

LED LINEAR™
lighting solutions

Member of the
Fagerhult Group

GAME CHANGER!



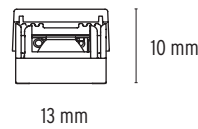
ULTIMA

INVINCIBLE BY SKILL.
INVISIBLE BY DESIGN.

ULTIMA

THE SMALLEST & MOST POWERFUL LIGHTING FIXTURE IN THE WORLD

ULTIMA represents a ground breaking step toward an enhanced quality of life through lighting while conserving the scarce resources of our environment. Its minimal design makes it blend in any building structure and disappear from sight while reducing the consumption of raw materials. Thanks to its second generation of nano optics, ULTIMA delivers precise and crisp lighting distributions while ensuring an accurate glare control integrated in less than 10 mm height. A technological breakthrough which lives in harmony with architecture, better serves mankind and preserves natural resources.



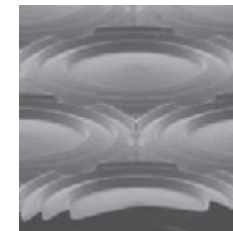
Scale 1:1



THE MASTER TECHNOLOGIES

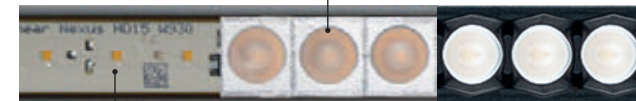
1 | NANORAY

The NanoRay 2.0 optics features more than 220,000 nano lenses in each LED cell. The lens details, smaller than $1\mu\text{m}$, accurately guide each light beam and ensure a proper mixing of all wavelengths. The result, sharp lighting distributions and homogeneous color over the whole lighting scene.



Microscope image of nano optics

This square would contain more than
1,000,000,000
nano details.



2 | CHIP SCALE

The only chip scale package LED tape available world-wide. 1 mm x 1 mm LEDs positioned with a $100\mu\text{m}$ precision.

3 | GLARE CONTROL

The glare control is ensured by an elegant louver fruit of multiple optimizations to conceal the light source within a minimal height. (Patent Pending)

RESPONSE FROM INTERNATIONALLY RENOWNED LIGHTING DESIGNERS

“THAT’S FANTASTIC !”

“VERY COMPACT AND FINE DESIGN.”

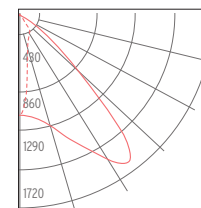
“IMPRESSIVE.”

“WOW!”

“WELL DONE!”

“THAT’S REALLY NICE!”

“THIS THING IS BRUTAL.”



7 Different optics
Up to 2000 lm/m

Spot (15°), Spot wide (25°), Mid flood (40°), Wide flood (60°),
Opal, Batwing, Asymmetric

INVINCIBLE BY SKILL

ULTIMA embeds the second generation of the NanoRay technology offering a large selection of lighting effects from spot to asymmetric with an outstanding control of glare and color consistency.

More ... page 6

INVISIBLE BY DESIGN

Its remarkably small design, harvest of countless concepts, results in a luminaire sufficiently small to be easily integrated in any architectural structures and blend in seamlessly. An architect's dreams comes true.

More ... page 8



10 mm x 13 mm
Smallest form factor

UGR < 13



SUSTAINABLE & ENVIRONMENTALLY MINDFUL

ULTIMA's design enabled to reduce the amount of raw materials by 94 % compared to previous technologies. This is a significant step toward more sustainable linear lighting designs and practices.

More ... page 9

ENABLING NEW LIGHTING DESIGN

The extended range of optics from spot to asymmetric combined with ULTIMA's minimal footprint opens a completely new perspective in lighting design. From complex accent lighting scenes to comfortable task lighting, ULTIMA offers an unprecedented flexibility in the design process.

More ... page 12

+20 lighting applications

+10 Mounting possibilities for any construction type



EXTENDED MODULARITY

ULTIMA is available either as stand-alone version or as 24 V track version which fits in the dedicated track system. Its stand-alone version is suitable for shelf, woodwork, or vitrine integration with various cabling configurations. The track versions can easily be clicked in any of the 24 V tracks as recessed (trim or trimless), as surface mount or as pendant for a full design freedom.

