



Katana industrial system

Modular large area
LED lighting solution

The power to make you

think
again

Large area lighting. Re-imagined.

For large area, high output illumination without the need to compromise on design, the Katana lighting system offers a powerful lumen package of up to 88,000 lumens, with precise optical control.

Providing ultimate flexibility: customisable to your specific project requirements. Katana’s modular design, with diverse mounting options and lighting distributions, gives you the power to build your perfect solution.

Highly efficient. Up to 130lm/w. Save energy and reduce (installation and maintenance) costs with Katana.

Katana. The only large area lighting system you’ll need.
From 5200lm to 88000lm.

Key advantages:

- Modular and flexible mounting
- High lumen output
- Low weight. Suitable for retrofit onto existing columns
- 24 flexible optical solutions
- With Diamond+ technology for the ultimate in precise lighting control
- Impressive energy efficiency
- Range of control options
- Smart City ready

Applications:



Large road lighting junctions / Motorway interchanges



Toll plaza



Large open areas – goods yards etc.



Car parks



Ferry / Rail ports



Covered areas



Case Study

Results worth thinking about

Take a look at this typical 8m high car park. With the flexibility to tailor your solution, significant energy savings are achievable over traditional HID light sources.

Post top mounted symmetrical optic, high power lamp to LED upgrade

Project	Car Park
Target Lighting Class	CE3
Minimum Maintained Average Lighting Level	15 Lux
Minimum Maintained Overall Uniformity	0.25

Project Description

	Original Scheme	New Scheme
Light Source	1 x400W MBI-T	Katana Post Top 1 module 4k 960mA
Total Product Circuit Watts (W)	445	210
Total Luminous Flux (lm)	36,000	21,124
Achieved Minimum Average	15.08	15.03
Minimum Maintained Average	3.4	4.0
Uo	0.23	0.29
Weight (kg per unit)	24	13
Lm/kg	1,500	2,347
Qty Lanterns	12	12
Total Energy (W)	5,340	2,520
		Energy saving of 53%



Standard options

Katana Post Top

For mounting at 8-20 metres

Options

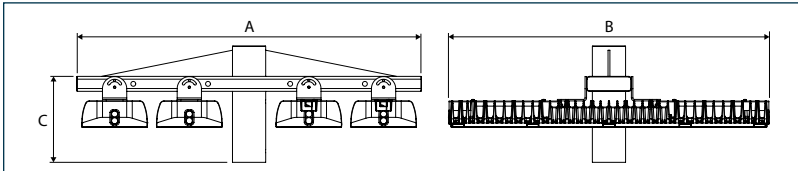
- 1 module: up to 22000lm (210W)
- 2 modules: up to 44000lm (396W)
- 4 modules: up to 88000lm (792W)

Suggested applications:

- Lighting of car parks
- Lighting large areas (from a minimum number of lighting points)



Katana Post Top	Dimensions (mm)			Weight (kg)	Windage (m²)
	A	B	C		
1 module	221	860	160	13	0.01
2 modules	503	860	311.5	30	0.07
4 modules	923	860	311.5	56	0.12



