



*Light, a new way to*

# COMMUNICATE DATA

+





*light-based*  
**+ INTERNET ACCESS**

LED technology is cost efficient, sustainable and smart. It is transforming the worldwide lighting market and it is now part of the digital era.

Not only are Lucibel lighting solutions compatible with remote management systems. Light can now interact with its surroundings and be controlled and adjusted in real time to achieve optimized energy consumption.

But it also allows light to be used as a new medium for data transmission thanks to the development by Lucibel of innovative and smart solutions. One of those is the «LiFi by Lucibel», a light-based Internet access solution.



VIDEO



YouTube LedLucibel



**LiFi**  
by Lucibel

## The «LiFi by Lucibel» solution Innovative and environment-friendly solution

Lucibel has developed the very-first lighting fixture in the world equipped with LiFi (Light Fidelity) technology, which provides LED light-based Internet access. LiFi is a technology that allows communication through modulated LED light. A special LED lighting exchanges data with a computer, thereby making Internet access possible. The two-way broadband data transfer is active within the light beam only. This system guarantees total data protection. LiFi provides a great alternative to WiFi in areas where the exchange of information must be secured.

In November 2018, Lucibel brought its 2nd generation of LiFi lighting onto the market with a higher transfer rate and a sales price divided by more than 2.

### What are the advantages?

#### > Highly secure data transfer:

A connection is only possible within the light cone, thus creating a data confidentiality zone and offering increases safety when transferring data.

#### > An alternative to radio waves (WiFi):

With LiFi, the data is transferred by the light beam between the network and the user's IT device with **no interference whatsoever to the surrounding radio waves and subsequently no disturbance in the operation of medical equipment** (scanner, MRI, ...). The absence of radio waves also enables LiFi technology to be **used in areas where access to WiFi is limited or non-existent**, an example of such areas are those governed by the Abeille law of 2015 prohibiting the deployment of WiFi in buildings receiving children under the age of 3 (nurseries, maternity wards, neonatology wards,...).

#### > The creation of connected and flexible work places:

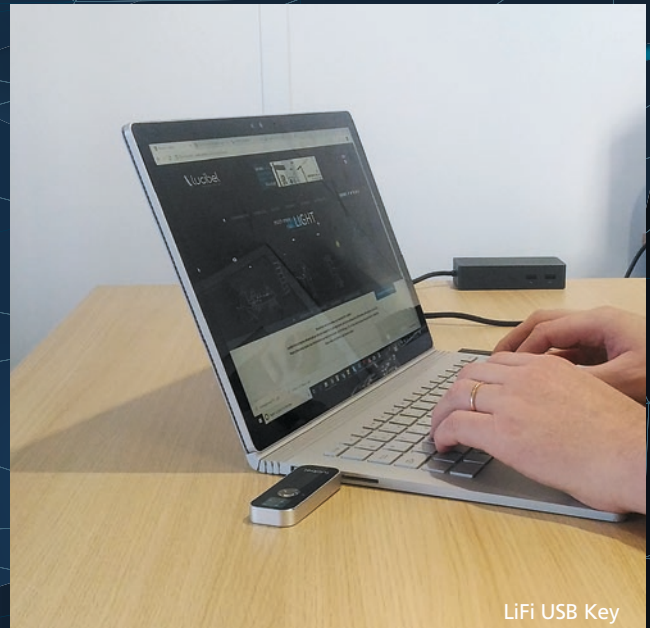
The «LiFi by Lucibel» solution creates **guaranteed and homogeneous connectivity zones** in places where WiFi is not available, or limited for technical reasons, thus providing an **uninterrupted internet connection**.

#### > Creation of connectivity zones with guaranteed «Quality of Service (QoS)»:

The «LiFi by Lucibel» concept enables **creation of connectivity zones where the QoS is guaranteed**, with a data transfer rate of 54 Mbps bi-directional and low transfer latency.



