



P860

Next Generation LED Luminaire





P860 LED luminaire excels in optical performance, thermal management, compatibility and serviceability, bringing an uncompromised outcome of efficiency and versatility that is future-proofed for an optimised investment.

P860 has been designed to meet most demanding lighting requirements, being easy to install and maintain. It combines latest LED light source with state-of-the-art design, achieving long life for both LEDs and the drivers. The installation is simple and fast, and the luminaire is easily upgradable on-site if required.

P860 is the ultimate solution to replace traditional HID sources. Being lightweight and having a low profile wind area enables the P860 to be safely installed on existing lighting columns and brackets.



Luminaire Luminous Flux	up to 54,500 lm
Luminaire Efficacy	up to 122 lm/W
Lumen Maintenance	L90 > 100,000 hrs at full power, Ta = 25°C
Photometric options	12 distributions

KEY BENEFITS

- Slim and elegant aesthetics
- Future-proof, upgradable on site
- Superior luminaire efficacy up to 122 lm/W
- Wide range of optics and lumen packages
- Advanced thermal management
- Maximised savings on energy and maintenance costs
- Contractor-friendly installation and maintenance
- Minimal total cost of ownership
- Up to ME1 lighting class applications
- Up to G6 glare rating. Dark sky friendly, no upward light
- Flexible and intelligent lighting control options
- Low windage and lightweight
- IP66 ingress protection
- 100% recyclable

IMPROVED SERVICEABILITY

- Tool-less access
- Easy, fast wiring and installation
- Contractor-friendly maintenance
- Quick replacement for LED and Driver compartment
- Automatic electrical isolation when opened
- Easy electrical testing without altering wiring



FLEXIBLE MOUNTING OPTIONS

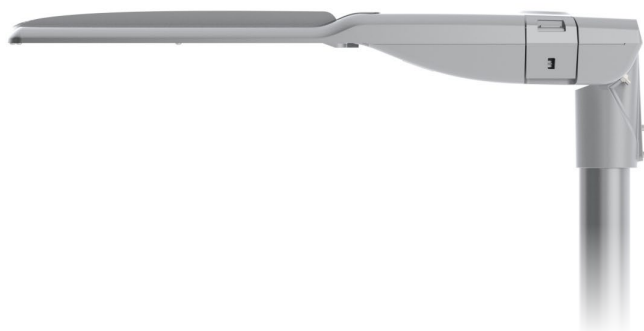
Universal SE/PT spigot caps to suit 34-42mm, 42-60mm and 60-76mm nominal diameter spigots providing -10°, -5°, 0°, +5° and +10° tilt in both post top and side entry arrangements with permanent indication on the luminaire.