More ... page 20

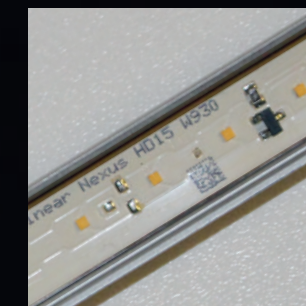
INVINCIBLE BY SKILL

UNPRECEDDED LIGHT



AVANT-GARDE

ULTIMA features the only Chip Scale Package (CSP) LED tape world wide offering prime color rendition and sound thermal performances out of a minimalistic luminaire.



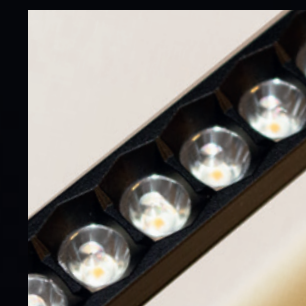
NANORAY 2.0

The second generation of LED Linear's nano optics reveals the full potential of this new technology by granting ULTIMA with a complete set of crisp lighting distributions from spot, medium flood, batwing and asymmetric with outstanding color homogeneity over all angles.



SHINE BRIGHT SILENTLY

Despite its extremely slim design, ULTIMA achieves lumen outputs from 300 lm/m reaching up to 2,000 lm/m making it suitable for decorative, accent and ambient lighting. A glare reduction louver (patent pending) offers an elegant finish while keeping the light source concealed.



MODULAR MOUNTING

ULTIMA offers a large mounting accessories program. As stand-alone with pre-mounted magnets or clips as well as 24 V track system recessed, surface mounted or pendant, it blends into any architectural concept with minimal structural impact.



INVISIBLE BY DESIGN

INNOVATION FOR THE ARCHITECTURE AND THE ENVIRONMENT



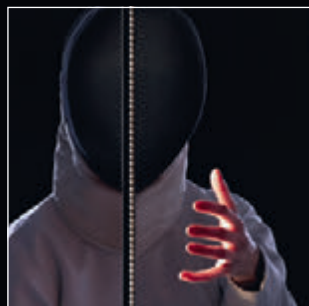
THE HIGHEST LEVEL OF INTEGRATION

The integration of professional lighting system can be challenging depending on the architectural concept or its structural parameters. ULTIMA enables an ease of integration regardless of the mounting or material types without impacting the architectural space.



PAINLESS TRIMLESS

The track version of ULTIMA in the recessed trimless track enables a simple planning and seamless installation as recessed in drywall construction. Thanks to its minimal installation depth of 11.2 mm, it does not require a structural planning or modification of the back studs, a simple cut-out in the 12.5 mm thick plaster-board suffice. Mounted as trimless, the light line disappears in the ceiling with its 13 mm width.



DISAPPEAR IN SPACE

Its excellent glare control ($UGR < 13$) makes ULTIMA suitable for task lighting applications but also hides the luminaire from sight.

ENVIRONMENTALLY RESPONSIBLE

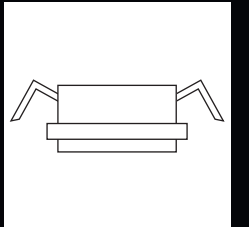
ULTIMA's design aims to deliver unprecedented functionality and lighting quality while drastically reducing the quantity of raw materials compared to existing lighting solutions. This drastic cut of material, and therefore weight, also reduces the overall carbon footprint required for transport.



SIGNIFICANT REDUCTION OF RESOURCES

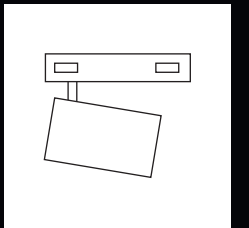
-94%

Compared to asymmetric



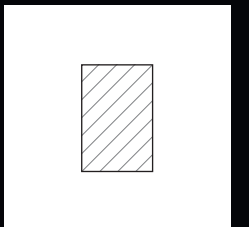
-88%

Compared to spotlight



-91%

Compared to architectural light line



ULTIMA IN ALL ITS FORMS

ULTIMA-S – STAND-ALONE

The stand-alone version presents ULTIMA in its most compact form as a system. Its cross section of 10 mm x 13 mm (H x W) makes it an ideal candidate for finesse integrations or confined spaces.

