

Fira

The small but mighty projector





The small but powerful projector

With its elegant, geometric form and compact size, Fira is a highly versatile architectural luminaire, designed to enhance urban environments through precise illumination.

Developed as a joint collaboration between DW Windsor and Pulsar, the high performance range is available with a choice of dynamic and monochromatic LED light sources with multiple beam options from narrow spots to wide floods.

Key advantages

- Three models: Fira, Fira Pro & Fira Ultra for ultimate choice
- 2700K, 3000K & 4000K for high performance (up to 117lm/W)
- RGBW, RGBA & Tunable White options for dynamic lighting schemes
- Multiple dimming protocols including bluetooth wireless control for easy adjustment
- Thermally optimised design to ensure consistent light performance
- IP66 rated with IK09 toughened glass for excellent impact protection
- Long-lasting 100,000 hour lifetime

Applications



Feature lighting



Statues & monuments



Historic buildings



Town squares & plazas



212mm



175mm



106mm





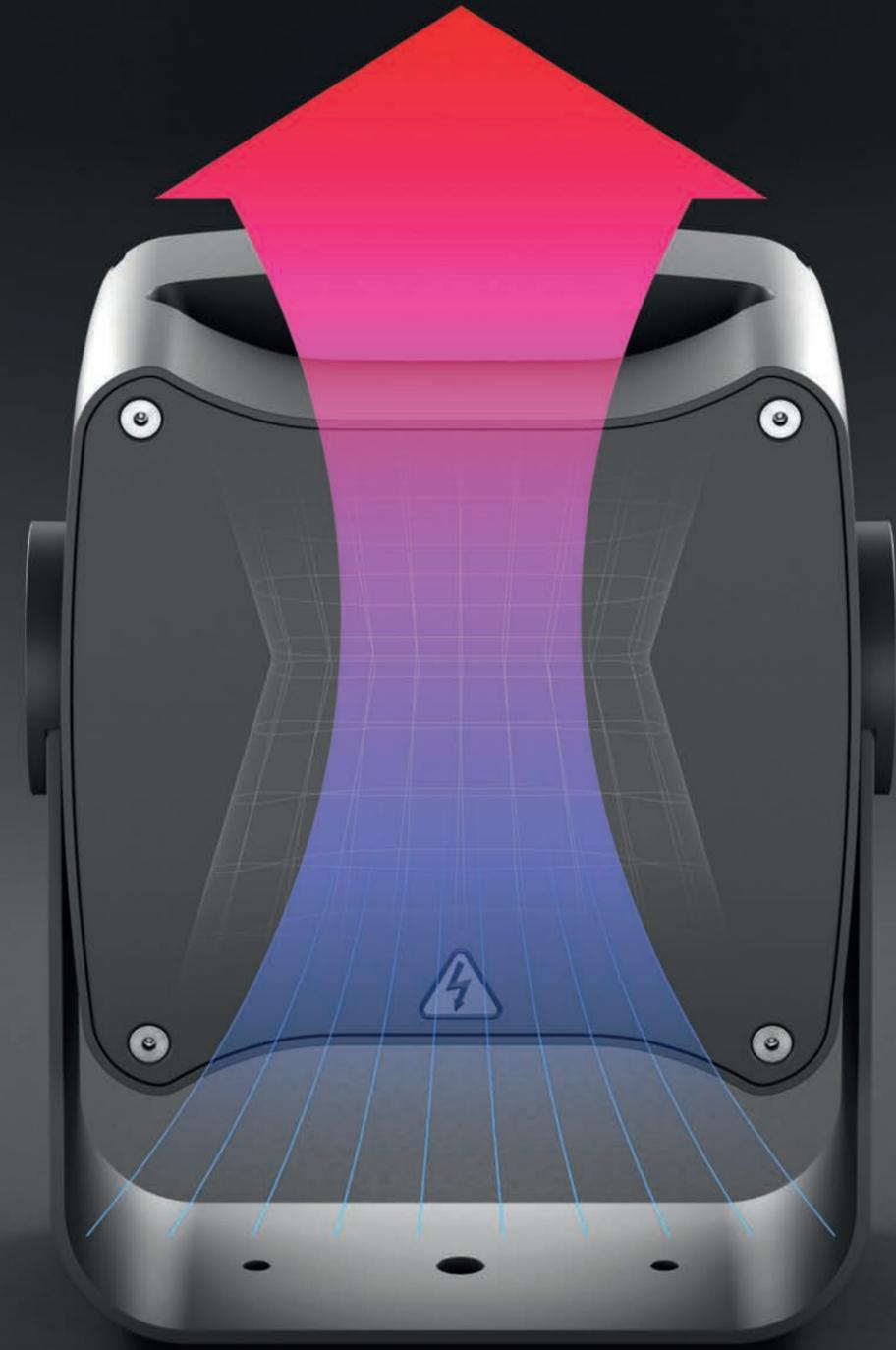
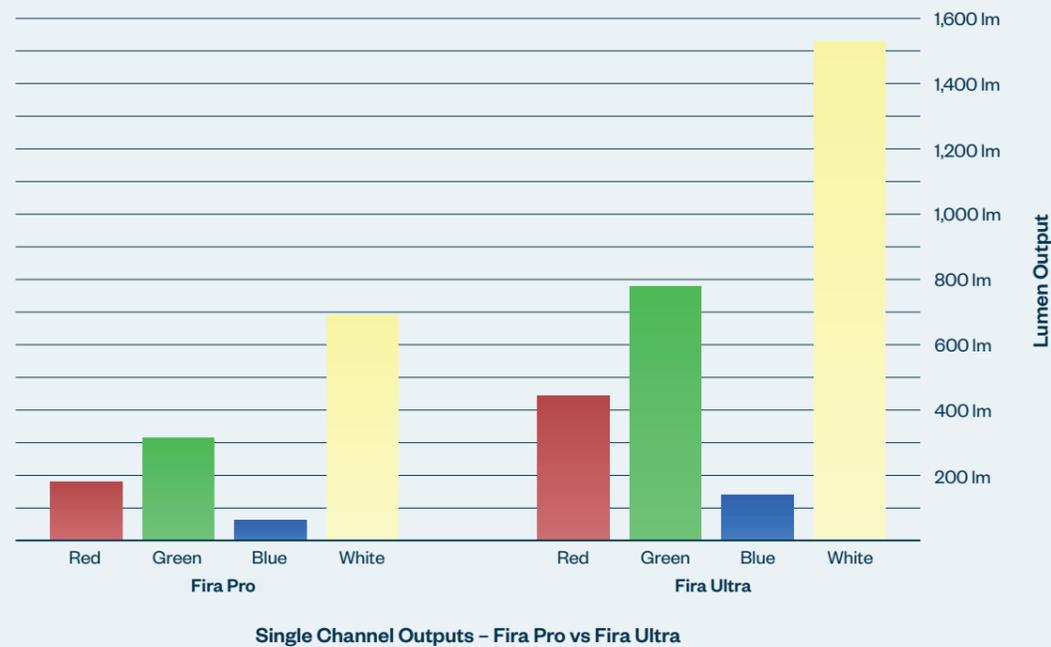
Maximum performance