Ø 34 - 42mm x 100mm Side-entry / Post-top



Ø 42 - 60mm x 100mm Side-entry / Post-top



Ø 60 - 76mm x 76mm Post-top

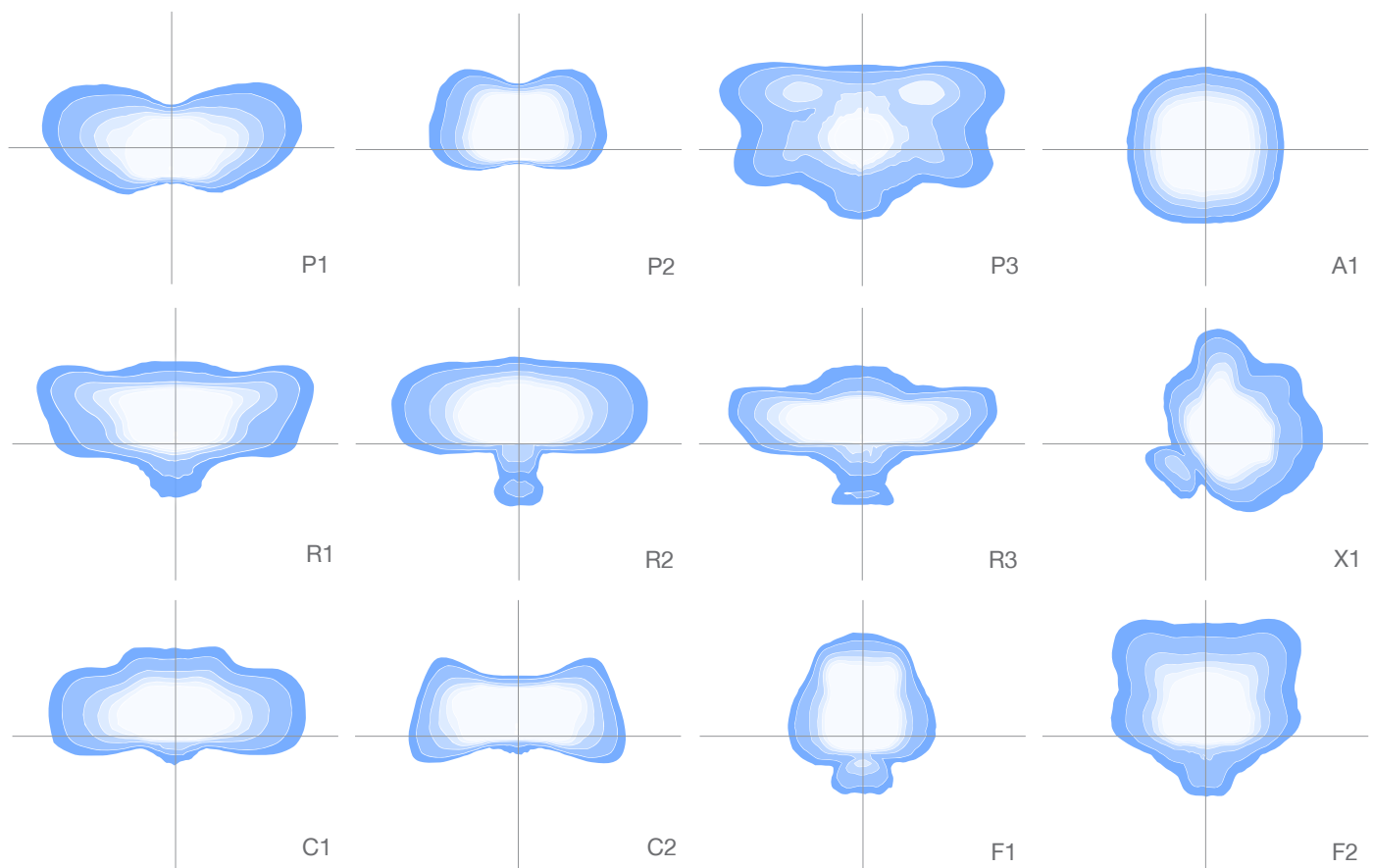
EXCEPTIONAL OPTICAL PERFORMANCE

- Standard Neutral White LEDs (CCT = 4000K)
- Optional Warm White LEDs (CCT = 3000K)
- Colour Rendering Index > 70
- Improved mesopic vision
- High quality PMMA lenses
- Exceptional uniformity
- Dark sky-friendly (zero upward light)
- Minimal glare (up to G6)

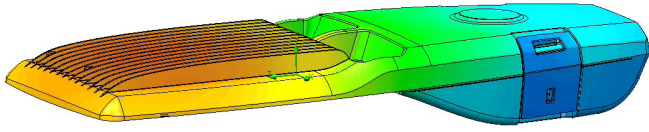
OPTICAL DISTRIBUTIONS

P860 offers a wide choice of optics and lumen packages. High efficacy optics with 12 distributions allows most challenging schemes to be effectively lit with maximum energy efficiency.

Specialised optics are provided for amenity, pedestrian crossings (X1) and floodlighting as well as the usual residential, main road and conflict area distributions.