ULTIMA-S smart end caps allow lateral or back feed while keeping the cables invisible. Combined with various cabling options such as male / female, open-end, or one-side only, it offers flexibility for the cable management.

A set of strong magnets mounted on its backside enable mounting on metal structures or other smooth surfaces by the use of the adhesive metal strip. It can also be secured using clips.

Thanks to designated clips, it can be integrated on the T-bar of grid ceilings without modification of the T-bar mesh. As the width of the luminaire is smaller than the grid, ULTIMA-S visually disappears in the ceiling.

NanoRay 2.0 unleash the capabilities of ULTIMA-S by providing crisp lighting effects from spot to medium flood, wide batwing and asymmetric optics integrated to scale which has never been seen before.

ULTIMA-S opal features a completely homogeneous light surface with various lumen output. Its wide flood beam spread is the right candidate for lighting of confined cabinetry.



ULTIMA-T – TRACK MODULES AND TRACK SYSTEMS

ULTIMA-T is a set of track modules which can be placed at will in an extended 24 V track system. Each module offers the exact same features as ULTIMA-S aside of its power feeding.

ULTIMA-T's design includes end caps which embeds spring contacts (patent pending). By clicking each module in the track, they are automatically connected to the 24 V lines and secured by a set of magnet located on its back side. The asymmetric design of the contacts prevents any risk of mispolarity.

Each light module can be freely moved within the track by simply sliding it which provides a full flexibility in dynamic places such as galleries or showrooms.

Thanks to the 4 x 2.4 mm² copper lines in each track, runs up to 10 m are possible. They also enable the control of two different lighting scenes by connecting ULTIMA-T modules to two independent channels.



The track system propose two various possible mounting options, either as pendant or surface mount. A feeder, straight or L coupler offer a complete freedom to design complex lighting scenes in concrete infrastructures.

Its recessed versions, either with trim or as trimless, enable a higher level of integration in dry construction spaces by leaving a clean ceiling. It can also be used to add slim design elements in the architecture through the choice of the antiglare or track finish color.

ULTIMA FOR MUSEUM & ART GALLERIES

The wide selection of lighting distributions and modular mounting options makes ULTIMA-T an excellent lighting tool for exhibitions. It vanishes in the room while delivering a safe and light precisely the art pieces. Its linear form enables a homogeneous lighting and prevent shadowing which can occur with standard spot technologies in galleries.

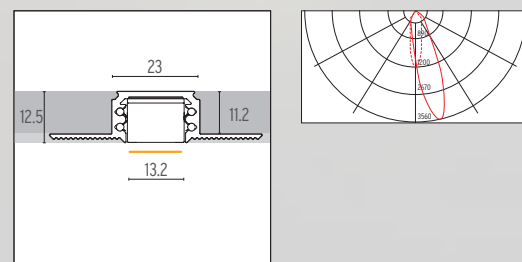
Batwing
in track

Asymmetric
in track

ULTIMA-T NANO asymmetric

Typical installation 300 mm to 500 mm from the wall.

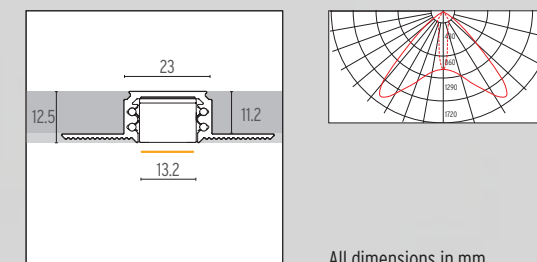
The 24 V trimless recessed track system provides a simple installation barely visible in the ceiling.



ULTIMA-T NANO batwing

The wide beam angle of the batwing optic offers an homogeneous ground illumination at the floor level when placed at the center of large spaces.

The longitudinal cutoff prevent light leaks at both ends of the light line.



All dimensions in mm.

ULTIMA FOR OFFICE & OPEN SPACES

Thanks to its high lumen output up to 2,000 lm/m and its excellent glare control down to UGR < 13, ULTIMA is also suitable for task lighting over desks or working spaces. The combination of the different optics enables to follow the geometry of the working space out of a single linear run.

