High performance secure data connectivity where you need it
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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

LiFi applications

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"

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.

Education

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

Trends in Eduction

- 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

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.

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

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.

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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

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!

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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

<table>
<thead>
<tr>
<th>Type</th>
<th>Product description</th>
<th>Order code</th>
<th>Max. data rate DL/UL [Mbit/s]</th>
<th>Roaming</th>
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<tr>
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* Licenses and Controller Unit or Controller Application are required. These are sold separately, see section Trulifi 6800 Controllers.

### Trulifi 6014 systems

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<td>0.5 - 12</td>
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<td>Laser pointer for 6014</td>
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<td>Trulifi 6014 MOUNT</td>
<td>Fine-adjustment mount for 6014</td>
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### Trulifi 6800 controllers

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* Licenses sold separately

For more information go to: [www.trulifi.com](http://www.trulifi.com)