



High Performance, Real-Time Data Link

Our Li-Fi Grathus® enables wireless data transmission using light with data rates of 1 Gbps and more. With a range of over 5 meters and ultra-low, deterministic latency well below 100 ns, it is ideal for time-critical industrial applications. The system supports bi-directional, full-duplex communication without interference and is compatible with industrial Ethernet standards such as Profinet, EtherCAT and EtherCAT-G. Thanks to its plug-and-play capability and compact design, it is easy to integrate. Interfaces include Ethernet, Gigabit Ethernet, USB 3.0/3.1, and customizable options, Laser Safety Class 1 compliance ensure safe and flexible operation.

Key Features

- Data rate: 1 Gbps and more
- Range: up to 10 m
- Bi-directional, full-duplex
- No interference issues
- Ultra-low, deterministic latency ($\ll 1 \mu s$, $\sim 1000\times$ lower than 5G WiFi)
- Compatible to industrial Ethernet like Profinet, EtherCAT, EtherCAT-G, SERCOS III
- Plug and Play capable and easy to adjust
- Interface: Ethernet, Gigabit-Ethernet, USB3.0/3.1 and customized interfaces
- Laser Safety Class 1 (eye safe)
- Additional side channel: 1 Mbps
- Physical size (L x W x H): 85 x 45 x 65 mm
- Patented Technology
- Robust, high-performance real-time link compatible to industrial field busses for ranges up to 10 m

Applications



Logistics



Automation



UAV Communication



Evaluation kit
available!

Contact

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