaire Lumens

- Kirium Pro Mini:** 440 - 6,395 lm
- Kirium Pro Midi:** 2,535 - 10,640 lm
- Kirium Pro 1:** 915 - 13,840 lm
- Kirium Pro 2:** 5,025 - 27,390 lm
- Kirium Pro 3:** 7,930 - 51,940 lm

Colour Temperature

- 2700K
- 3000K
- 4000K

Colour Rendering Index

70Ra

Luminaire Efficacy

Up to 192 lm/W

Drive Current

200mA - 1050mA (in 50mA increments)

Mounting

- Direct post:** Ø60mm / Ø60 - 76mm
- Side entry:** Ø34 - 42mm / Ø60mm
- Direct post/side entry inclination:** -15° -10° -5° 0° +5° +10° +15°
- Adaptors available for various spigot diameters

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
- RAL 7046 Mid grey
- RAL 7035 Light grey
- (Other RAL colours available on request)

Materials

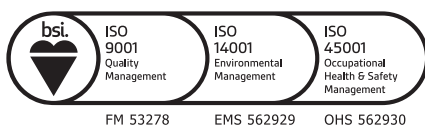
- Body:** High-pressure die-cast aluminium (LM6)
- Glazing:** Toughened glass (IK08) / Polycarbonate (IK10)
- Seals:** Silicone
- Finish:** Polyester powder coat

Accessories

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

Installation & Maintenance

- Available with various cable tail options prefitted
- Short form UMSUG codes available on the website
- Operational temperature range: -45°C to +50°C
- Surge protection: 10kV



FM 53278 EMS 562929 OHS 562930



DW Windsor is part of the Luceco Group

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