# HIGHLIGHTS 2024

/3F Filippi





/Sales Network

#### Credits:

The use of texts, images, drawings and anything else contained in these "Highlights 2024", as well as the modification or reproduction of the images and texts in whole or in part, is absolutely prohibited unless expressly authorised by 3F Filippi S.p.A.

Any company, product and brand names mentioned in the material illustrated in this publication are the property of their respective owners.

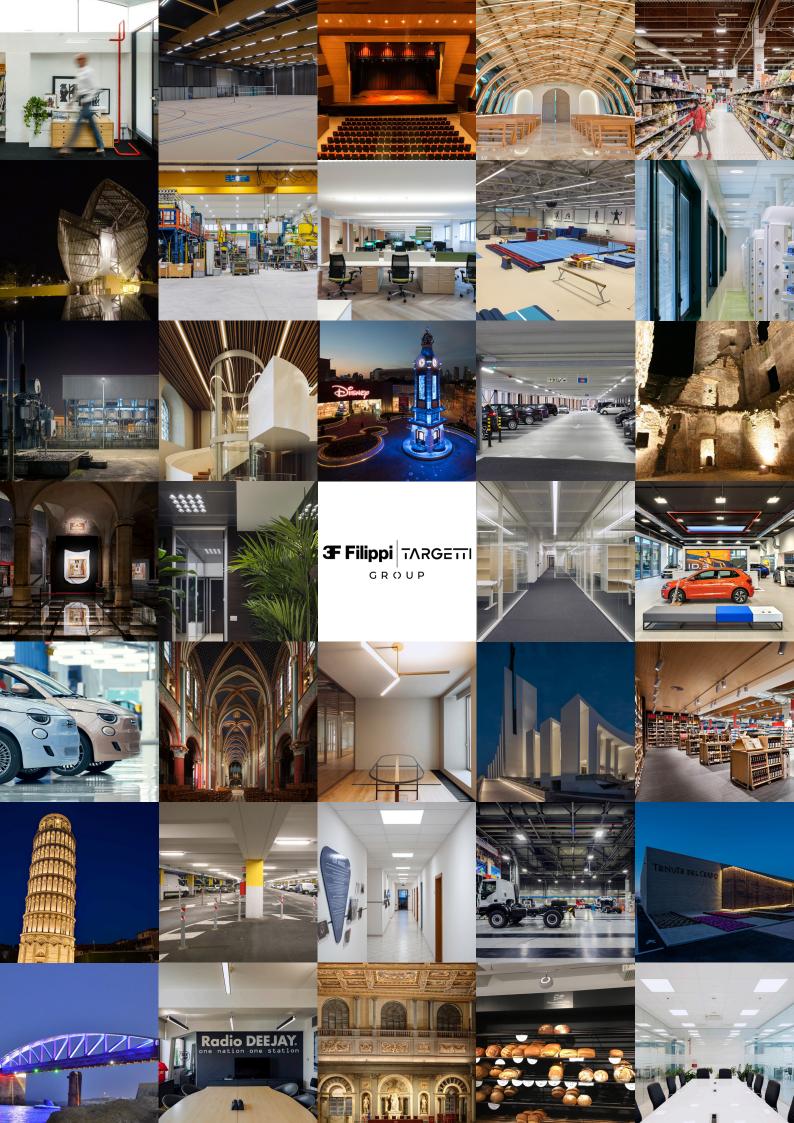
- \_ Group
- \_ 3F Filippi
- News 2024
- \_ 3F Rio
- \_ 3F Rover
- 45 \_ 3F Tank Rock
- 52 \_ 3F Wireless

## / Group

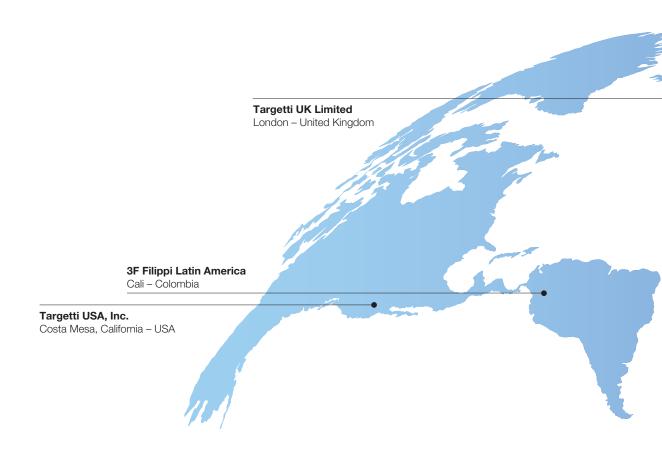
Three companies, one group, all sharing the same values, all expressions of Made in Italy.

Drawing on decades of consolidated expertise and leveraging a combination of skills in the field of technical and architectural lighting, our trio of brands works together to offer a comprehensive portfolio of products, proudly promoting the excellence of Made in Italy in more than 50 countries worldwide.

The Group's offering caters to and fulfils a vast array of design and planning needs. Our clients can rely on a broad range, spanning from the technical and functional products of the 3F Filippi catalogue, to the indoor and outdoor lighting fixtures by Targetti, and an extensive selection of LED light sources and fixtures offered by the Duralamp brand.

