Frax
Boost your outdoor experience
Light and ambiance are not only for indoors, by combining light and architecture in outdoor settings, the city also remains vibrant at night. With its 7 different light effects and its multiple installation options, Frax has been designed for every aspect of the urban architecture: any form, any material or any composition.

Light up the Dark
Family Overview
CHOOSE YOUR COLOUR

Dark Grey / Grey

CHOOSE YOUR POWER

Small: 5.9 up to 7.9W / 650 up to 870lm
Medium: 17.9W up to 23W / 1800 up to 2400lm

CHOOSE YOUR OPTICS

8° / 14° / 26° / 47°

Other effects:
linear spread / wallwash

CHOOSE YOUR ACCESSORY

Honeycomb
Kap

CHOOSE YOUR INSTALLATION

Surface mounted on hard surfaces
On a pin in soft surfaces
Strapped around a tree
Mounted on a pole

IP65
SEAL
Silicone seal which closes off the optical part completely and creates a watertight, IP65 luminaire.

GLASS
Thermally toughened glass to withstand high demands and loads and offer additional protection and safety.

IK06
IK06 thanks to 5mm thick glass for Frax S

IK08
IK08 thanks to 8mm thick glass for Frax M

IP65

Take a look inside
LED CASET® TECHNOLOGY
Frax is based on Delta Light’s LED CASET® technology, which combines multiple LEDs with individual collimator lenses per LED to generate a clean-cut light distribution. The individual lenses create a multi-layered light distribution to generate a clean 8° or 14° beam angle. Other beam angles or other light effects are being obtained by adding microlenses in front, sculpting the light into a 26° or 47° beam angle or into a linear or wallwash effect.

HOUSING
The housing contains both the light technical and the controlling part, as it also houses the power supply. Frax S comes as an on-off luminaire, while the bigger Frax M can be supplied with an integrated DALI dimmable power supply. To protect the luminaire from harsh weather conditions, the in-house developed D-lock system avoids damage by overheating, overvoltage and water ingress.

FIXATION
A multitude of options allows Frax to be installed in different ways:

- Surface mounted on hard surfaces
- On a pin in soft surfaces
- Strapped around a tree
- Mounted on a pole with a bracket

MOUNTING BRACKET
Anodized mounting bracket with protective sheet allows mounting on raw surfaces without damaging the luminaire.
Frax is based on Delta Light’s LED Caset® technology, which combines multiple LEDs with individual collimator lenses per LED to generate a clean-cut light distribution. The individual lenses create a multi-layered light distribution to generate a clean 8° or 14° beam angle. Be it for the Small version or the high-power Medium Frax, by concentrating the lenses together, the light distribution will be the same thanks to the multi-layering process.
With its 7 different light distributions, Frax is the all-round projector. The 8° and 14° versions serve as the base models of the Frax family. Adding a microlens to Frax 14° results in a 26° or 47° beam angle.

These microlenses can not only be used to generate a different beam angle, also specific lighting effects can be created by putting an additional lens into the luminaire. Specific lenses can be used to generate a wallwash effect or to create a horizontal or vertical elliptical effect.

Besides the easiness of creating different light effects, these inhouse developed microlenses are designed to have an evenly spread light distribution for all beam angles, resulting in a scallops-free light effect. With a good Colour Over Angle uniformity, the microlenses also reduce the colour shift that occurs when comparing the center of the distributed light with the edges.
Harsh Environments

With its multitude of optical solutions and its multiple ways of installing, Frax can be applied in many different settings to fulfill various kinds of lighting needs. To ensure a hassle-free answer to the diverse application areas, Frax is designed to perfection in every detail.

**Watertight** IP65 luminaire thanks to silicone seal
- IK06 thanks to 5mm thick glass for Frax S
- IK08 thanks to 8mm thick glass for Frax M

**UV-resistant** components for extended lifespan

**D-Lock**: in-house designed safety to prevent failure due to overheating, overvoltage or humidity entering the luminaire

**No visible cable** coming out of the luminaire as all cabling runs through the hinge

**Optimized flexibility**: Tilting up to 120° & Rotating up to 360°

**Reliable** in extreme weather conditions: from -25° up to 45°

Delta Light® maintains the highest standards both in material choice and in the coating process, to offer superb and durable anti-corrosion protection. Which is approved and confirmed by the 1000h filiform corrosion test.

- Specific polyester powder coating for outdoor use
- Titanium based conversion layer
- Etching process in multiple steps
- Cleaning & rinsing process
- Corrosion resistant, lowest copper content aluminum alloy.
Optical Precision

By using lenses, the light beam of Fragma can be completely controlled, as 100% of the light emitted by the LED engine goes through the lens and is being directed in the desired way. As a result, more precise beam angles can be created compared to the use of reflectors, as a reflector has no complete control of the light emitted by the LED engine.

Installation made easy

Apart from the extensive optical possibilities, Frax also offers a range of different mounting options. Standard, the luminaire comes on a round base, but one can also opt to install the luminaire head on a pin, on a strap or on a simplified bracket. In this way, Frax can easily be transformed to install in between the green, around a tree, a pole or any other surface.
To facilitate the installation of multiple Frax luminaires, a degree scale is integrated on the hinge, perfect for precise aiming and a proper repetitive light effect.
Visual Well-Being

Frax not only cares about the perfect light effect, it takes care about the passer-by as well. Frax can be provided with an additional honeycomb or a kap to reduce the possibility from directly looking into the light source. Both of them reduce any undesired light effect and the glare associated with it.