Featuring precision optics and our latest LED technical innovations, Fira delivers powerful, targeted illumination with precisely controlled beams and perfect uniformity. So whether you're highlighting an architectural feature, or illuminating a building façade, with Fira you can be sure light is directed only where it's needed.

Fira also incorporates our Cool Zone™ technology to help maximise luminaire performance. This innovative feature separates the driver from the LED chamber creating a thermal barrier, whilst also accelerating air flow using an engineered venturi slot to maximise the cooling effect.

LuxRAMP™ Technology

Fira Pro and Fira Ultra models incorporate Pulsar's LuxRAMP technology which dynamically boosts the power sent to individual LED channels, helping to maximise the total light output of the luminaire. Fira Ultra is able to leverage this technology even further, resulting in more than double the brightness when compared with Fira Pro.



Advanced Cooling

Cool Zone technology draws cool air through the luminaire to help improve luminaire performance.



Multiple light sources



Dumfries House, United Kingdom

The Fira range can be specified with a selection of monochromatic and dynamic LED light sources to suit your project needs. Fira provides efficient, white light, whilst Fira Pro and Fira Ultra models utilise Pulsar's proprietary VividCOLOUR and TunableWHITE technologies to produce high quality multi-channel, variable light.



White Light

High quality, efficient white light. Available in a choice of three colour temperatures - 2700K, 3000K and 4000K



RGBA

Capable of producing a wide spectrum of warm, rich colours including very warm whites down to 1700K



RGBW

