



by  signify

High performance  
secure data connectivity  
where you need it



## LiFi applications

# High performance secure data connectivity where you need it

Is the quality of your WiFi unpredictable?  
Is radio-based communications not permitted  
or unwanted? Wireless connectivity is a must  
have. Conventional connectivity solutions  
use the crowded radio spectrum to  
communicate. LiFi works via light and  
offers you a unique level of security and  
consistent high-speed connectivity.

### What is LiFi?

LiFi, short for light fidelity, is a wireless communication technology that uses light waves instead of radio frequencies. The light is capable of transmitting data through a range of light spectrum, such as visible light, ultraviolet and infrared light.

LiFi enables fast and secure data transfer that ensures user needs. With growing concerns about radio communication and data leaks, LiFi also benefits by adding an additional layer of physical security: light stays in the room.

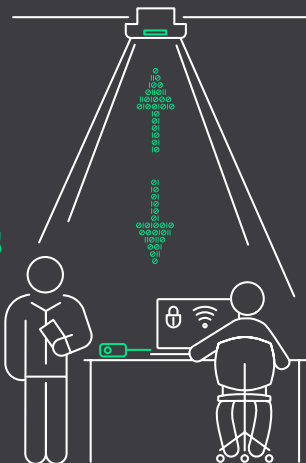
Ideal connectivity

Consistent high-speed connections

Unique physical security

Keep your data private

Low latency for real time data streaming



**Digital industries**  
Enabling IoT applications  
where radio-based  
internet does not work  
or is not allowed



**Office**  
Increasing productivity  
in your office while  
your data is safe

**Devices**  
Secure, wireless  
high-speed data with  
ultra-low latency for  
flawless XR experiences



**Aero and transportation**  
Creating the best  
online experience  
for traveling

**Government and defense**  
Secure wireless  
broadband  
data connections  
for government  
and defense



**Education**  
Study and work  
wirelessly, flexibly  
and radio-free



# Offices

Several business trends are increasing the demand for better connectivity in the office environment:

## Trends in the office space



Flexible workspaces (>1 person per workplace)



Increased use of cloud-based work



More online collaboration tools (like Skype™, Teams™)



More "rent a spot" "hot desking"

# Education

When it comes to educating young people, the education markets shows some trends of its own:

## Trends in Education



Legislation limiting and/or prohibiting the use of radio networks (WiFi, 4/5G)



Increasing use of online tools, therefore high-performance networks are needed



Security and data privacy is a general concern

For real estate owners and developers, Trulifi can potentially increase the value of their property by offering business renters stable, fast and secure network access alongside their current platform.

Smart hand-over and interference management turn wireless connectivity into a hassle-free experience. And the provision of access keys and strictly defined communications areas ensures absolute security at all times.

In some countries legislation stipulates that schools should limit the use of WiFi (radio) networks. Many schools have to fall back to using cabled internet connections to enable teachers and students to work with their online education tools. Besides running a cable to a digital whiteboard, connecting cables to accommodate 20 to 30 students with a laptop can be a challenge.

Trulifi by Signify gives you the flexibility of working wirelessly and does it without radio, as LiFi works via light. Trulifi provides you with speeds of up to 220 Mbps, enough to download a gigabyte in 40 seconds or work with multiple online tools without any hiccups.

## Case study

### World Forum The Hague application for Office and Hospitality

World Forum installed LiFi to ensure that their guests can feel secure about their data and enjoy the fast wireless connection. Trulifi offers an additional layer of security with LiFi and that makes it the best fit for World Forum.

## Case study

### The Rosetta Rossi school in Rome

Rome is the first city in Italy, and one of the first in the world, to experiment with LiFi in a school. Trulifi was chosen to offer better performance and more security for the students.



# Digital Industries

As factory automation evolves along the road to Industry 4.0, digitalization can be seen affecting several business areas:

## Trends in the digital industry space



Customer centricity



Smart global supply chain



Digital Factory



Intelligent distribution

# Government and Defense

The mobile generation expects ubiquitous access to the internet. But security concerns are driving new needs in government and defense buildings and other areas:

## Trends in the government and defense space



Digitalization of services



Increased use of cloud-based work



High security



High demands for government and defense working online

Manufacturing and logistics operators (as well as related businesses) are increasingly in need of real-time data and control. For example, on last-yards connections and to control smart vehicles.

Trulifi from Signify offers a robust, low latency, and highly stable broadband connection, one that is every bit as good as a wired connection, or in other words, 'stable as a cable... but wireless!'. And it's ideal for places where wireless connectivity is poor or restricted.

The trend to more flexible work environments as well as the increase in online services has created more freedom for people... but it has also increased concerns about security. Walls have ears, right? The truth is, many password-protected networks are vulnerable.

LiFi can protect this freedom while maintaining data security, because light does not travel through walls. In essence, it's as immune to eavesdropping as a cable would be!

## Case study

### Wieland Electric

Wieland Electric is investigating the use of LiFi at its in-house manufacturing facilities, where it develops applications for industrial environments.

LiFi is seen here at work on a production line for high quality electronic components. Configuration data are sent to the machine, while information on output or faults is sent back to the Wieland operating data collection system.

## Reference case:

### Ministry of Dutch Defense application for Government and Defense

LiFi is now being used by the Dutch Defense due to its flexibility of installation and no risk of radio frequency interference. LiFi enables them security and ensures no data speed drops or interference even during F-35 maneuvers on an airstrip!



## LiFi product overview

### Trulifi 6002 system

Type	Product description	Order code	Max. data rate DL/UL [Mbit/s]	Roaming
6002.1	Access Point	912500101793	150/140	-
6002.2	Access Point	912500101791	220/160	*
6002.1	Transceiver	912500101812		
6002.1	USB Key	912500101792		
6002 Ceiling Holder Rec ESS	Ceiling Holder Rec ESS	912500101579		
6002 POF Cable EU 10 m	POF Cable EU 10 m	912500102094		
6002 POF Cable NA 10 m	POF Cable NA 10 m	912500102283		

\* Licenses and Controller Unit or Controller Application are required. These are sold separately, see section Trulifi 6800 Controllers.

### Trulifi 6014 systems

Type	Product description	Order code	Max. data rate [Mbit/s]	Max. operating range [m]
6014.01 APMB	Access Point 6014	9125 001 04193	528	0.7 - 20
6014.01 EPMB	End Point 6014	9125 001 04194	528	0.7 - 20
6014.02 APMV	Access Point 6014	9125 001 04195	845	0.5 - 12
6014.02 EPMV	End Point 6014	9125 001 04196	845	0.5 - 12
Trulifi 6014 POINTER	Laser pointer for 6014	9125 001 04197		
Trulifi 6014 MOUNT	Fine-adjustment mount for 6014	9125 001 04198		

### Trulifi 6800 controllers

Type	Product description	Order code	Compatible systems
6800.00	Controller Unit EU*	912500103432	6002.1, 6002.2
6800.01	Controller Unit NA*	912500103433	6002.1, 6002.2
6800.20	Controller Application*	912500103434	6002.1 6002.2
6800 ROAMING	License for Roaming on 6002.2 system	912500103435	6002.2
6800 NMC	License for Network Monitoring and Control	912500103436	6002.1, 6002.2

\* Licenses sold separately



For more information go to:

[www.trulifi.com](http://www.trulifi.com)