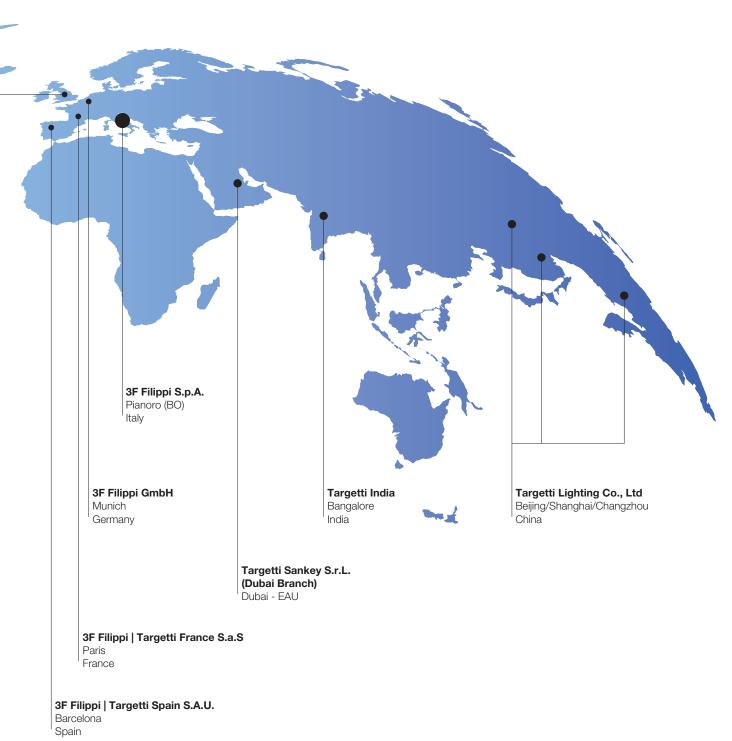


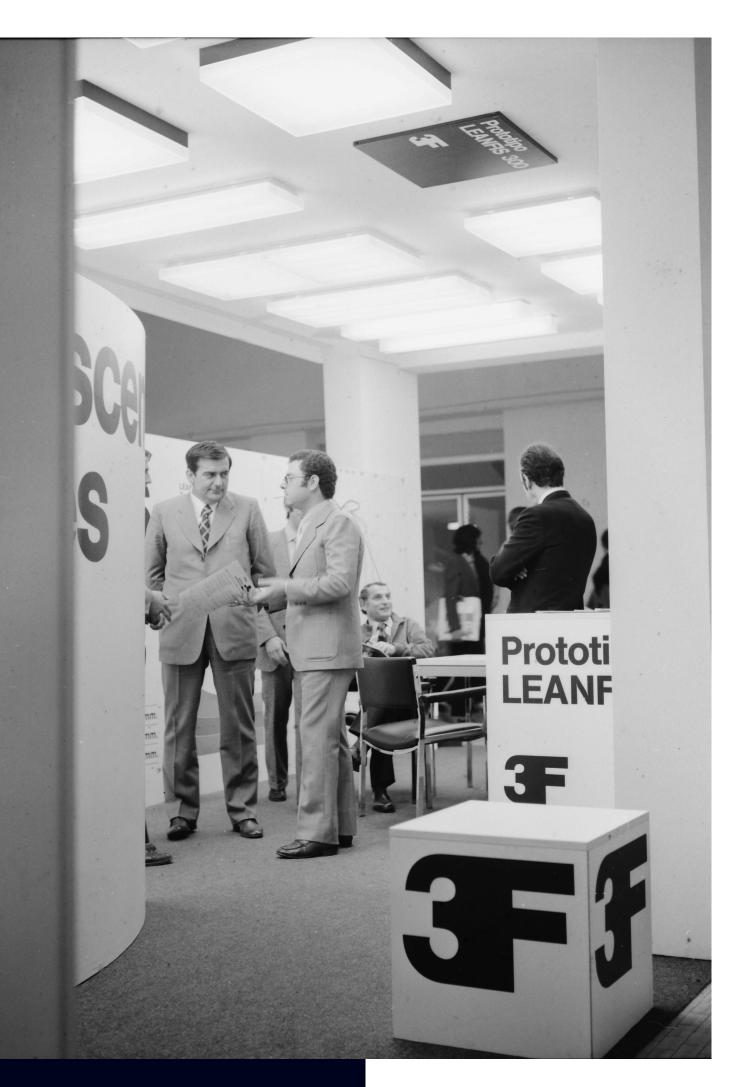
## / Connected. Everywhere.



The Company works with a dense network of regional and foreign offices in the European, American, Asian and Oceanic markets.

The 3F Filippi | Targetti group represents a single entity, serving as an exclusive partner for professionals and designers in pursuit of quality solutions, providing them with the most cutting-edge tools and the support of our Sales Offices located all around the globe.





## /3F Filippi

**3F Filippi**, a Company that has made lighting history in Italy, is today a brand at the service of professionals and designers looking for quality solutions.

Our most cherished value: absolute market transparency. Since 1952, we have been dedicated to designing and marketing quality light fixtures that guarantee lasting performance, thus establishing ourselves as a reliable partner for every lighting project.

### / Our values







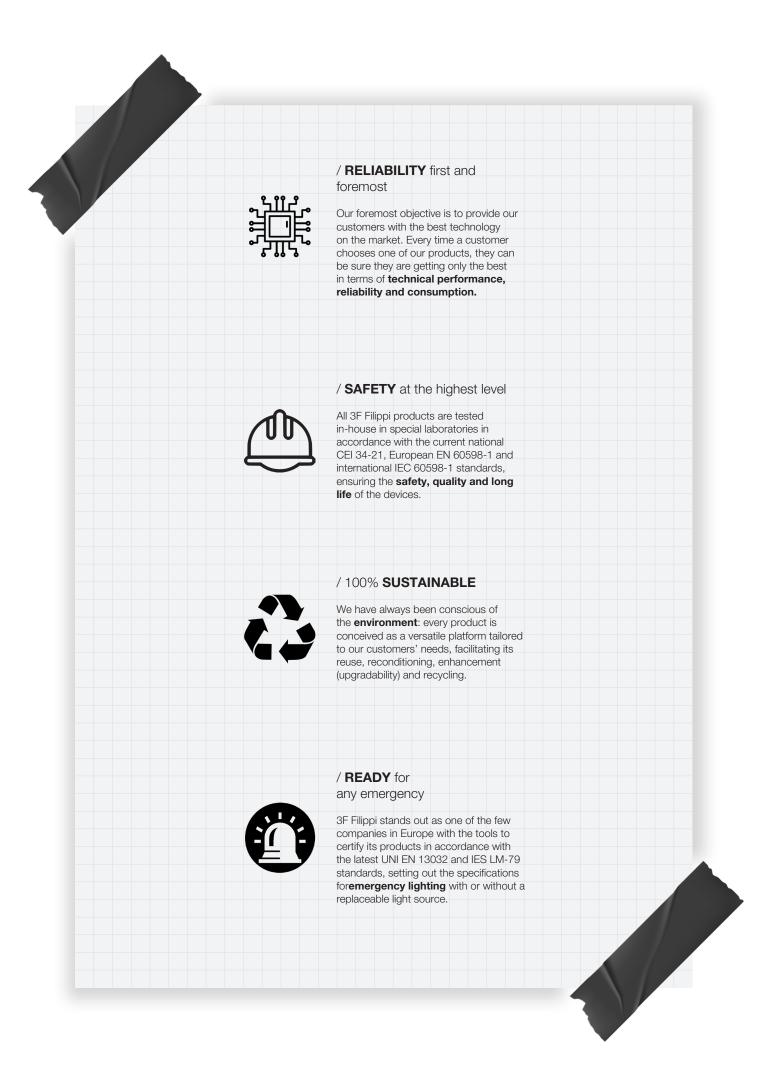




We aim to foster the diffusion and development of a new consumer model based not on a "disposable" economy but rather on products designed for longterm viability and upgradability.

Our products have always been designed as adaptable platforms responsive to evolving customer needs and technological progress, delivering ever more efficient solutions. To achieve this, we focus on enhancing product performance and minimising the environmental footprint of our production processes.

**3F Filippi** actively collaborates with **Lighting Europe** to develop increasingly high-tech systems in accordance with European and worldwide standards. We are also **members of ASSIL** (National Association of Lighting Manufacturers), partners **and** institutional supporters **of IES** (Illuminating Engineering Society of North America), **AIDI** (Italian Lighting Association) and **APIL** (Association of Lighting Professionals), with whom we share the values of the "Carta della Luce" (Lighting Charter).



### / News 2024



### 3F Rio

3F Rio represents the forefront of innovation in the industrial sector, boasting high performance and a unique modular design that can be customised to suit a range of applications.