Used as wall grazer, it can also enhance the space perception by highlighting the structure of walls and provides an elegant indirect glow.

Mid flood (40°)
in track

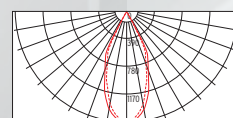
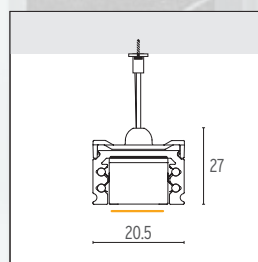
Batwing
in track

Photo: Shutterstock.com

ULTIMA-T NANO 40°

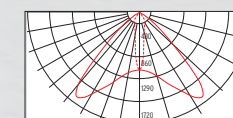
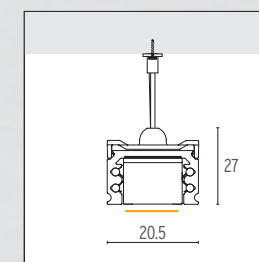
The Mid flood optic offers a precise task lighting with excellent visual comfort (UGR < 14) and provides an homogeneous lighting over the working space.

The 24 V pendant track blends in space thanks to its cross section of 20.5 mm x 27 mm.



ULTIMA-T NANO batwing

Short pieces of ULTIMA batwing deliver wide strip of light perpendicular to the luminaire's direction which can be used to light side surfaces of desks.



All dimensions in mm.

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ULTIMA FOR SHOWCASE & DISPLAY

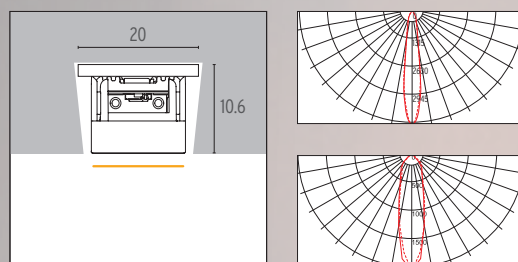
15° or 25°
Stand-alone

Either as uplight or downlight, ULTIMA is fully suitable for showcase and display lighting. It can set accurate accent on the displays or uniformly illuminate larger items. ULTIMA-S NANO magnifies jewelry or natural crystals through multiple reflections offering stunning sparkling effects. The display remains clean and free to all viewers thanks to seamless and simple integration in millwork or as surface mount on the showcase socle.

ULTIMA-S NANO 15° & 25°

A smooth accent on displayed objects can be achieved using the spot and spot wide optics integrated seamlessly in the display structure downward.

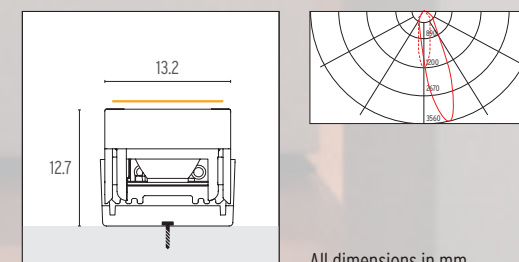
ULTIMA-S can easily be mounted magnetically as recessed by sliding the 20 mm metal strip in an appropriate T shaped millwork or surface mounted using clips.



ULTIMA-S NANO asymmetric

For vertical objects, the use of ULTIMA-S NANO asymmetric optic facing upward allows an homogeneous lighting of the surface while keeping the display fully open to the viewers.

Recessed in the lower case, the luminaire will only stick out 2 mm off the surface for an excellent integration.



All dimensions in mm.

Asymmetric
Stand-alone

ULTIMA FOR SHELF LIGHTING

The minimal height of ULTIMA-S offers a large span of integration in cabinetry or shelf systems. It can be easily recessed in wood without complex woodworking and can be magnetically mounted on metal shelves. The diversity of optics enables a complete freedom of lighting design from strong accent on products with Spot optics or light fill using asymmetric or opal optics.



