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## Your Gateway to Efficient Connectivity

Comprising a preconfigured pair of plug-and-play units, with integrated antennas and rugged housings, the Kvaser Air Bridge Light HS M12 (CE) ensure the rapid exchange of CAN data in environments or situations that make wired connection unsuitable or challenging, e.g. systems involving moving or rotating machines that are connected by CAN.



### Warranty

2-Year warranty. See our general conditions and policies for details.



### Support

Free support for all products by contacting [support@kvaser.com](mailto:support@kvaser.com)



### EAN

73-30130-01141-0

## Major Features

- Forms a wireless CAN bridge between a pair of two Kvaser Air Bridge Light HS devices.
- High-speed CAN connection (compliant with ISO 11898-2), up to 1 Mbit/s.
- Plug and play, driver-free, and configuration-free.
- Proprietary wireless protocol for high robustness, very low latency and to enable link establishment and connection in an instant.
- Internal antenna design with polarization diversity.
- Automatic bit rate detection.<sup>1</sup>
- Bit rate conversion between CAN bus systems with different bit rates.
- IP65-rated, dust- and water-resistant housing.
- IP67-rated M12 connector for cabling with extra dust- and water-tightness, suitable for outdoor installation.
- Extended operating temperature range.
- Compatible with J1939, CANopen, NMEA 2000® and DeviceNet. Higher layer protocol translation handled by the user's application. For software support please see our Technical Associates products and our Software Download page ([www.kvaser.com](http://www.kvaser.com)).

## Support

Documentation, Kvaser SDK and drivers can be downloaded for free at [www.kvaser.com/downloads](http://www.kvaser.com/downloads).

Kvaser SDK is a free resource that includes everything you need to develop software for the Kvaser CAN interfaces. Includes full documentation and many program samples, written in C, C++, C#, Delphi, Visual Basic, Python and t script language.

Kvaser CAN hardware is built around the same common software API. Applications developed using one device type will run without modification on other device types.

<sup>1</sup> Configurable to a fix CAN bit rate (1Mbit/s, 500 kbit/s, 250 kbit/s or 125 kbit/s). Refer to Kvaser Air Bridge Light HS User's Guide for more information.



## Technical Data

|  |  |
|--|--|
| <b>Antenna Output Power</b>                            | Max 18 dBm   |
| <b>CAN Bit Rate</b>                                    | 1 Mbit/s, 500 kbit/s, 250 kbit/s and 125 kbit/s                                      |
| <b>CAN Channels</b>                                    | 1  |
| <b>CAN Transceivers</b>                                | TJA1051T (compliant with ISO 11898-2)  |
| <b>Connector</b>                                       | M12 5-pin, A-code  |
| <b>Dimensions</b>                                      | 30 x 151 x 17 mm   |
| <b>Frequency Range</b>                                 | 2400 - 2483.5 MHz  |
| <b>Housing Material</b>                                | Aluminum, PA6  |
| <b>Message Latency</b>                                 | Typically 2.5 - 7.5 ms   |
| <b>Message Rate, CAN 2.0A (11-bit ID) <sup>1</sup></b> | 2 x 2100 messages/s  |
| <b>Message Rate, CAN 2.0B (29-bit ID) <sup>1</sup></b> | 2 x 1680 messages/s  |
| <b>Message Transfer Capacity <sup>2</sup></b>          | Corresponding to 100% bus load for both directions at 250 kbit/s bit rate            |
| <b>Power Consumption</b>                               | Typically 2 W  |
| <b>Power Supply</b>                                    | 9 - 36 VDC   |
| <b>Regulatory Compliance</b>                           | CE, FCC  |
| <b>Temperature Range</b>                               | -40 to +70 °C  |
| <b>Weight</b>  | 84 g (per device)  |
| <b>Wireless Communication</b>                          | Frequency Hopping Spread Spectrum (FHSS) with Gaussian Frequency-Shift Keying (GFSK) |

<sup>1</sup> Maximum message rate in both directions for eight byte payload. Refer to "Kvaser Air Bridge System Integration Guide" for more information.

<sup>2</sup> Recommended maximum load is 80%. Refer to "Kvaser Air Bridge System Integration Guide" for more information.