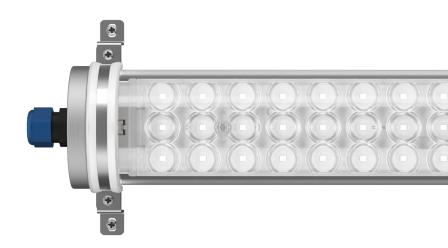
p. 17



### 3F Tank Rock

3F Tank Rock is the ideal choice for ATEX environments, offering the highest IP rating and IK resistance, and is suitable for use in ATEX zones 2 and 22 (Gas and Dust).

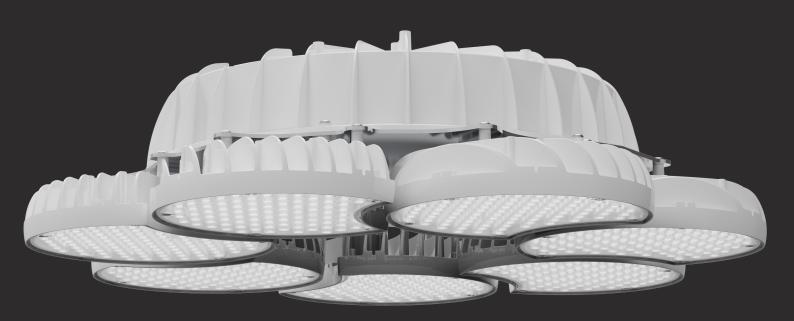
p. 45



### 3F Rover

3F Rover is a new product, ideal for industrial and logistical applications, valued for its delicate balance between lightness and sturdiness, ensuring versatility in a range of settings, including the food industry (HACCP).





/ <sup>3F</sup>Rio

Innovation is synonymous with flexibility: **3F Rio** represents the new frontier for industrial applications, harnessing its innovatively designed luminaires to tailor lighting to different usage needs.

### Overview

- Efficiency up to 200 lm/W.
- Fluxes up to 60,000lm.
- Pitches up to 1.50 x hu.
- UGR <22.
- Wide, Medium and Narrow distributions.
- Ta HO 45° HT 70°C.
- From 2 to 8 modules.
- Service life (L80/B10): 100,000 h.
- Standard, Sensor and HT versions.
- ON/OFF and DALI-2 DATA.
- IoT ready.
- Single fixing point.
- Quick connection.
- Patented design.

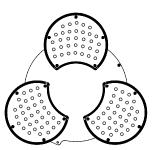
### **MODULARITY**: the core essence of Rio.

What makes 3F Rio so unique is its extraordinary modularity, allowing reduced glare and shadowing on the work surface.

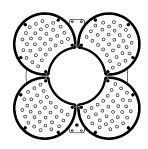
The die-cast aluminium heat sinks in a characteristic half-moon shape can be arranged in either a circular (C) or linear (L) configuration, thus offering a broad range of combinations.

For the Circular (C) version, assembly options range from 3 to 8 modules, while for the Linear (L) version, the range spans from 2 to 4 modules, across all product families: Standard, Sensor and High Temperature (HT).

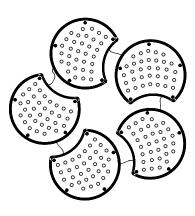
3F Rio **3C** 21.000 lm



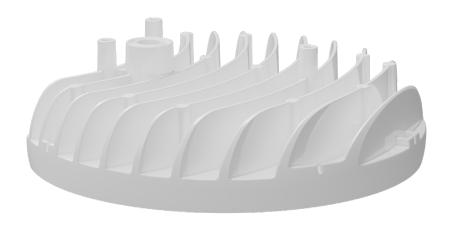
3F Rio **4C** 28.000 lm

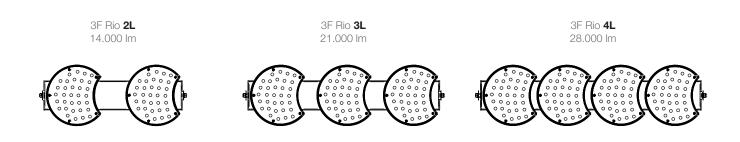


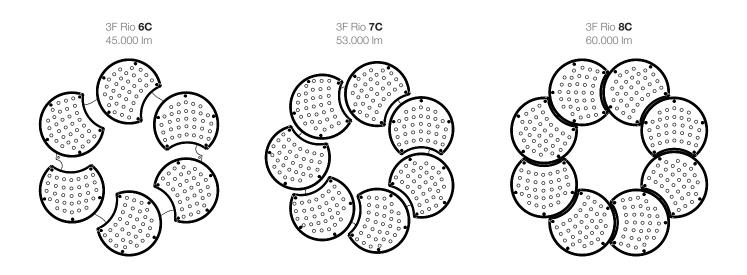
3F Rio **5C** 35.000 lm

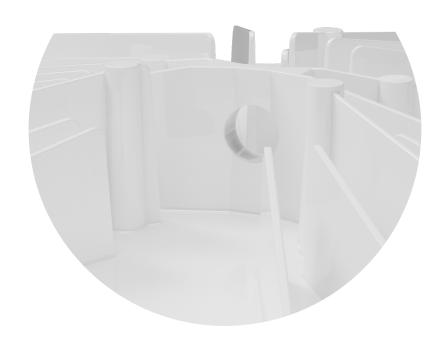


## 









### Unprecedented **PERFORMANCE**.

3F Rio is an industrial-grade product that stands out for its exceptional capacity for heat dissipation.

This performance is achieved through the special shape of the heat sink modules, specially designed to maximise airflow, inspired by techniques used in the aviation industry.

Specifically, the configuration of the upper fins produces a Venturi effect, providing effective thermal insulation for the electronic components, thus ensuring the fixture's L80/B10 certified lifespan of up to 100,000 hours, even at temperatures up to 70°C (in HT versions).

The design of 3F Rio is engineered with installer convenience in mind. Its single, squared-off fixing point prevents any possible misalignment of the fixture, while the quick connection using the Techno connector, located on the top of the body, ensures fast and easy suspension/under-bar installation.



## A winning **COMPOSITION**.

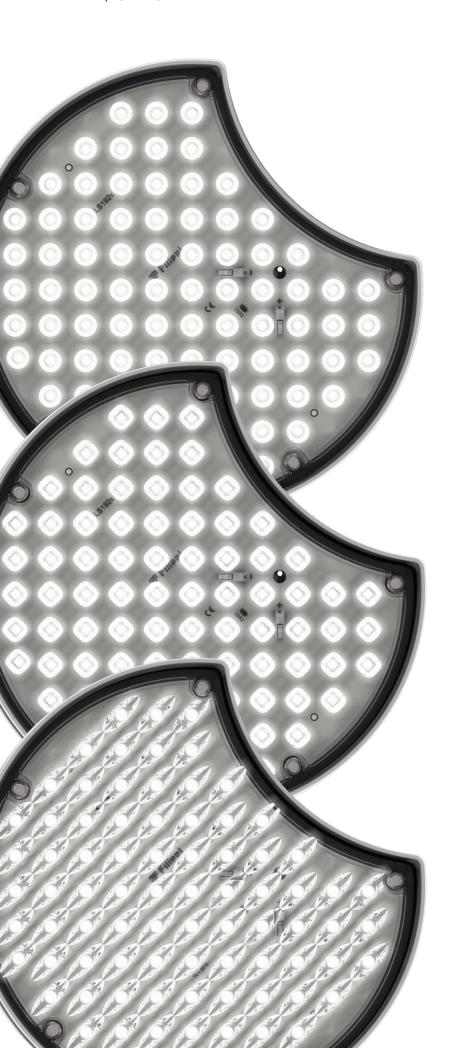
Each 3F Rio light fixture is designed to be securely attached to a stainless steel plate. This solution not only helps disperse the heat generated by the product but also helps insulate the electronics inside the fixture.