25°
Stand-alone



15°
Stand-alone

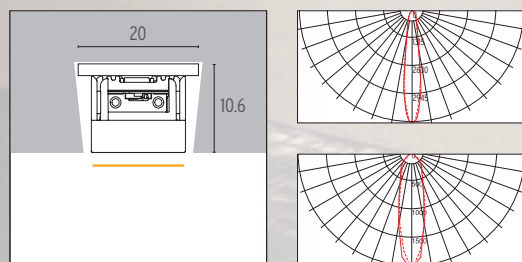
Asymmetric
Stand-alone

Opal
Stand-alone

ULTIMA-S NANO 15° or 25°

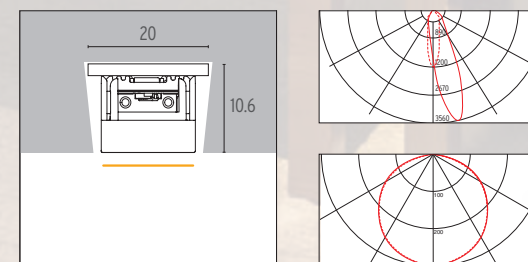
The use of ULTIMA-S NANO with tight lighting distributions allows to set strong accent on displayed objects even for furniture with high spacing between two shelves level. It also prevents the bystander to be glared thanks to its UGR < 13.

It can be installed magnetically by sliding a thin steel strip within millwork.



ULTIMA-S NANO asymmetric or opal

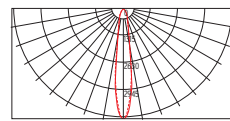
When the intent is to homogeneously lighten up the cabinetry, the usage of opal cover can be an excellent solution. Nevertheless it often comes with the trade off of unintended light spills on the forefront of the shelf. ULTIMA-S NANO's asymmetric is an excellent solution to prevent this effect while ensuring a homogeneous lighting of the cabinet.



All dimensions in mm.

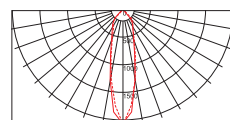
LED Linear™ GmbH

OPTICAL EXCELLENCE



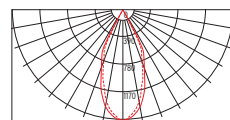
Spot (15°)

Color over Angle = +/- 110 K
UGR = 13 (B); 16 (W)



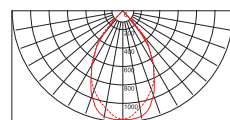
Spot wide (25°)

Color over Angle = +/- 25 K
UGR = 13 (B); 16 (W)



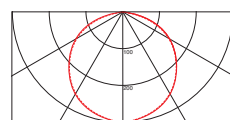
Mid Flood (40°)

Color over Angle = +/- 55 K
UGR = 14 (B); 16 (W)



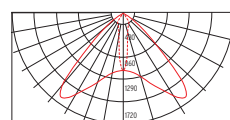
Wide Flood (60°)

Color over Angle = +/- 75 K
UGR = 17 (B); 20 (W)



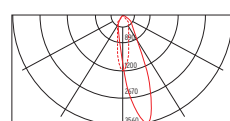
Opal

Color over Angle = +/- 15 K
UGR = 25 (B); 26 (W)



Batwing

Color over Angle = +/- 90 K
UGR = 27



Asymmetric

Color over Angle : +/- 70 K

FEATURES AT A GLANCE

IP20/
IP40

L80/B10
> 60,000 h

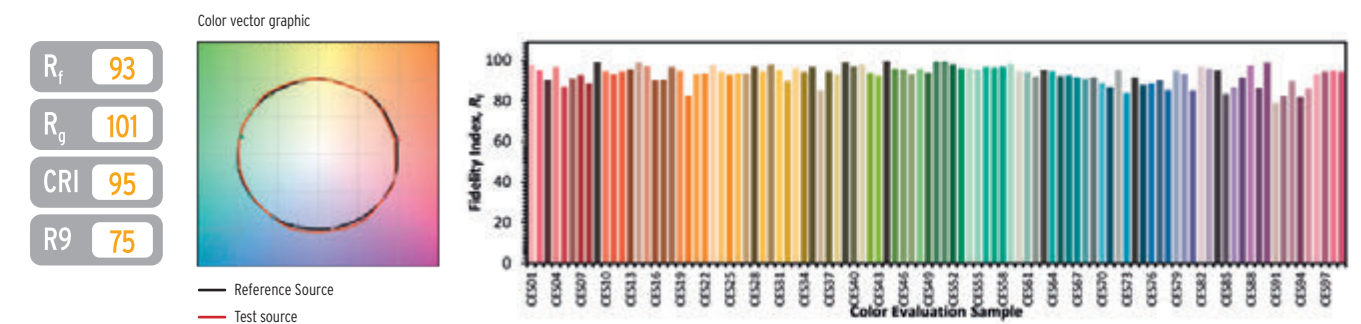
White

IQ White

Coming soon

COLOR RENDITION, CONSISTENCY & COLOR TEMPERATURE CCT

Color rendition (@ 3,000 K)



