

## DATASHEET

### XBB Dongle

Bluetooth, CAN

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Bluetooth, CAN



Order number: IDAB-2020-0528-1

Version: EN-20200918-1

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## Important:

This section contains information that is important for you to know when reading the datasheet and before working with the XBB Dongle™.

It includes the safety information that applies when you are working on and with the XBB Dongle™ and its surrounding parts.




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## Safety information:

Follow the instructions to avoid injury or damage the equipment:

|   |   |
|---|---|
|  | <p><b>WARNING!</b></p> <p><i>There are ESD sensitive components inside the XBB Dongle™.</i></p>                   |
|  | <p><b>WARNING!</b></p> <p><i>Contains electronics. Must be recycled. Do not dispose in household garbage.</i></p> |
|  | <p><b>WARNING!</b></p> <p><i>Newer work on XBB Dongle™ with the power supply on.</i></p>                          |

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## Function:

XBB Dongle™ serves as the master for all XBB compatible products that can communicate over Bluetooth or CAN.

It houses a fully compatible CAN 2.0B controller for communication with vehicles over the OBDII port or other CAN compatible devices and over Bluetooth, with Bluetooth 5 compatibility.

A total of 4 XBB compatible products can be connected to the XBB Dongle™.

XBB Dongle™ have voltage monitoring and a tri-axis digital accelerometer for wake-up purposes. With the TSharkRex™ programming language XBB Dongle™ is fully programmable.

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## XBB Dongle

Bluetooth, CAN

## Technical data:

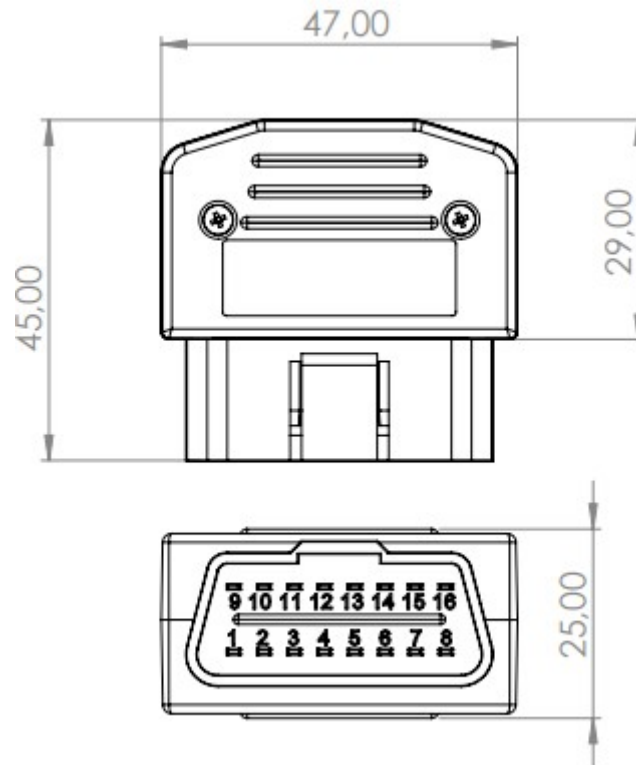
|  |  |           |
|--|--|-----------|
| Rated voltage:   | 12 / 24  | V         |
| Operating voltage:                                     | 9 – 36   | V         |
| Quiescent current Standby mode:                        | 3 – 5.4  | mA        |
| Operational current (with CAN transmission activated). | 30   | mA        |
|  |  |           |
| Protection class:                                      | -  |           |
| Implementation:  | Plastic  | >PA66<    |
| EMC/Standards:   | EN 50498:2010<br>EN 50581:2012<br>RED 2014/53/EU<br>EN 300328 – V2.1.1<br>EN 301489-01 – V2.1.1<br>EN301489-17 – V3.1.1<br>EN 60950 – 1:2006<br>/11:2009<br>/A1:2010<br>/A12:2011<br>/A2:2013<br>EN 62479:2011-09<br>RoHS 2011/65/EU |           |
| Permissible temperature range:                         | -40 to +85   | °C        |
| Weight:  | 28   | g         |
| Connection:  | 2x8 pin male   | ISO J1962 |
| Feature:   | Bluetooth, CAN, voltage monitoring, 3-axis accelerometer   |           |

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## Dimensions:



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## XBB Dongle

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## Connector Pinout:

| <i>Pin #</i> | <i>Function</i>           |
|--------------|---------------------------|
| 1            | <i>Alt. CAN-H (Tesla)</i> |
| 2            | <i>n.c</i>                |
| 3            | <i>Alt. CAN-H (Ford)</i>  |
| 4            | <i>GND</i>                |
| 5            | <i>GND</i>                |
| 6            | <i>CAN-H</i>              |
| 7            | <i>n.c</i>                |
| 8            | <i>n.c</i>                |
| 9            | <i>Alt. CAN-L (Tesla)</i> |
| 10           | <i>n.c</i>                |
| 11           | <i>Alt. CAN-L (Ford)</i>  |
| 12           | <i>n.c</i>                |
| 13           | <i>n.c</i>                |
| 14           | <i>CAN-L</i>              |
| 15           | <i>n.c</i>                |
| 16           | <i>+12 VDC</i>            |



## Alternative CAN pins

XBB Dongle is equipped with different CAN pins depending on different vehicle models. CAN pin selection is made hardware wise only by trained personell. Changing the CAN pins require soldering on PCB and doing so without manufacturer's written approval will void any warranty.

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## Traceability

### Reference document

| Denomination          | Publication number |
|-----------------------|--------------------|
| Reference instruction | Nr:EN-20200918-1   |
|                       |                    |

## Revision

The following significant changes have taken place since the previous version:

| Rev | Page | Description of revision | Approved by tech. manager | Date     | App. by doc. officer. | Date     |
|-----|------|-------------------------|---------------------------|----------|-----------------------|----------|
| 1   | ALL  | Creation of doc.        | KHS                       | 20-09-18 | KHS                   | 20-09-18 |
| 2   |      |                         |                           |          |                       |          |
| 3   |      |                         |                           |          |                       |          |
| 4   |      |                         |                           |          |                       |          |
| 5   |      |                         |                           |          |                       |          |