Additionally, each module operates autonomously, contributing to the fixture's circular geometry and distinctive light distribution.

The design thus ensures remarkable flexibility, rendering the product highly adaptable to a broad range of industrial settings, spanning from manufacturing to logistics.







3F Rio **Wide** 

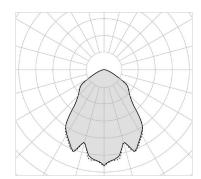
3F Rio **Medium** 

3F Rio **Narrow** 

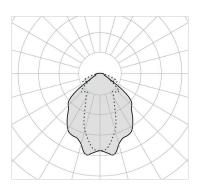
#### Wide



#### Medium



#### **Narrow**



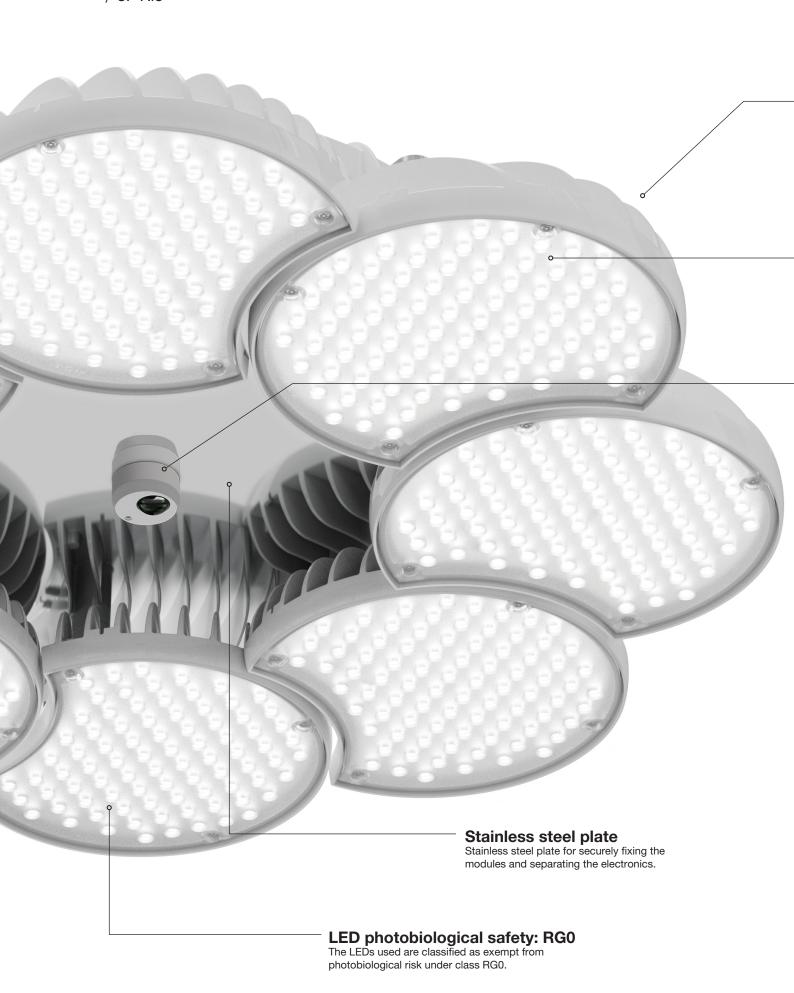
### **CUSTOM** light distribution.

To ensure a product's optimal lighting performance, it is crucial to develop tailored, specialised solutions according to specific application requirements.

That's why our design team has developed various lens types, each designed to offer three district types of light distribution: Wide, Medium and Narrow (elliptical).

These distributions are available in both Circular (C) and Linear (L) versions and can be combined to create fully customised lighting solutions.

Through the integration of these optics, heat sink modules and high-performance light sources, our product achieves an efficiency of up to 200 lm/W, delivering luminous fluxes of up to 60,000lm, all while ensuring minimal glare with UGR <



#### Heat sink modules

3F Rio's modules are engineered to optimise heat dissipation, facilitating superior air flow and enhancing overall product performance.

#### **Custom lenticular optics**

Available with controlled Wide, Medium or Narrow emission (UGR < 22).

#### Wireless IoT compatibility

3F Rio seamlessly integrates with wireless and/or Bluetooth brightness and motion sensors, enabling integration with new and/or existing electrical systems.

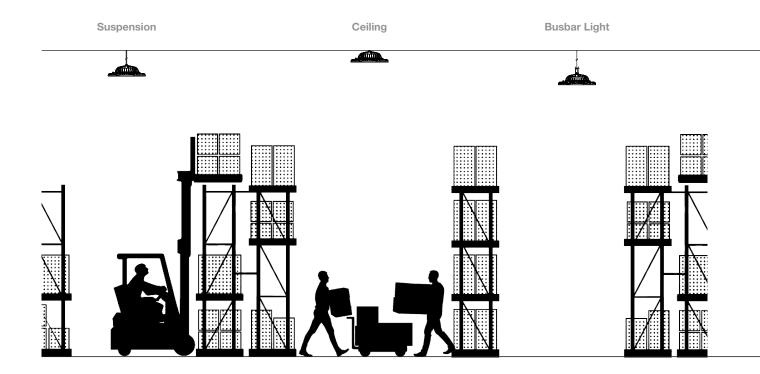
### 3F Rio STRUCTURAL DESIGN.

Drawing on our industrial expertise, 3F Rio is meticulously designed to deliver high performance and efficiency.

Its components create a versatile platform capable of excelling in every application, thanks to careful engineering.