Binning

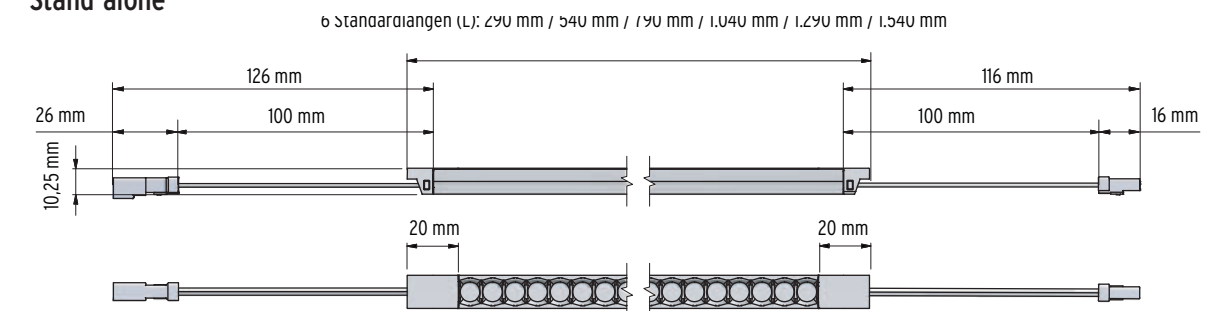
3 SDCM with a binning tolerance of +/- 0.003 (True 3 step MacAdams)

Available CCT

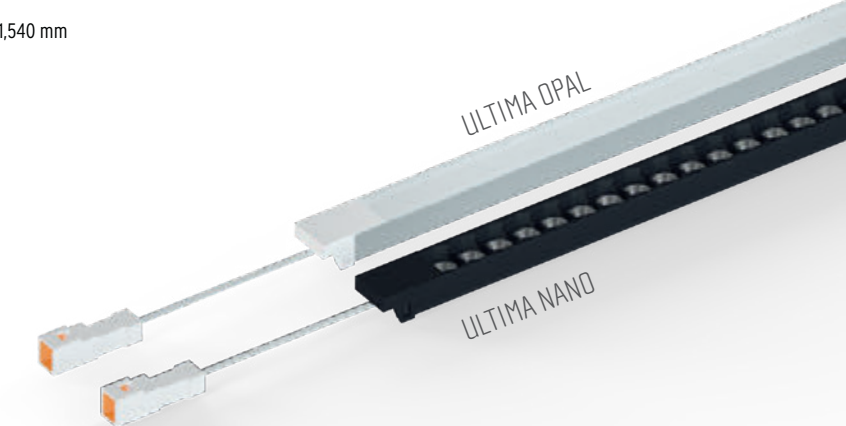
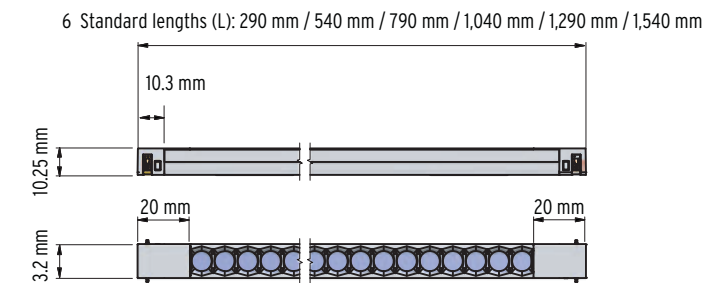
2200 2700 3000 3500 4000 5000 Kelvin