Ideal for applications that require a mix of white and coloured light. Choose from RGBW 2700K and RGBW 5700K

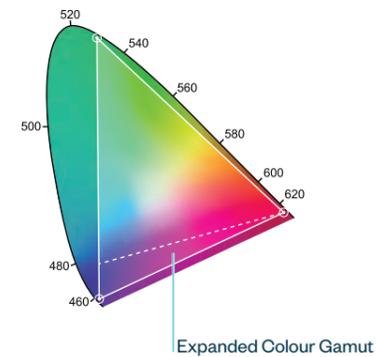


Tunable White

Variable white light. Dynamically adjust the light's colour temperature from 5700K to 1700K to suit the application

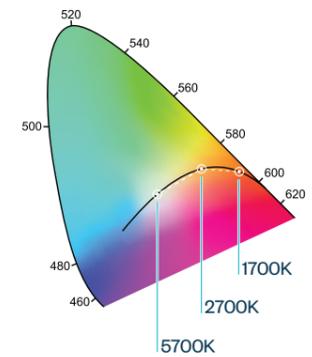
VividCOLOUR

Using a mix of red, green, blue and white LEDs, Pulsar's VividCOLOUR technology expands the colour gamut, extending the range of blue, magenta and cyan hues to produce a full spectrum of colours.



TunableWHITE

While most variable white sources use just two LEDs to create white light, Pulsar's TunableWHITE technology uses a mix of three white LEDs to produce light more closely aligned to the black body curve.





Engineered to last

Fira has been designed to withstand extreme weather conditions whilst enduring some of the world's toughest environments; so no matter where it's installed, it can deliver exceptional performance — year in, year out.

With Fira, every detail has been considered to ensure product reliability and longevity. From its anti-condensation valve to its durable power coated finish, with Fira, you can be confident that it will continue to perform whatever the weather.



Outdoor Use

Features an IP66-rated housing for increased water protection, plus drainage points to prevent pooling



Extreme Temperatures

Capable of withstanding wide fluctuations in ambient temperature from -40° C to +50° C*



Durable Construction

Manufactured from die-cast LM6 aluminium and toughened glass with an impact protection rating of IK09



Long Lasting

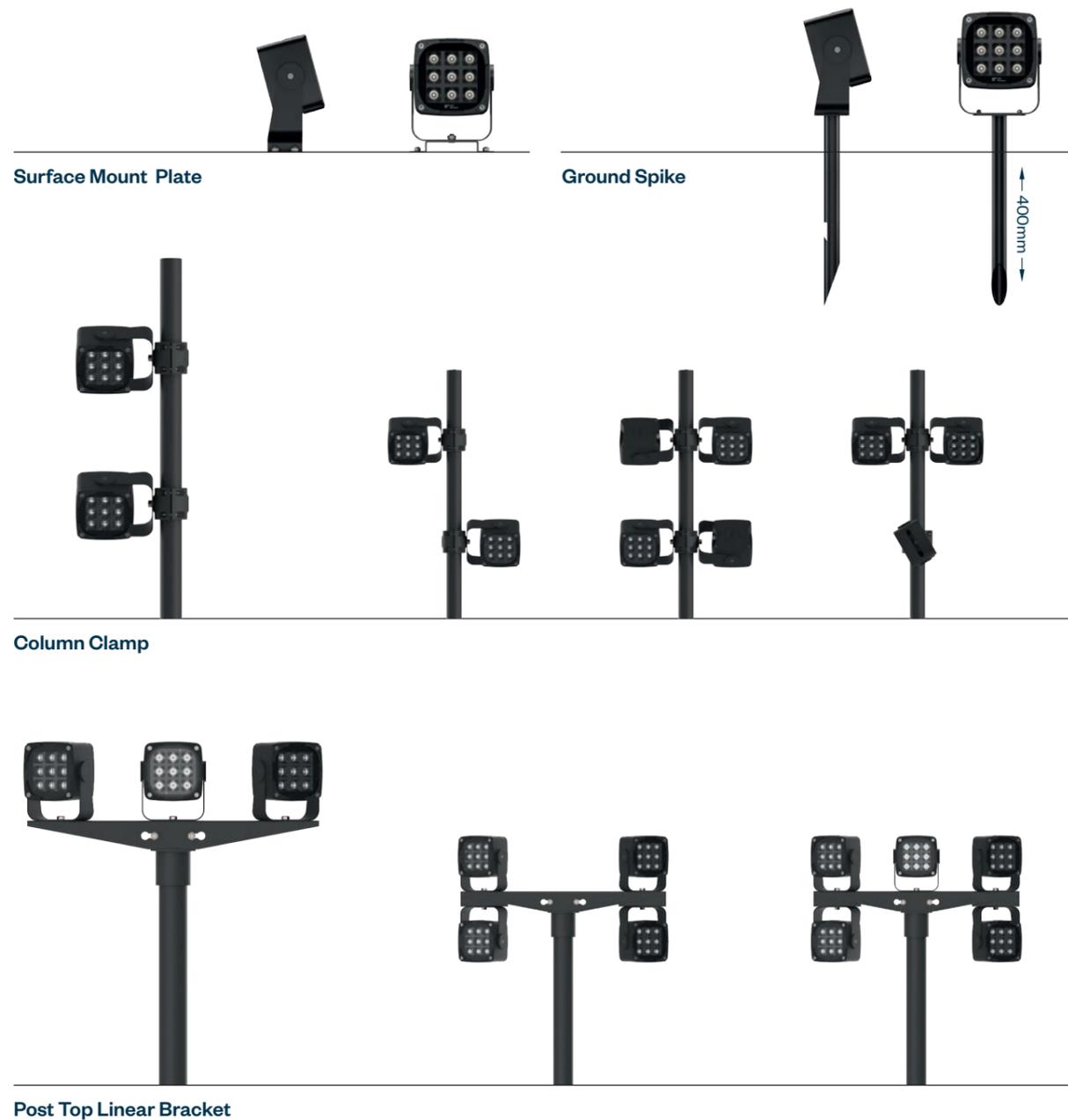
Offered with our 5-year warranty as standard, and a rated LED lifetime of up to 100,000 hours