Katana Direct Post

For mounting at 8-15 metres

Options

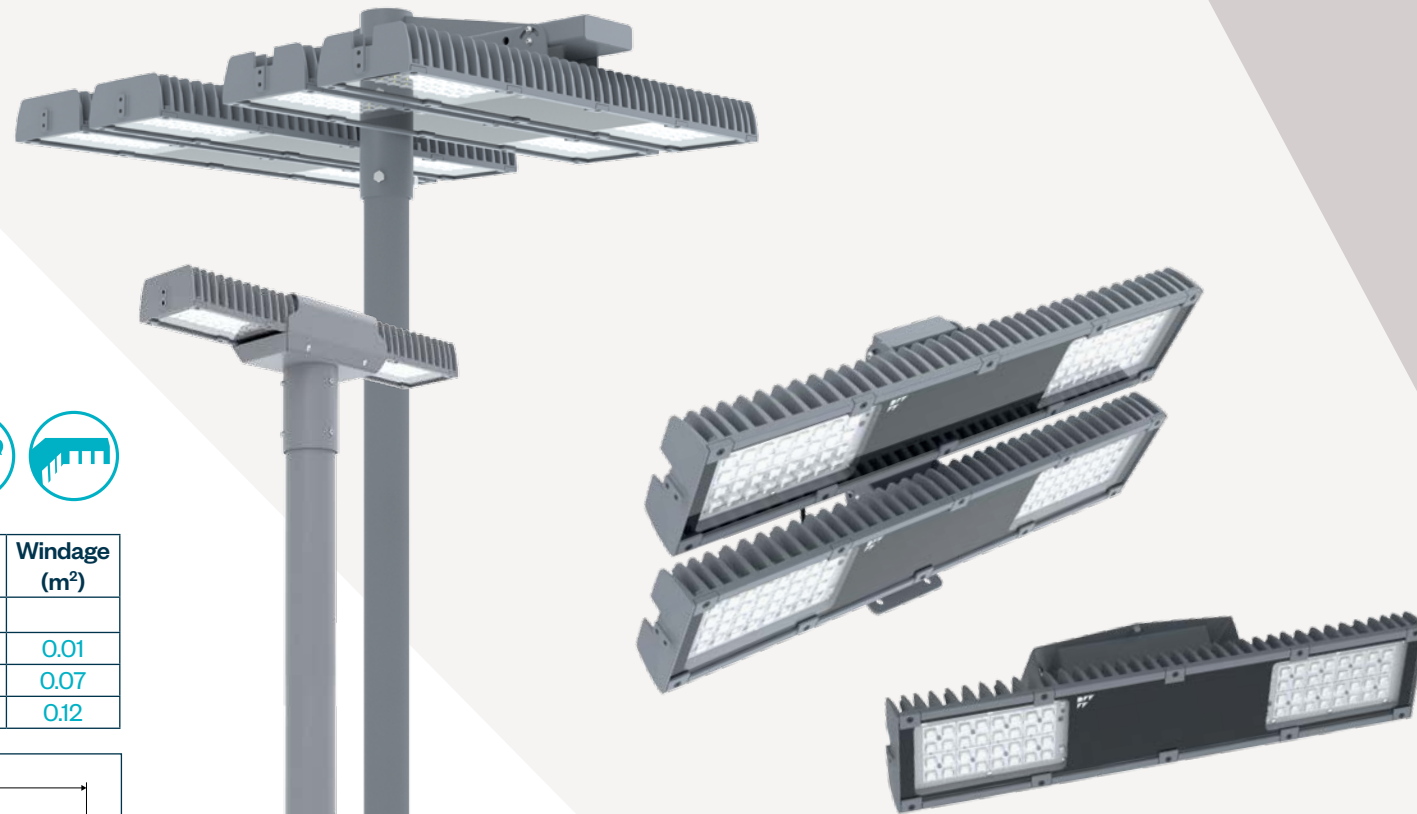
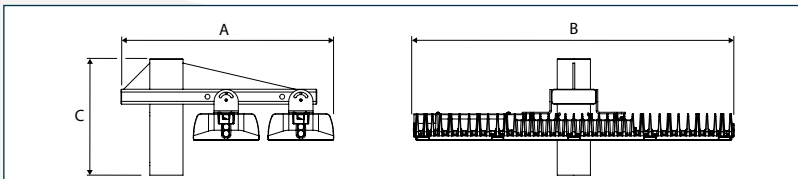
- 2 modules: up to 44000lm (396W)
- 3 modules: up to 66000lm (594W)

Suggested applications:

- Perimeter lighting of car parks
- High level road lighting
- Large spaces



Katana Direct Post	Dimensions (mm)			Weight (kg)	Windage (m²)
	A	B	C		
2 modules	570	860	311.5	30	0.07
3 modules	770	860	311.5	43	0.09



Katana Wall / Ceiling Mount

For mounting at 8-10 metres

Options

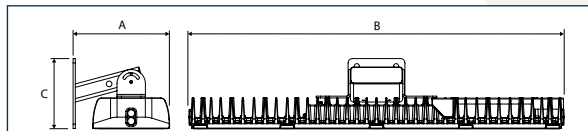
- 1 module: up to 22000lm (210W)
- 2 modules: up to 44000lm (396W)

Suggested applications:

- Lighting of building surrounds in large open areas
- Lighting of platforms from buildings



Katana Wall Mount	Dimensions (mm)			Weight (kg)
	A	B	C	
1 module	221	860	160	13
2 modules	421	860	195	26



Introducing Diamond+

With 24 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

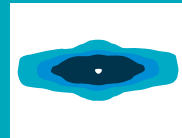
Diamond+ A Optic



Options:
A1, A2, A3, A4 or A5

Typical applications:
Wide roads and dual carriageways (M classes)

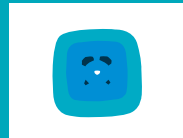
Diamond+ B Optic



Options:
B1, B2, B3, B4 or B5

Typical applications:
Narrow roads and footpaths

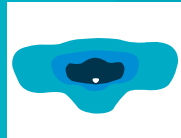
Diamond+ C Optic



Options:
C1, C2, C3, C4 or C5

Typical applications:
Area applications

Diamond+ D Optic



Options:
D1, D2, D3, D4 or D5

Typical applications:
Standard roads and wide footpaths

Diamond+ F Optic



Options:
F1

Typical applications:
New flood optic for perimeter and car park lighting

Please refer to [dwindsor.com/katana](https://www.dwindsor.com/katana) for full optical configurations