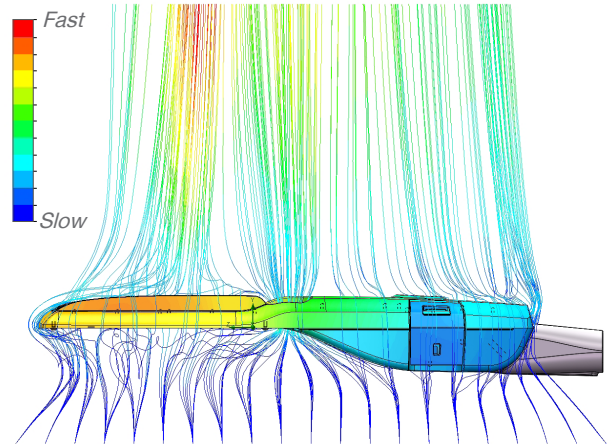
ADVANCED THERMAL MANAGEMENT



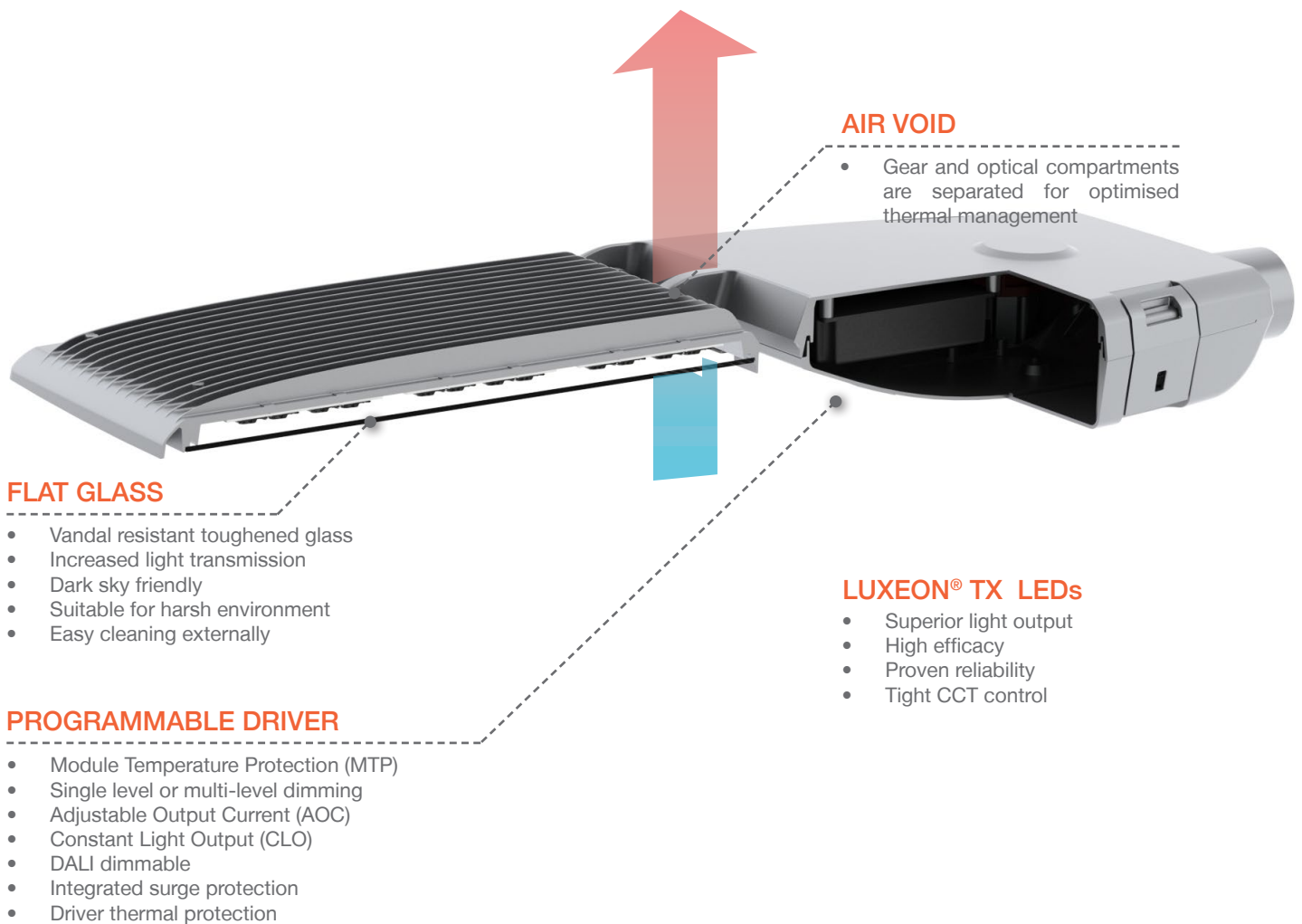
Luminaire temperature results from CFD

P860 uses widely spaced LED chips, combined with large surface cooling area as well as longitudinal fins to avoid any centralised heating problem which occurs in typical modular LED luminaire designs, thus maintaining all LEDs at an even low temperature.

The complete separation of the driver compartment from LEDs keeps the drivers very cool, significantly increasing the luminaire operating life in high ambient operating temperatures.

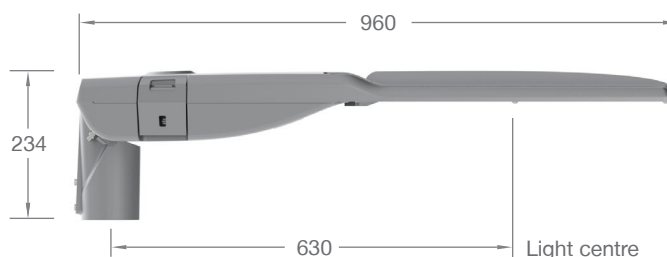
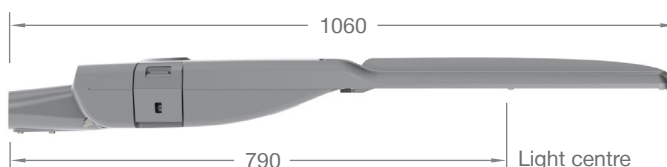


Air flow velocity & luminaire temperature



P860 SPECIFICATION

Light Source	Lumileds LUXEON® TX LEDs	
Number of LEDs	168	168
Number of Drivers	2	3
Power Consumption	105 ~ 331W	359 ~ 520W
Luminaire Luminous Flux	26,600 ~ 39,200 lm	41,400 ~ 54,500 lm
Luminaire Efficacy	up to 122 lm/W	up to 112 lm/W
Driver Current (in 50mA steps)	200mA ~ 650mA	700mA ~ 1000mA