* Fira rated up to +40° C



Mounting options

Fira is a versatile lighting system suitable to several mounting locations, including floor, wall and ceiling positions. A range of mounting accessories provides further flexibility, allowing Fira to integrate seamlessly into architectural spaces. Multiple column-mounted solutions can also be configured to help bring public spaces to life.





Range overview

FIRA - EFFICIENT, WHITE LIGHT



(2700K - 4000K)		8°	30°	65°
350mA (9W)	Luminous Flux (lm)	948 - 1070	825 - 931	684 - 772
	Peak Intensity (cd)	17,175 - 19,386	2,173 - 2,452	607 - 685
500mA (13W)	Luminous Flux (lm)	1478 - 1669	1,286 - 1,452	1,066 - 1,203
	Peak Intensity (cd)	26,778 - 30,238	3,388 - 3,825	946 - 1,068
700mA (18W)	Luminous Flux (lm)	1897 - 2141	1,650 - 1,862	1,367 - 1,543
	Peak Intensity (cd)	34,369 - 38,790	4,347 - 4,905	1,213 - 1,370
1050mA (27W)	Luminous Flux (lm)	2790 - 3148	2,427 - 2,739	2,011 - 2,270
	Peak Intensity (cd)	50,549 - 57,035	6,394 - 7,216	1,785 - 2,015