ADD FRAX HONEYCOMB TO REDUCE GLARE
Frax Honeycomb is used as a small grid to put in front of the optical part of the luminaire. The small frames reduce the minimum of remaining spill light in all directions and the glare associated with it. The hexagonal openings make sure a minimum of efficiency is lost when adding the honeycomb.
ADD FRAX KAP TO MINIMIZE SPILL LIGHT
Frax Kap is a good way to remove an unwanted light effect in one direction. In some cases, the beam angle used is perfect to light up for example an item on the wall, but no upwards light is wanted. By adding the Frax Kap in front of the luminaire, the undesired upwards light effect is being removed.
Fine to Combine

The design philosophy behind Frax has lots of touchpoints to what Polesano stands for: an instrument for the designer to use in urban and landscape settings. Modularity, flexibility and functionality combined with aesthetics: several characteristics that fit both lighting tools, making it easy to complement each other in any urban or landscape project.
How To

With a wide range of optics, meticulous precision and a multitude of installation options, Frax is a toolbox to bring buildings, monuments and cities to life.

1. **FRAX SB BRACKET**
   14° + Linear Spread Lens Vertical
   Illumination of the window compartment

2. **LOGIC R**
   11°
   Illumination of the window compartment on ground level

3. **FRAX M**
   14° & 26°
   Illumination of the classical building facade

4. **FRAX SB PIN**
   47°
   Illumination of trees & bushes

5. **FRAX SB BRACKET**
   8° Superspot
   Illumination of the columns

6. **FRAX M**
   Wallwash
   Illumination of the top façade

7. **FRAX S**
   Wallwash
   Illumination of the top façade

8. **POLESA N O**
   Street Lighting

9. **FRAX MB STRAP**
   26°
   General lighting of the square

10. **FRAX MB STRAP**
    14° + Linear Spread Lens Vertical
    Illumination of the sculpture
This ‘contemporary abbey’ is designed by Ghent-based architecture studio Dhooge & Meganck as a factory and storage facility for Camp’s, a Belgian producer of traditional pickles, mustard and preserved vegetables.

Frax enables to illuminate this fantastic piece of architecture, emphasizing its unique character. To limit the visual impact of the architectural facade, using a wallwash was not an option. Instead 6 Frax projectors evenly light up the building from a distance, a combination of power and optical precision.
This church turned artwork is located in the village of Bossuit, near the Delta Light HQ. This former church was given a new destination and made into an artificial ruin to create an outdoor public space for the village. The new terrazzo floor includes drawings of the elements that were removed during demolition, and of the life the architecture previously lived. A masterpiece by artist Ellen Harvey.

By illuminating this fantastic public artwork at night, Frax enhances the character of the ruin through a dramatic play of light and darkness. Wider beam angles light up the bigger vertical planes, while the 8° superspot version accentuates the details.
### FRAX S

**LED CLUSTER 7,9W / 867lm / 700mA**

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**ACCESSORIES**
- FRAX ANTI VANDAL SCREWS 5 PCS • 26070 0030
- FRAX KAP • 26070 0010 N

### FRAX S SUPERSPOT

**LED CLUSTER 7,9W / 867lm / 700mA**

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**ACCESSORIES**
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- FRAX KAP • 26070 0010 N

### FRAX M

**LED CLUSTER 23W / 2390lm / 900mA**

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**ACCESSORIES**
- FRAX ANTI VANDAL SCREWS 5 PCS • 26070 0030
- FRAX KAP • 26070 0010 N

### FRAX M SUPERSPOT

**LED CLUSTER 17,9W / 1859lm / 900mA**

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**ACCESSORIES**
- FRAX ANTI VANDAL SCREWS 5 PCS • 26070 0030
- FRAX KAP • 26070 0010 N

**A / N**
- 220-240V / 50-60Hz

**IK06**

**IP65**
### FRAX MB SUPERSPOT

- **Requirements**
  - FRAX BRACKET or FRAX STRAP (max. Ø 250mm)

- **Accessories**
  - FRAX ANTI VANDAL SCREWS 5 PCS
  - FRAX M KAP

- **Specifications**
  - **LED Cluster**: 30W / 3190lm / 900mA
  - **Light Angle**:
    - 14°
    - 20°
    - 47°
  - **Mounting Options**:
    - NO ACCESSORY
    - HONEYCOMB
    - LINEAR V
    - LINEAR H
    - WALLWASH
  - **Input Voltage**: 225-240V / 50-60Hz
  - **Incl. Accessories**:
    - 1 x CABLE H05 RN-F 3 x 1mm² 2m
  - **Protection Class**: IP65
  - **IK Rating**: IK08

- **Part Numbers**
  - 26000 9310
  - 26000 9300
  - 26000 9370
  - 26000 9380
  - 26000 9390

### FRAX SB SUPERSPOT

- **Requirements**
  - FRAX BRACKET or FRAX STRAP (max. Ø 250mm)

- **Accessories**
  - FRAX ANTI VANDAL SCREWS 5 PCS
  - FRAX S KAP

- **Specifications**
  - **LED Cluster**: 7,9W / 867lm / 700mA
  - **Light Angle**:
    - 14°
    - 26°
    - 47°
  - **Mounting Options**:
    - NO ACCESSORY
    - HONEYCOMB
    - LINEAR V
    - LINEAR H
    - WALLWASH
  - **Input Voltage**: 220-240V / 50-60Hz
  - **Incl. Accessories**:
    - 1 x CABLE H05 RN-F 3 x 1mm² 2m
  - **Protection Class**: IP65
  - **IK Rating**: IK06

- **Part Numbers**
  - 26000 9310
  - 26000 9300
  - 26000 9370
  - 26000 9380
  - 26000 9390