



AT A GLANCE

USB powered mobile LiFi system featuring world's highest data rates up to 1 Gbit/s

Benefits

- Combination of lighting and data communication
- Improved privacy
- No interference with existing Wi-Fi networks

Background

Optical wireless communication, also called LiFi, is an interesting alternative for mobile communication via light. The already existing LED illumination infrastructure can be reused and new high-speed data transmission functionality is added.

LiFi is considered as a promising technology for mobile indoor connectivity where the unlicensed optical spectrum is used. Light is better confined within a room, compared to radio and safer against unauthorized access and jamming. Secure high-speed light communication will enable new use cases especially in enterprise scenarios.

Fraunhofer HHI has more than 20 years of experience on indoor LiFi systems and provides compact LiFi modules for immediate industrial prototyping and field tests.



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Features

- USB 3.1 interface
- Available with near infrared, visible and ultraviolet LEDs
- Multi-user access possible
- Peak data rate 1 Gbit/s
- Small form factor

Applications

- Secure conference room
- Mobile access in RF sensitive areas (e.g. hospitals)
- High-speed wireless access for private premises