FIRA PRO - BEAUTIFUL, DYNAMIC LIGHT



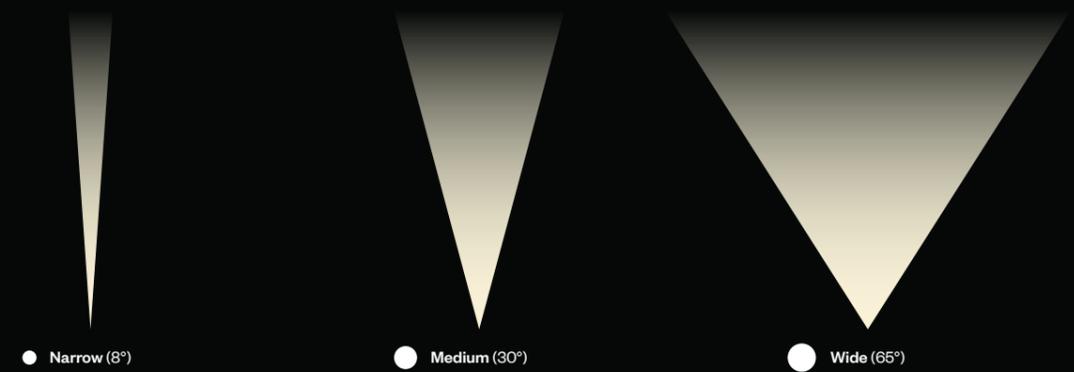
(All Channels On)		12°	20°	40°	80°	12° x 60°
RGBW (5700K)	Luminous Flux (lm)	1,078	1,077	1,071	1,069	1,054
	Peak Intensity (cd)	16,281	4,755	1,427	791	4,277
RGBW (2700K)	Luminous Flux (lm)	896	895	890	889	876
	Peak Intensity (cd)	13,532	3,956	1,186	658	3,554
RGBA (1700K)	Luminous Flux (lm)	834	833	829	827	816
	Peak Intensity (cd)	12,596	3,682	1,104	612	3,311
Tunable White	Luminous Flux (lm)	1,660	1,659	1,649	1,646	1,623
	Peak Intensity (cd)	25,071	7,324	2,197	1,219	6,586

FIRA ULTRA - POWERFUL, DYNAMIC LIGHT

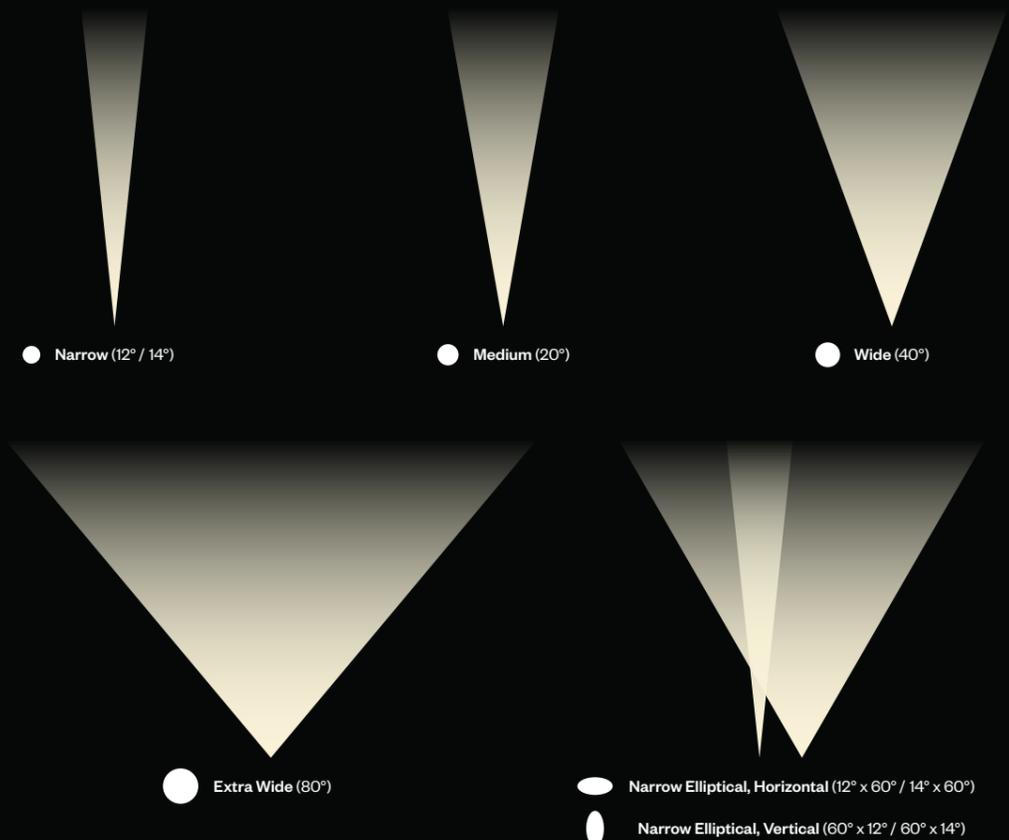


(All Channels On)		14°	20°	40°	80°	14° x 60°
RGBW (5700K)	Luminous Flux (lm)	1,259	1,258	1,250	1,248	1,231
	Peak Intensity (cd)	15,186	5,926	1,597	881	4,211
RGBW (2700K)	Luminous Flux (lm)	1,105	1,104	1,098	1,096	1,081
	Peak Intensity (cd)	13,329	5,206	1,403	773	3,698
RGBA (1700K)	Luminous Flux (lm)	1,092	1,091	1,085	1,083	1,068
	Peak Intensity (cd)	13,172	5,144	1,386	764	3,654
Tunable White	Luminous Flux (lm)	1,904	1,903	1,891	1,887	1,861
	Peak Intensity (cd)	22,966	8,965	2,415	1,331	6,366