LiFiCup



LiFi USB Key

The LiFi system developed by Lucibel comprises a LED lighting element, a LiFi USB dongle used to transmit and receive data via light waves thus offering the user total mobility

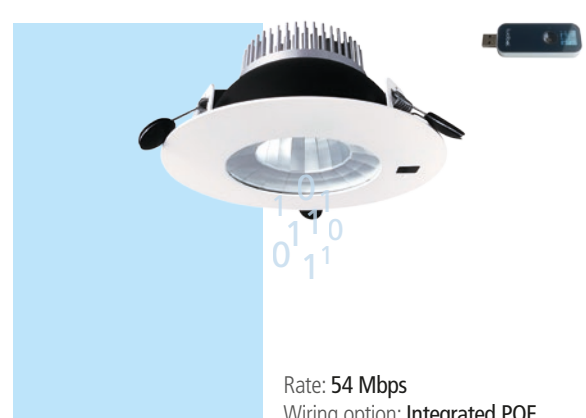


## 1<sup>st</sup> generation



Rate: 42.5 Mbps  
Wiring option: POE optional

## 2<sup>nd</sup> generation



Rate: 54 Mbps  
Wiring option: Integrated POE



# LIFI range



## LiFi lighting fixture

LiFiCup  
(Standard and POE)



Code : LC840WH  
Rate 54 Mbps  
Colour T°: 4000K  
Diffusion angle 76°

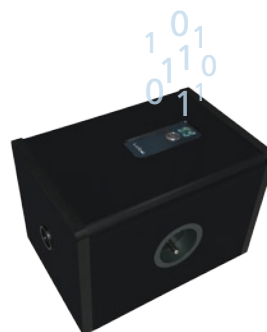
## LiFi receivers

LiFi USB key



Code : CLELIFI.01

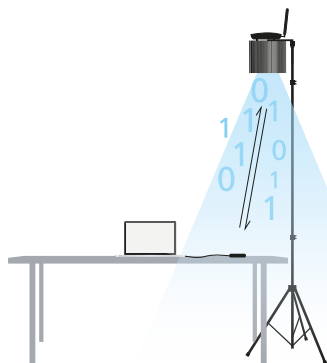
LiFiBox



Code : LIFIBOX.01

## LiFi incorporated products

LiFi demo Kit



Connected seat



## Customer projects



Stell hospital - Rueil-Malmaison (France)



SAP - Paris (France)



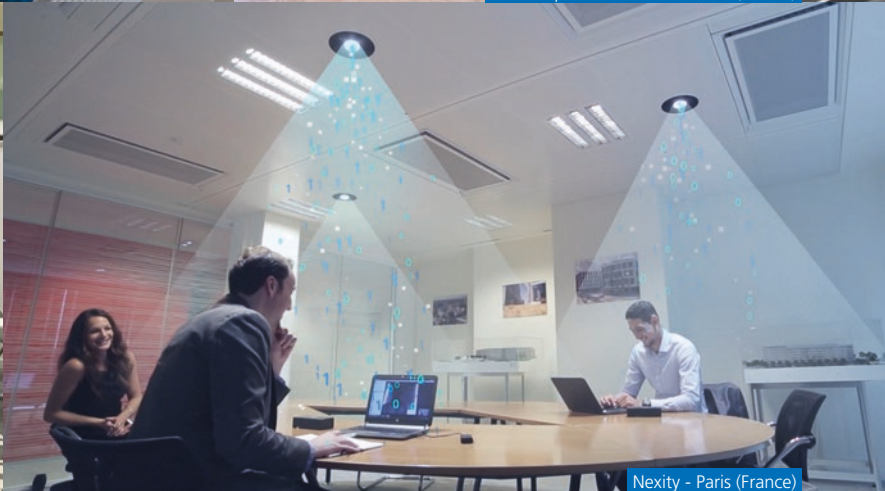
Arkea - Lacanau (France)



Stell hospital - Rueil-Malmaison (France)



Viparis - Paris (France)



Nexity - Paris (France)

## References





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