Below are the main components of 3F Rio:

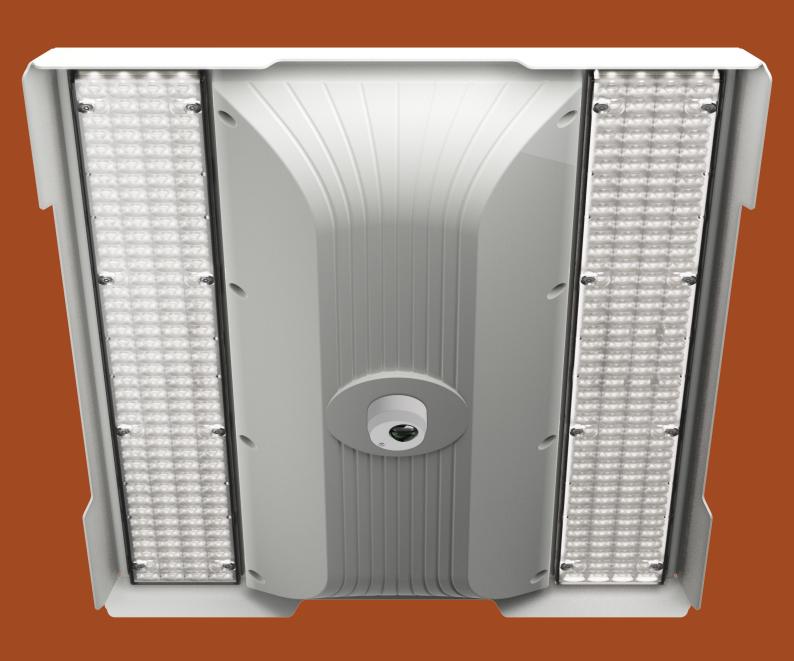
## **PRODUCT RANGE**



Range	3F Ri	3F Rio								
	W	lm	CCT	Wiring	Distribution	Modules	L	х А	хН	
Rio	74 - 294	13050 - 60000	/840 /865	ON/OFF D2D	Wide Medium Narrow	2L 3L 4L 3C 4C 5C 6C 7C 8C	450 640 740 502 508 549 626 610 644	200 200 200 502 508 549 626 610 644	300 300 300 172 172 172 173 173	
Rio Sensor	74 - 294	13050 - 60000	/840 /865	D2D Wireless	Wide Medium Narrow	2L 3L 4L 3C 4C 5C 6C 7C 8C	450 640 740 502 508 549 626 610 644	200 200 200 502 508 549 626 610 644	300 300 300 172 172 172 173 173	

3C	4C	5C	6C	7C	8C	2 - 4L

HT 41 - 152 7200 - 30100 /840 ON/OFF Wide 2L 450 200 300 D2D Medium 3L 640 200 300 Narrow 4L 740 200 300 300 300 300 300 300 300 300 30		W	lm	CCT	Wiring	Distribution	Modules	L	x A	х Н
	Rio <b>HT</b>	41 - 152	7200 - 30100	/840		Medium	3L 4L 3C 4C 5C 6C	640 740 502 508 549 626	200 200 502 508 549 626	300 300 172 172 172 173

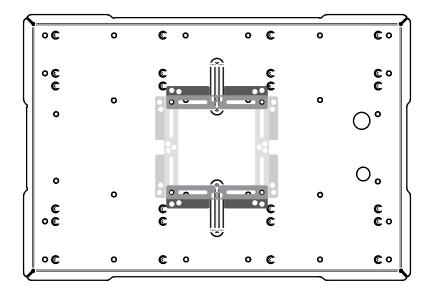


/ 3F Rover

**3F Rover**: the revolutionary industrial product characterised by exceptional strength and remarkable lightweight construction.

### Overview

- Efficiency up to 175 lm/W.
- Fluxes up to 51,000lm.
- Pitches up to 1.58 x hu.
- UGR <22.
- Wide, Medium and Narrow distributions.
- Ta 45°C.
- Single (S) and Double (D) models.
- Service life (L80/B10): 100,000 h.
- Standard and Sensor versions.
- ON/OFF and DALI-2 DATA.
- IoT ready.
- Quick connection.
- Simplified maintenance.
- Dual-position mounting brackets.



Consistent pitch - 90° rotation

### STURDY yet SLEEK.

In the realm of industrial products, weight often poses a significant challenge.

These fixtures, installed at elevated heights, must ensure optimal lighting performance, which typically adds to their weight due to the need to dissipate the heat generated by the light sources.

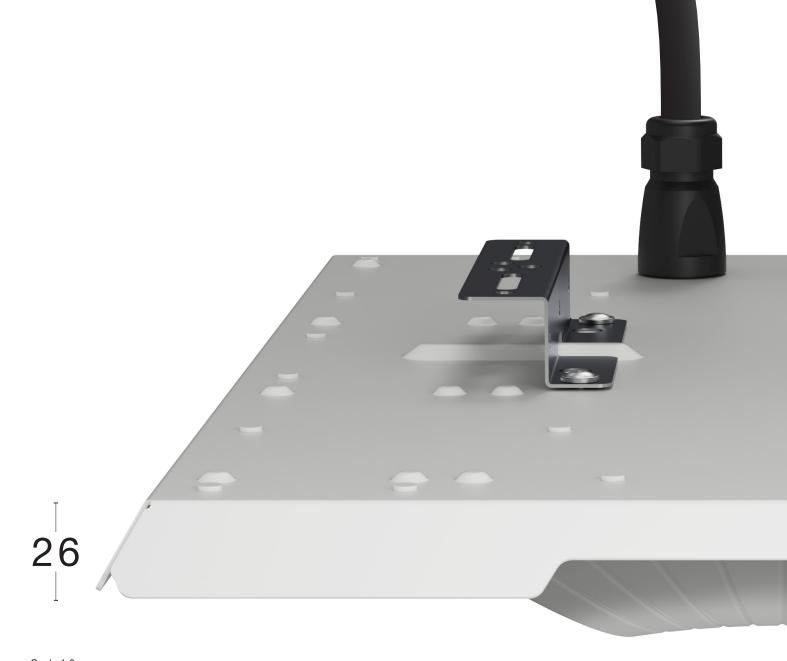
One of the standout features of 3F Rover is its lightweight design. To uphold this characteristic without compromising performance, our

R&D team has developed a patented technology making it possible to preserve the product's mechanical heat dissipation capabilities, despite its slender 4.5 mm profile.

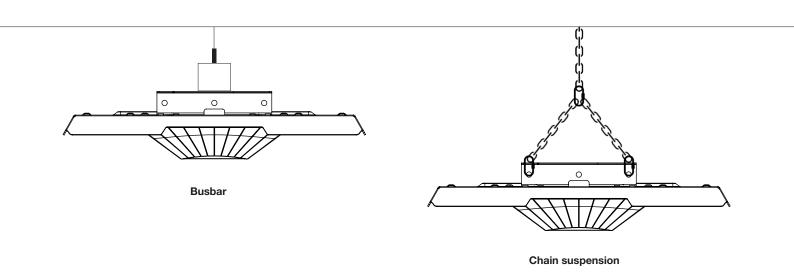
Moreover, its design separates the electronics, situated beneath the product, from the heat dissipation area, with the heat being directed upwards. This ensures a markedly longer service life compared to most similar products.

To minimise 3F Rover installation times, we have engineered a pair of standard stainless steel brackets suitable for either ceiling or suspended installation (with or without a chain), as well as busbar installation.

These brackets ensure fast and adaptable installation, allowing perpendicular or transverse attachment to the body of the fixture, granting users the flexibility to orient 3F Rover according to their specific needs or preferences.