LIGHT DISTRIBUTIONS - FIRA



LIGHT DISTRIBUTIONS - FIRA PRO | FIRA ULTRA





Design features

Fira draws on the combined technical knowledge of DW Windsor and Pulsar to deliver a feature-rich external lighting solution capable of delivering exceptional light quality and performance.

Durable Design
Constructed from high pressure die-cast LM6 aluminium and toughened glass with a polyester powder coated finish for maximum protection

Thermal Management
Cool Zone technology creates a thermal barrier between the driver and LED chamber, drawing cool air through the luminaire to aid performance

Flexible Mounting
Fira can be surface-mounted in any orientation, horizontally or vertically. A bespoke column-mounted option is also available

Tilt Adjustment
Quickly adjust tilt angle from -45° to +90° and lock in place using a 5mm Allen key. Uses a non-destructive friction washer to protect the finish

Easy Installation
Fira is supplied pre-cabled for quicker installation. This avoids the need to open the luminaire, helping to maintain IP integrity

Breather Valve
An anti-condensation valve regulates internal pressure and prevents condensation build up to protect the internal electronics

Fira | Fira Pro | Fira Ultra

LEDs
Fira is equipped with nine highly efficient, 80CRI LEDs, capable of producing up to 117lm/W. Available in 2700K, 3000K and 4000K

Beam Distributions
Fira is offered with a choice of narrow (8°), medium (30°) or wide (65°) distributions to support a range of external applications

Dimming Controls
Bluetooth-enabled for direct wireless dimming control, no additional cabling required. DALI and on/off switching options also available

LED Optics
Fira's LED optics are individually recessed within the front fascia to reduce discomfort glare and improve visual comfort

Fira

LEDs
QuadCORE LED technology enables a variety of optimised colour-mixing solutions using four individually binned LEDs for high CRI (90+) illumination

Beam Distributions
Holographic Beam Shaping technology enables a range of symmetric and asymmetric distributions with excellent uniformity from 12° to 80°

Dimming Controls
Utilises DMX512 for dynamic control with Pulsar's InterBIT Smoothing technology to produce seamless fades and transitions between scenes

LED Optics
Homogeneous colour mixing blends light within the optic to produce a single-coloured, uniform beam whilst helping to minimise colour fringing

Fira Pro | Fira Ultra



Control options

Lighting control systems offer many benefits, from increased flexibility to helping lower energy consumption. Fira can be specified with multiple control options to suit the individual needs of your scheme.

FIRA



On / Off

Non-dimmable, provides illumination at a fixed light output. Supplied with a pre-wired 3-core cable.

DALI

Allows for control, configuration and diagnostic of individual or grouped luminaires via a hardwired connection. Supplied with a pre-wired 5-core cable.

Bluetooth

Switch, dim and configure luminaires wirelessly 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.

For more information visit: dwwindsor.com/fira

FIRA PRO | FIRA ULTRA

DMX512



DMX512

An industry standard control protocol for dynamic lighting systems that is both incredibly fast and robust. Ideal for schemes that feature multiple luminaires as it ensures transitions remain synchronised.

For more information visit: dwwindsor.com/fira

RDM Compliant

Provides bi-directional communication between a control system and luminaire. Used during commissioning as well as for status reporting, including temperature monitoring.