DIMENSIONS

Stand-alone



Track



LUMEN OUTPUT

ULTIMA Opal

Intensity
From 220 lm/m up to 970 lm/m @ 4,000 K

4 Power Levels
6 W/m, 10 W/m, 15 W/m and 25 W/m

ULTIMA NANO

Intensity
From 400 lm/m up to 1,850 lm/m @ 4,000 K

5 Power Levels
6 W/m, 10 W/m, 15 W/m, 20 W/m and 25 W/m

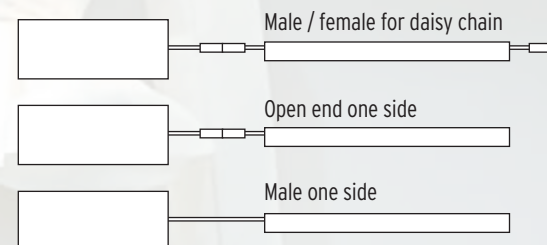
ULTIMA-S

STAND-ALONE LUMINAIRE

Ideal for furniture integration, showcase or display lighting, integration on grid ceilings or as surface mounted.

Intelligent end cap enabling to orient the cable feed in the desired direction (back, left or right side) while keeping it hidden.

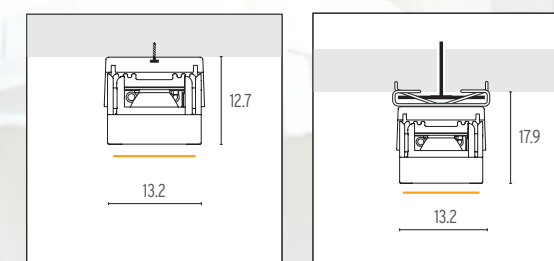
Remote 24 V PSU



Various cable / connectors configurations to suit almost any installation scenario

Simple mounting on magnetic surfaces through premounted magnet on its backside.

Various clips to secure the fixture on non-magnetic surfaces or special clips to directly mount ULTIMA-S on grid ceiling.



All dimensions in mm.

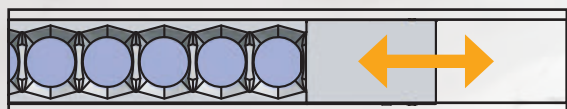
ULTIMA-T

MODULE FOR ULTIMA TRACK SYSTEM

Ideal for gallery & museum lighting or spaces requiring multiple lighting effects with strong structural restrictions. ULTIMA-T can be placed anywhere in the recessed trimless, recessed with trim or surface / pendant track systems.

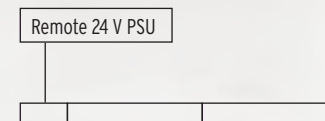


ULTIMA-T embeds electrical contact at its ends for a simple contacting in the track (patent pending). Just click the ULTIMA-T module in the pre-installed track system without having to worry about complex cabling.



Each light module can be freely moved within its track by simply sliding it which provides a full flexibility necessary in dynamic places such as galleries or showrooms.

The 24 V track enables long run length up to 10 m at maximal power with one feed-in.



CREATE A COMPLETELY NEW LIGHT LINE IN ONLY 2 STEPS

1st step

Configure the ULTIMA-T modules of your wish using our intuitive online configurator.