Lumen Maintenance Output (Ta = 25°C)	L90 > 100,000 hours	L80 > 100,000 hours
Operating Temperature (for 100,000 hrs)	-30°C to +40°C (650mA)	-30°C to +30°C (1000mA)
Maximum Operating Temperature	50°C	45°C
Weight (Total)	18.6kg	19.5kg
Correlated Colour Temperature	4000K (3000K optional)	
Glare Rating	up to G6 (depending on lens)	
Colour Rendering Index	> 70	
Optical Cover	Flat Glass	
Electrical Class	I	
Control System Input	DALI or Step-dimming	
Surge Protection	Up to ANSI C62.41.2 high exposure for 10kV, 10kA level	
Dimming Control	Multi-step dimming	
Lighting Regulation	Mini Photocell • NEMA Socket • Wireless CMS options	
Installation Height	8 ~ 15m	
Installation	Ø 34-42mm x 100mm SE • Ø 42-60mm x 100mm SE/PT Ø 60-76mm x 76mm PT	
Post Top / Side Entry Tilt	-10°, -5°, 0°, 5°, 10°	
Material	High pressure die cast aluminum (Housing)	
Finish	Polyester powder coat cured under heat	
Colours	Light grey (RAL 7035), other RAL colours available on request	
Ingress Protection	IP66	
Wind Area (EPA)	0.054m²	



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