Scale 1:2 mm



## So **RELIABLE** you forget it's there.

All our products are designed to last without requiring any maintenance. However, should the product ever need to be updated or inspected, 3F Rover also stands out for its user-friendly handling.

The electronics and IoT wireless connection systems are housed within a wiring compartment located under the product, ensuring the highest level of IP protection.

This enables installers to service the fixtures without needing to dismantle them. Simply remove the front protective cover with a screwdriver to access the internal components of the product directly.







### High-PERFORMANCE dualism.

This industrial product stands out for its exceptional versatility and superior performance, thanks to its cuttingedge design.

3F Rover is the perfect choice for illuminating large warehouses and logistics areas requiring the integration of advanced management and connectivity (IoT) systems.

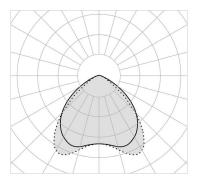


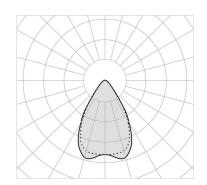
3F Rover is also available in a Double (D) version for increased light output, while maintaining the distinctive features and benefits of the Single (S) version of 3F Rover.

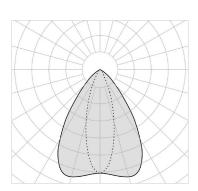
This variant can similarly be equipped with IoT sensor technology, seamlessly integrated into one of the two light fixtures housed in the centre of the wiring compartment.



3F Rover **Wide**  3F Rover **Medium**  3F Rover **Narrow** 



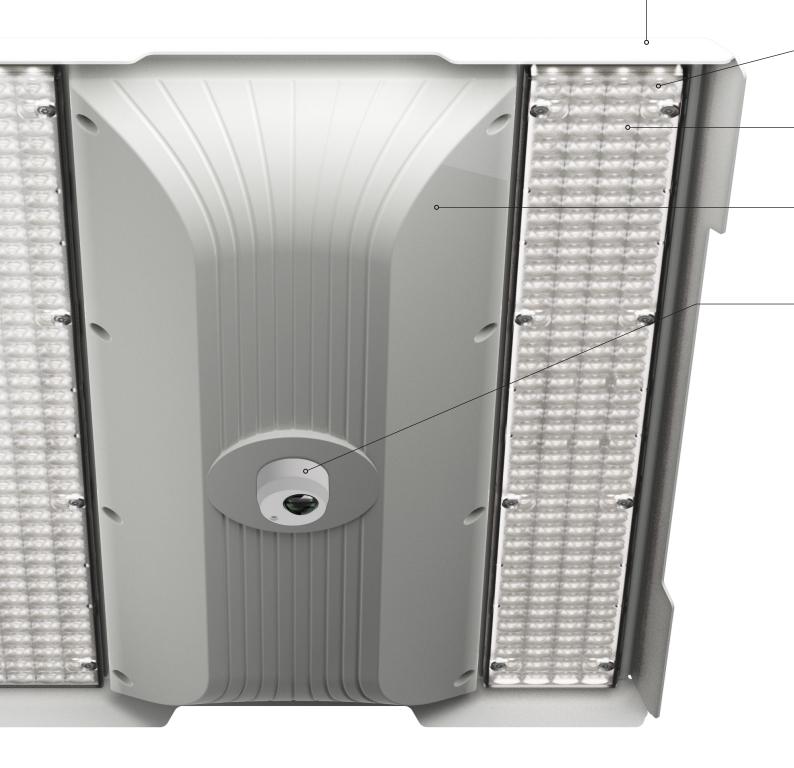


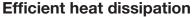


# **CUSTOM** light distribution.

3F Rover is designed to adapt to any environment. Hence, our lenticular optics have been engineered to ensure different types of light distribution depending on the context of use.

The product is available with controlled Wide, Medium and Narrow emission, in both product versions (Single or Double), reaching an impressive efficiency of up to 175 lm/W and fluxes of up to 51,000 lm, ensuring a UGR value of <22.





The 3F Rover fixture is designed to dissipate heat with remarkable efficiency, while at the same time maintain its compact dimensions.

### 3F Lens lenticular optics

Available with controlled Wide, Medium or Narrow emission (UGR < 22).

### LED photobiological safety: RG0

The LEDs used are classified as exempt from photobiological risk under class RG0.

### **Electronic wiring enclosure**

Bottom wiring enclosure to facilitate non-routine maintenance without dismantling the product.

### **Brightness/motion sensors**

3F Rover seamlessly integrates with wireless and/or Bluetooth brightness and motion sensors, enabling integration with new and/or existing electrical systems.

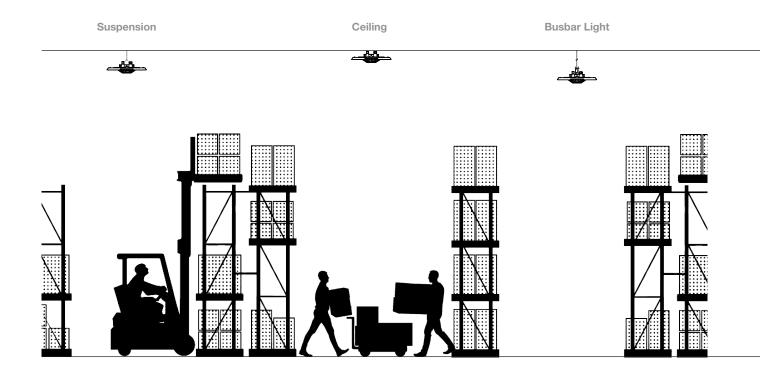
## 3F Rover STRUCTURAL DESIGN.

Drawing on our industrial expertise, 3F Rover is meticulously designed to deliver high technology and efficiency.

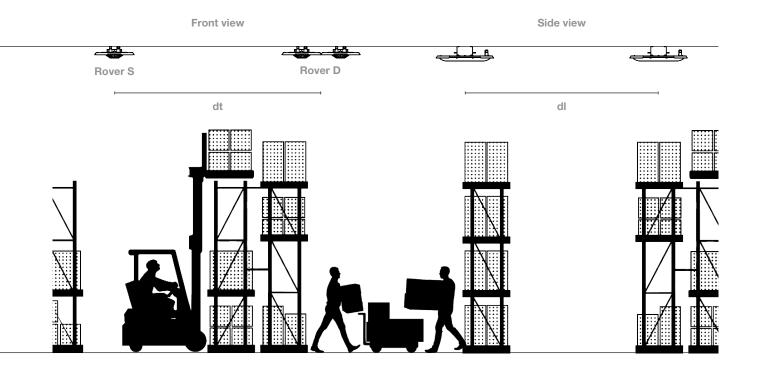
Its components form a versatile product capable of excelling in its field of use, thanks to careful engineering.