Optical accessories

Obtrusive light shields for zero upward light





Build your perfect lighting solution

The Katana system is available in a range of configurations. A selection of standard mounting options are illustrated within this brochure. For more aspirational arrangements please see our Katana urban system brochure or visit dw Windsor.com/katana

Cooling fins

Fully CMS compatible

With room for existing and future Smart City control

Tailored control

Integral LED driver with a wide range of control and drive current options

Surge protection 10KV as standard

Adjustable tilt

Each module individually adjustable (5° increments)

Performance lighting

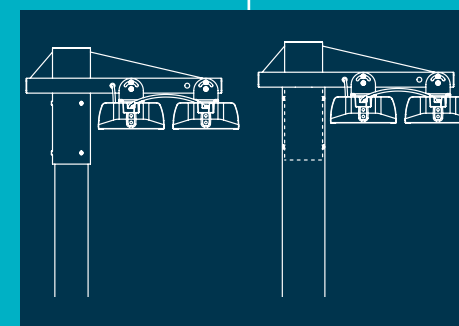
LUXEON TX LEDs (from 64 to 256 LEDs – choice of 1 to 4 Katana modules) up to 130lm/W

24 optical distributions as standard

Ability to combine different distributions within each module for ultimate optical flexibility

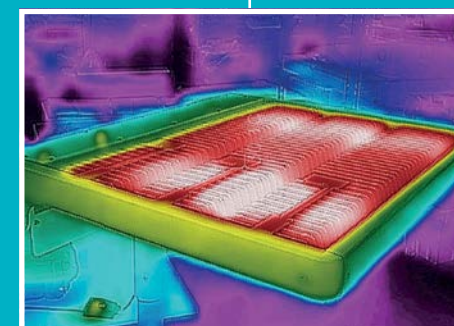
Flexible mounting options

Post top / direct post [76, 89, 114mm Ø]
Wall/ceiling mount



Superior thermal management

Air vents between the LED modules facilitate air flow. Temperature sensitive electronics are isolated



Katana Module – Specification

IP66 | IK09 | CLASS I | CLASS II

Features

Highly efficient, configurable lighting solution

Flexible range of outputs and lighting distributions

Ability to combine different distributions in a single module for ultimate optical flexibility

Flexible mounting options

High efficacy

Fully controllable

Optical control

Diamond+ (see page 5)

Obtrusive light shield(s)/hood

Optional diffuse glazing (on special request)

Light source

LEDs: Luxeon TX

Number of LEDs: 64

L90 lifetime prediction

In excess of 100,000 hours (all variants)

Colour temperature

2700K (very warm white)

3000K (warm white)

4000K (neutral white)

Colour rendering index

70Ra (3000 / 4000K)

80Ra (2700 / 3000K)

Luminaire efficacy

Up to 130lm/W (total measured luminaire efficacy)

Drive Current

From 200mA – 1000mA (in 50mA increments)

Gear, switching and control

LED Driver: Philips Xi Lite / Fully programmable

Switch: On/off through conventional PEC or NEMA photocell

Dim: Factory set dimmed / customer specified dimming

CMS: Compatible with all available CMS systems

Surge protection

10kV as standard

Colours

RAL 7046 Mid Grey

Materials

Body: High pressure die cast aluminium

Glazing: Toughened glass

Seals: Silicone

Finish: Polyester powder coat

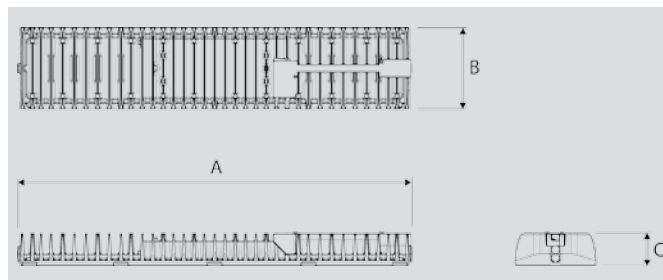
Installation and maintenance

Each module individually adjustable (5° increments)

Operational temperature range: -45° to +50°C

Modules supplied pre-cabled to suit application

For luminaire weight and windage please see pages 4 and 5



	Dimensions (mm)			Weight (kg)
	A	B	C	
SINGLE MODULE	860	176	70.5	10

Katana® is a registered design

Due to continuous product development the details within this brochure are subject to change at any time, please contact us for the most up-to-date information or visit: www.dwwindsor.com

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July 2017