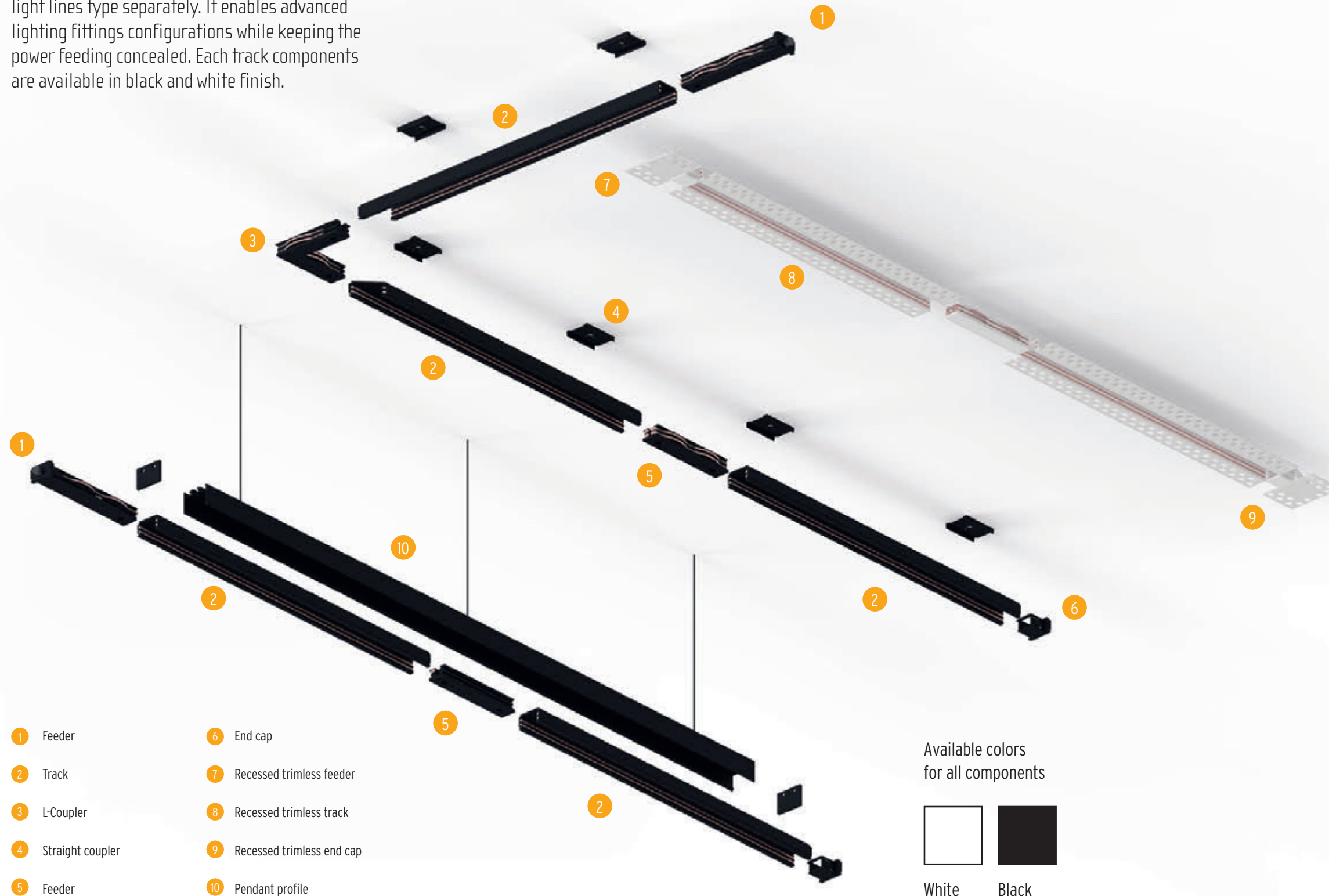
2nd step

Set up the track system fitting to the required mounting type.

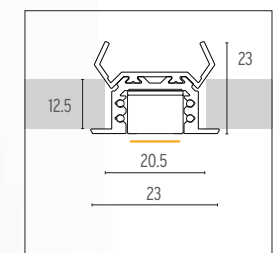
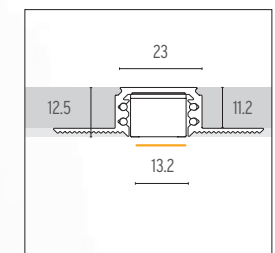
ULTIMA-T

TRACK SYSTEM

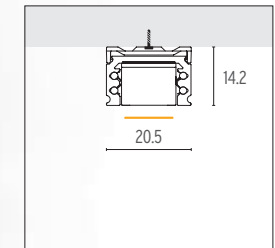
Extended system of compact 24 V tracks featuring 4 conductor lines enabling control of 2 different light lines type separately. It enables advanced lighting fittings configurations while keeping the power feeding concealed. Each track components are available in black and white finish.



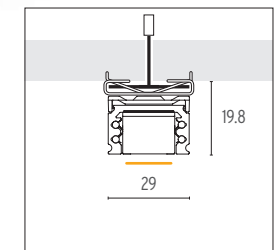
Recessed



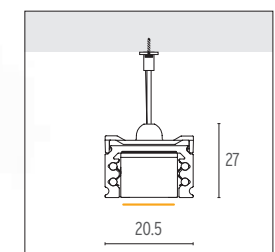
Surface-mounted



Grid ceiling T-bar



Pendant



All dimensions in mm.



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