Below are the main components of 3F Rover:

# **PRODUCT RANGE**



Range	3F Rover										
D	W	lm	ССТ	Wiring	Distribution	Dt	DI	L	х А	хН	
Rover	104 - 304	18180 - 51000	/840 /865	ON/OFF D2D	Wide Medium Narrow	1,45 1,06 1,16	1,58 1,02 0,52	600	400 800	100	



	W	lm	CCT	Wiring	Distribution	Dt	DI	L	х А	х Н
Rover <b>Sensor</b>	104 - 304	18180 - 51000	/840 /865	D2D Wireless	Wide Medium Narrow	1,45 1,06 1.16	1,58 1,02 0.52	600	400 800	100



/ 3F Tank

**3F Tank**: the light fixture that excels in delivering maximum safety while providing quality light in high-risk work environments.

### Overview

- Efficacy up to 158 lm/W.
- Fluxes up to 11,000lm.
- Rock and Ice Extreme versions.
- Rock version suitable for ATEX II 3G and 3D (areas with gas and dust), ENEC certified.
- UGR <19.
- Lite, Wide, Medium, Narrow and UGR distributions.
- Service life (L80/B10): 100,000 h.
- Protection rating IP69k (IP66 ATEX).
- ON/OFF and DALI.
- Suspended, ceiling, busbar and wall installation.

# MANY CONTEXTS. One product.

3F Tank in its Rock version meets the stringent requirements of the two EU ATEX directives governing devices designed for use in environments with explosive atmospheres, guaranteeing the safety of personnel who operate in these critical conditions. ATEX stands for "ATmosphere Explosive".

These pages highlight the application areas where 3F Tank Rock stands out, showcasing its outstanding technical specifications (compliant with zones 2 and 22, according to ENEC certification).

GAS (G)



Zone 0

An area in which an explosive atmosphere due to the presence of gas is <u>present continuously</u> or for long periods of time or frequently.

Zone 1

An area in which an explosive atmosphere due to the presence of gas is likely to <u>occur</u> <u>occasionally</u> in normal operation.

Zone 2

An area in which an explosive atmosphere due to the presence of gas is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

DUST (D)



Zone 20

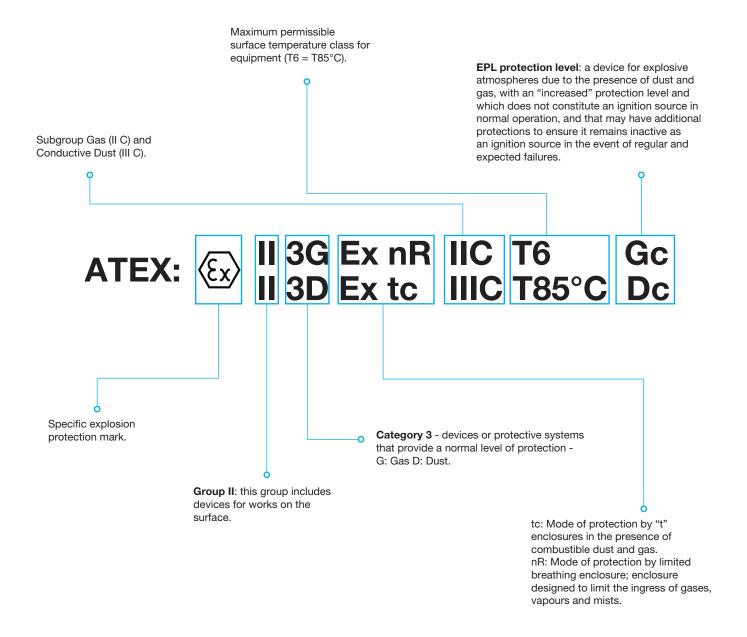
An area in which an explosive atmosphere due to the presence of dust, in the form of a cloud of combustible dust in air, is <u>present continuously</u> or for long periods of time or frequently.

Zone 21

An area in which an explosive atmosphere due to the presence of dust, in the form of a cloud of combustible dust in air, is likely to occur occasionally in normal operation.

Zone 22

An area in which an explosive atmosphere due to the presence of dust, in the form of a cloud of combustible dust in air, is <u>not likely</u> to occur in normal operation but, if it does occur, will <u>persist for a short period only</u>.



### In short: **PERFECT**.

To achieve exceptional performance, meticulous attention to every detail is paramount.

3F Tank is meticulously engineered to minimise the number of components used, ensuring the highest quality and performance of each, all encapsulated within a sleek geometric shape: a cylinder.

Made from co-extruded polycarbonate, the body of the light fixture seamlessly integrates an opal section with a highly transparent part, housing the technological core composed of a high-performance driver and state-of-the-art LED boards.

This system is hermetically sealed by two die-cast 6082-T6 aluminium end caps, fitted with gaskets to ensure an impeccable seal.

Every aspect has been meticulously addressed: the stainless steel installation screws and brackets prevent oxidation and wear over time. 3F Tank is more than merely a lighting product: it embodies the epitome of perfect functionality and minimalist design, a testament to our unwavering commitment to excellence in every facet.



Ice Extreme version for temperatures from -30°C up to +40°C with a relative humidity of up to 95%.



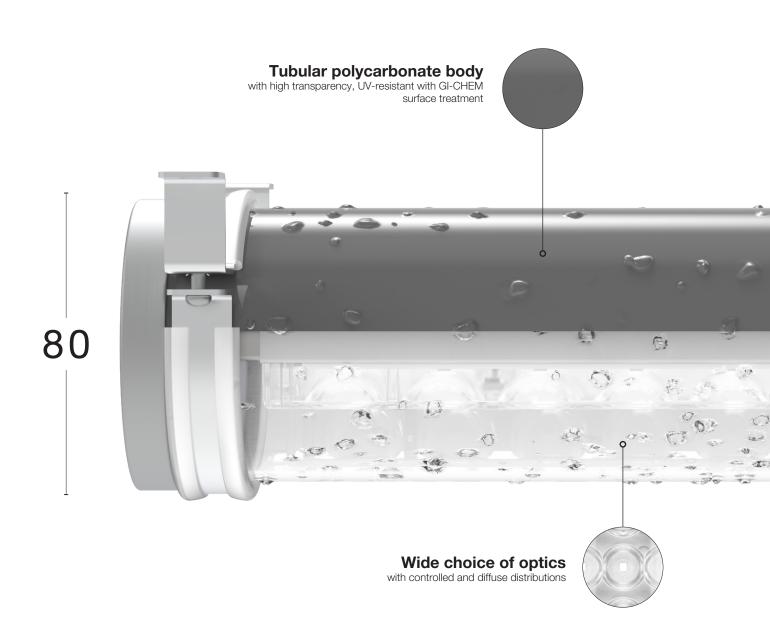
Rock version for use in ATEX explosive atmosphere environments (Gas and Dust).



On request: suitable for outdoor installation, UV-resistant.



Compliant with food industry standards, including HACCP, IFS, BRC Standard.





Resistant to aggressive chemicals (HS finish).