Optical accessories & finishes

OPTICAL ACCESSORIES



Half Snoot



Full Snoot



Louvre

STANDARD FINISHES



Black (RAL 9005)



White (RAL 9016)



Aluminium (RAL 9006)



Metallic Grey (RAL 9007)



Metallic Dark Grey (DB 703)

Fira product codes

	Code	Example
Product		
Fira	FIR9	FIR9
Control		
Switched (on/off - default)	SW	SW
DALI	DALI	
Bluetooth	BLU	
Colour Temperature		
2700K	27	30
3000K	30	
4000K	40	
Light Distribution		
Narrow - 8°	N	M
Medium - 30°	M	
Wide - 65°	W	
Drive Current		
350mA (9W)	350	700
500mA (13W)	500	
700mA (18W)	700	
1050mA (27W)	501	
Colour Finish		
RAL 9016 White	40	10
RAL 9005 Black	10	
RAL 9006 Aluminium	26	
RAL 9007 Metallic Grey	27	
DB 703 Metallic Dark Grey	DB	
Wiring		
Pre-wired with 1m cable (default)	1M	1M
Pre-wired with 5m cable	5M	
Pre-wired with 10m cable	10M	
Accessories (ordered separately)		
Louvre	LVR	SNT
Snoot	SNT	
Half Snoot	HSNT	
Column Clamp (Ø60mm / Ø76mm)	CC	
Pole Top Linear Bracket (Ø76mm)	PT	

Example Code: **FIR9SW30M700101MSNT**

Fira Pro & Fira Ultra product codes

	Code	Example	
Product			
Fira	FIRA	FIRA	
Version			
Fira Pro	104	104	
Fira Ultra	109		
Control			
DMX + RDM	RDM2	RDM2	
Light Source			
RGBW 5700K	VC	VC	
RGBW 2700K	A3		
RGBA 1700K	A1		
Tunable White	TW		
Colour Finish			
RAL 9016 White	40	26	
RAL 9005 Black	10		
RAL 9006 Aluminium	26		
RAL 9007 Metallic Grey	27		
DB 703 Metallic Dark Grey	DB		
Light Distribution			
Narrow - 12°	Narrow - 14°	012 / 014	040
Medium - 20°	Medium - 20°	020	
Wide - 40°	Wide - 40°	040	
Extra Wide - 80°	Extra Wide - 80°	080	
Vertical Elliptical - 60°x 12°	Vertical Elliptical - 60°x 14°	V02	
Horizontal Elliptical - 12°x 60°	Horizontal Elliptical - 14°x 60°	H02	
Not Applicable			
Not Applicable	XX	XX	
Not Applicable			
Not Applicable	XX	XX	

Example Code: **FIRA104RDM2VC26040XXXX**

Features

- A compact, high-performance architectural luminaire range
- Durable construction for product longevity
- Advanced thermal design to aid luminaire performance
- Multiple light source options including RGBW, RGBA & Tunable White

Light Sources

- Fira – monochromatic white light (2700K, 3000K, 4000K)
- Fira Pro & Fira Ultra – dynamic light (RGBW, RGBA, Tunable White)

Beam Options

- Fira – 8° / 30° / 65°
- Fira Pro – 12° / 20° / 40° / 80° / 12° x 60° / 60° x 12°
- Fira Ultra – 14° / 20° / 40° / 80° / 14° x 60° / 60° x 12°

Lifetime prediction

- Fira – in excess of 100,000 (L90)
- Fira Pro & Fira Ultra – in excess of 100,000 (L70)

Total luminaire lumens

- Fira – 684 - 3,148lm / 27W
- Fira Pro – 1,078 - 1,660lm / 30W
- Fira Ultra – 1,259 - 1,904lm / 32W

Colour rendering index

- Fira – 80Ra (2700K / 3000K / 4000K)
- Fira Pro & Fira Ultra – 90Ra (RGBW / Tunable White)

Total measured luminaire efficacy

- Fira – up to 117lm/W

Operating voltage

- Fira – 220 - 240V AC @ 50/60Hz
- Fira Pro & Fira Ultra – 120 - 277V AC @ 50/60Hz

Control

- Fira – On/Off / DALI / Bluetooth Wireless
- Fira Pro & Fira Ultra – DMX 512 + RDM for easy setup

Drive current

- Fira – 350mA / 500mA / 700mA / 1050mA

Range of movement

- Pan: 360°
- Tilt: -45° to +90°

Mounting

- Surface (horizontal and vertical)
- Column

Product colours

- RAL 9016 White
- RAL 9005 Black
- RAL 9006 Aluminium
- RAL 9007 Metallic grey
- DB 703 Metallic dark grey
- Other RAL colours on special request

Materials

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

Installation and maintenance

- Available with various cable tail options prefitted
- Mounting plate accessory available
- Operational temperature range up to -40°C to +40°C**

* Class II on request ** 50°C for Fira Pro & Fira Ultra

