FREEDOM
Luminaire components for wireless lighting
Helvar

The world is **wireless**

We believe in a wireless future. Where lighting is just one loop in an endless mesh of connectivity. We believe in open sources, ecosystems where standards don't limit inguinety or inspiration. We believe in freedom of choice.

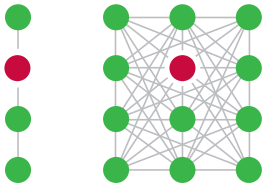
That's why we created Freedom. We want to support our clients in transition from traditional lighting into the world of wireless. But which wireless control system to use? What if we could offer a possibility to choose? And that's what we did. Instead of following one standard, we give the possibility to choose one of the many wireless systems or to go with all of them. Or create your very own. The rules have changed.

Helvar ActiveAhead® self-learning wireless solution in YIT HQ, Helsinki

Freedom to **connect**

Wireless technologies are present in our everyday lives, so should your lighting be wireless too? Wireless lighting control offers simplicity, a totally new level of flexibility and excellent connectivity. Commissioning and programming is quick, if even needed. You save time and money, and users can enjoy the benefits of excellent lighting that is future proof.

Wireless lighting is based on mesh: a communication network of devices. Instead of data moving via bus in a specified order, each device automatically interacts wirelessly with others using mesh technology, such as Bluetooth low energy (BLE), Wirepas, Mymesh and others. This ensures interaction even if one of the connection points fails. It's safe, reliable and easy to maintain. And easily scalable into larger networks.

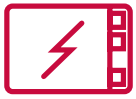


Single point of failure is fatal for bus communication, but not for mesh.

Simply clever

Freedom is built on two basic luminaire components: The Freedom Node and the Freedom LED driver. You also need a connecting cable between them. Any Freedom LED driver works with any Freedom Node. To add intelligence and maximise savings, apply the optional Freedom Sense luminaire sensor.

You can design your luminaire and choose the desired driver and wireless control software - as you wish.

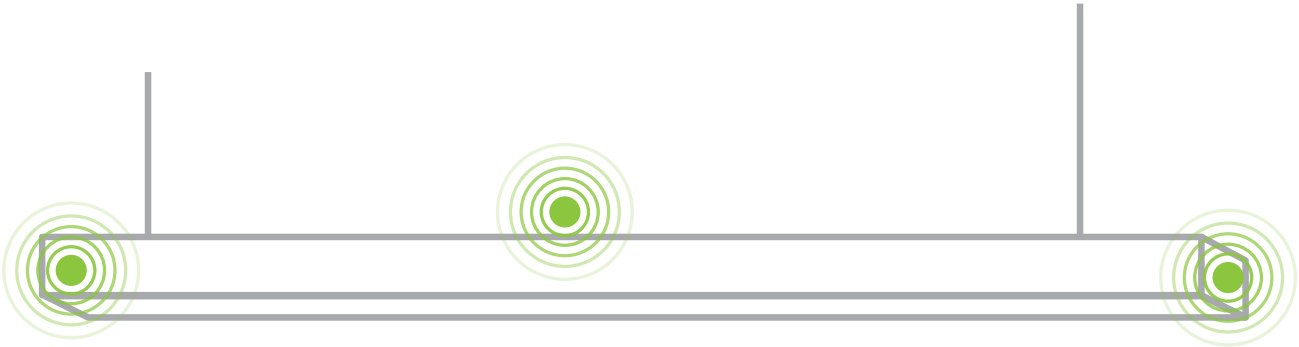


Pick the right Freedom driver for your LED light source.

Choose any of the Freedom Nodes for wireless control. You can also change the Node afterwards.

Add optional sensor for motion detection and ambient light sensing

Make your design magic and enjoy your wireless luminaires.



IN OR OUT? The Node is designed to be mounted freely anywhere inside or outside the luminaire.This is the best way to ensure connectivity in different luminaire designs or installation sites.

Freedom **Node**

Freedom Node is the intelligence. It's also the antenna, the radio unit.
It communicates with the Freedom LED driver, other Freedom Nodes or any supported device in the mesh. Inside we can store any Freedom compatible wireless lighting control software. One Node, many options.
You choose. Or create your own!

We designed the Node's connectivity to be the best in the market. It's antenna is tested to be awesome. And that's why we didn't embed it inside the driver. You can place the Node inside or outside your luminaire and ensure the best connectivity of your products. No weak signals.
No design nightmares. No struggle. Just freedom to connect.

Helvar
LED Driver
LL42-FD-120-350
Freedom

Freedom **LED drivers**

We have 70 years of experience in lighting. We are specialists in lighting control. And we certainly know how to create world class LED drivers to maximise the quality of LED light source. Freedom LED drivers are the powerful and tireless workhorses that keeps your LED module operating at its finest and saving energy. It's also powering up the Node and the Freedom Sense sensor.

- Compact and linear drivers
- 25 -110 W
- 100-1400 mA
- SELV60 & Non-isolated
- Amplitude dimming or hybrid dimming
- Flicker free
- Accessory strain-reliefs available

Freedom to **develop**

We want to offer everyone the possibility to connect with Freedom. That's why we invite you to innovate. Our Freedom protocol library is free to use for everyone.

The UART serial interface command protocol offers a quick way to build a Freedom compatible software. We can add new commands for new features anytime. Go on and try it! Don't let rigid standards to get in your way of creating something brilliant.

Freedom **Wireless Components**

FREEDOM LED DRIVERS

Max power	Driver casing	Current range
25 W	Compact	350 – 700 mA
35 W	Compact	700 – 1050 mA
50 W	Compact	900 – 1400 mA
42 W	Linear	120 – 350 mA
50 W	Linear	100 – 1400 mA
80 W	Linear	150 – 350 mA
80 W	Linear	350 – 700 mA
110 W	Linear	350 – 700 mA
150W	Linear	350 - 700mA

ACCESSORIES & CONNECTOR CABLES

Strain reliefs for LED drivers, mounting holders for Freedom Sense and connector cables in different lenghts.

FREEDOM NODE

The radio communication unit, that holds the selected wireless lighting control software inside. Easy to install inside or outside the luminaire.

FREEDOM SENSE

Super small and capable luminaire sensor with PIR motion detection and light sensor for daylight harvesting. Can be also installed outside the luminaire.

Helvar ActiveAhead®

CASAMBI

ENSTO WORKSPACES

Mount Kelvin

mymesh by Chess

WIREPAS

INGY

helvar.com/freedom

HELVAR OY AB
LUMINAIRE COMPONENTS

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Helvar

We're based in Finland, but work with partners all around the world.
Find your closest Helvar specialist at **helvar.com**