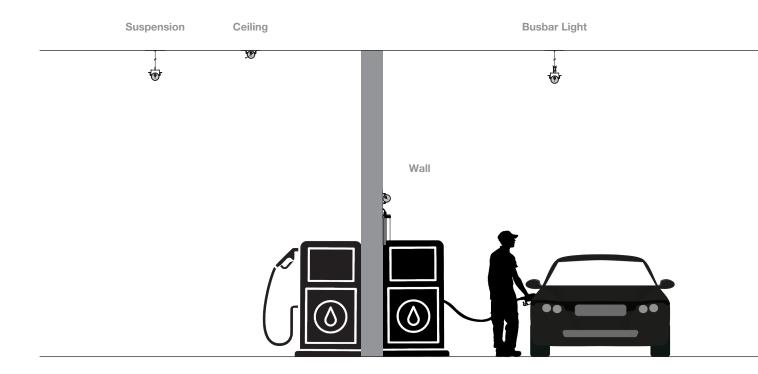


Resistant in marine environments and railway structures.

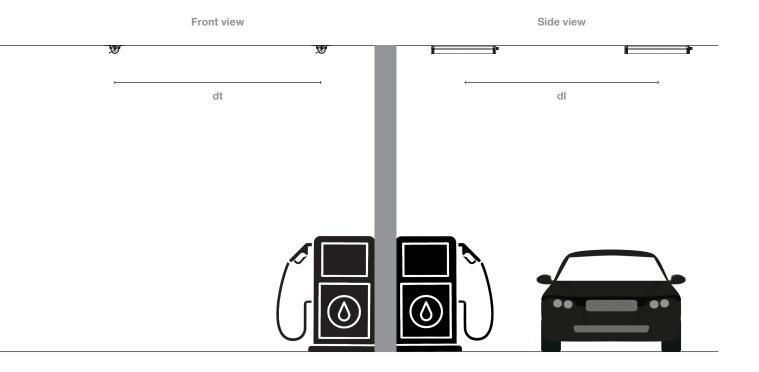


Protection rating IP69K, resistant to high pressure and/or steam.

# **PRODUCT RANGE**



Range	3F Tank										
	W	lm	CCT	Wiring	Distribution	Dt	DI	L	х	Ø	
Tank Rock	14,5 - 74	1850 - 11000	/840 /865	ON/OFF DALI	Lite Wide Medium UGR Narrow	1,29 1,16 1,20 1,47 0,57	1,22 1,18 1,19 1,36 1,14	676 1264 1558 1852		80	



<del>-</del> .	W	lm	ССТ	Wiring	Distribution	Dt	DI	L	х	Ø
Tank ICE Extreme	49 - 72	7040 - 11000	/840	ON/OFF	Wide Medium UGR Narrow	1,16 1,20 1,47 0,57	1,18 1,19 1,36 1,14	1264 1558 1852		80

# / 3F Wireless







Controller wireless Mesh Network 2.4 GHz Bluetooth LE/Zigbee compatible.



Multisensor Wireless Mesh Network 2.4 GHz Bluetooth LE/Zigbee compatible.

### Wireless **LIGHTING SYSTEMS**.

3F Filippi light fixtures with Wireless technology are equipped with Wireless Mesh Network 2.4 GHz devices, featuring dual Bluetooth LE/Zigbee 3.0 technology, allowing the simultaneous connection of mobile devices via Bluetooth LE and the interconnection of system nodes using the Zigbee 3.0 protocol. The light fixtures are thus seamlessly integrated with the entire ecosystem of compatible products, including home assistants and other home and building automation devices.

Every device in the Zigbee 3.0 network receives, regenerates and forwards signals on to the next nodes, thus creating a wireless **Mesh Network**.

#### **BENEFITS**

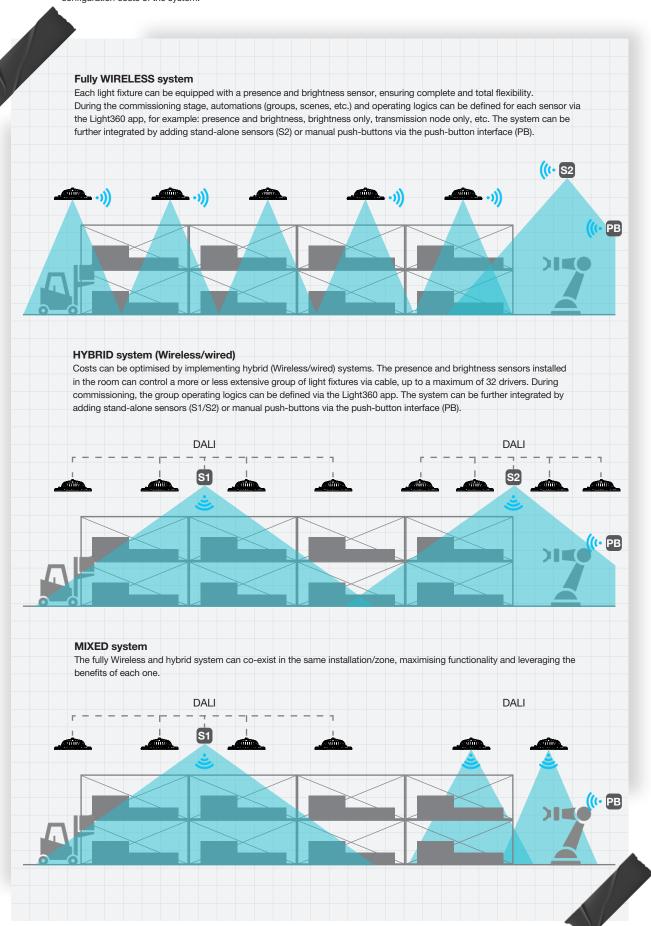
3F Wireless technology is particularly suited for retrofitting existing installations lacking a control system.

- IoT Ready: devices (sensors or nodes) integrated into the light fixtures allow the development of smart systems without the need for modifications to the existing electrical installation (for example, adding the DALI backbone).
- Mesh Network: communication between 3F Wireless system devices occurs via radio frequency signals with Mesh Network technology (very robust and encrypted), enabling the development of extensive systems that overcome the "limits" of wired DALI systems.
- Energy saving: up to 80% thanks to the automation system.

- Plug&play: configurable via App by non-specialist personnel, significantly reducing commissioning time and
- Consumption monitoring: MIDcertified energy consumption measurement.
- Emergency: centralised emergency system diagnostics.
- **Flexibility**: the system caters to both simple and complex projects.
- Cloud Lighting: light fixture management within a local network or via the cloud.

#### Stand-Alone Systems

The light fixtures, sensors and control modules, whether wired or wirelessly connected, can be configured via an App or other simple, intuitive applications without the need for specialised technicians. Once the setup is complete, the various components of the system operate independently without interacting with each other. This architecture optimises the implementation and configuration costs of the system.







For more information, visit the website: <a href="https://www.3f-filippi.com">www.3f-filippi.com</a>



**3F Filippi S.p.A.**Via del Savena, 28 40065 Pianoro, Italy **T:**+39.051.6529611 **F:**+39.051.775884  $\textbf{E:} 3f\text{-}filippi@3f\text{-}filippi.it} \ \textbf{W:} 3f\text{-}filippi.com$ 

ΕN rev. 05/24