Autonomous Charging Car Emulation & Display

Application: Autonomous Charging of Electrical Vehicles

The grivix Autonomous Charging Car Emulation & Display is used to test the “Communication and Positioning” interface according to CAN-Bus J1939 (heavy duty vehicles, trucks, and busses) or CAN-Bus native for robots.
It can be also used as an integration for existing vehicles in combination with the “Autonomous Charging Communication & Positioning Interface” to enable automatic charging from the driver (initiation of communication with the robot and opening and closing the flap).

Benefits

- Enables to test your robot or charging flap.
- Integration into existing vehicles to open the flap manually.
- Status information for the driver.

Product Definition

Product Type	Testing and Integration
Connectivity	CAN-Bus (J1939 or RAW) Wifi (abg)
Ingress Protection	IP 44
Conformance	CE compliant

Electrical Data

Supply voltage	5 V/DC
Power consumption	2.5 W

Mechanical Data

Size	92 x 70 x 61.5 mm
Material of the box	PA 12

Environmental Data

Operating temperature range	-25 °C to +50 °C
RoHS compliant	

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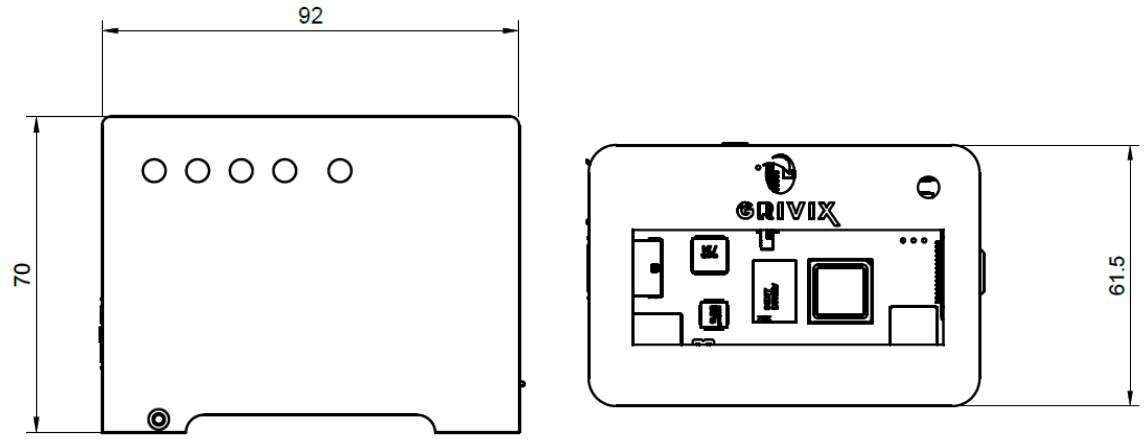
Accessories

Autonomous Charging & Communication Module	Autonomous Charging Inlet Flap
Megawatt Charging Inlet	



Note

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general information purposes only.

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Autonomous Charging Communication & Positioning Interface

Application: Autonomous Charging of Electrical Vehicles

The grivix Autonomous Charging Communication & Positioning Interface enables the in-range detection and communication between an autonomous or regular Electrical Vehicle and an autonomous Charging Station. It has LIN-Bus integrated to directly drive a motor to open and close a flap. The interface is available in a version for vehicles or infrastructure with specific enclosing.

Benefits

- Enables your vehicle to charge autonomously.
- Guidance to the charging station.
- Wireless communication between charging station and vehicle

Product Definition

Product Type	Communication & Positioning Interface
Connectivity	Ultra Wide Band (UWB) Bluetooth 5.0 CAN-Bus (J1939 or RAW) LIN-Bus
Standards	IEC TS 61851-26
Ingress Protection	IP 54 (in enclosed housing)
Conformance	CE compliant

Positioning / Transceiver

UWB Communication Channels	UWB Channel Number 5 9	Centre Frequency 6’489,6 MHz 7’987,2 MHz
Bandwidth	499,2 MHz	
Accuracy (UWB positioning)	15 cm	

Electrical Data

Supply voltage	12 or 24 V/DC	
Power consumption	Transmission Peak (flap opening)	1,7 W 8 W

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Mechanical Data

Size	Housing Housing incl. mounting PCB	78 x 105 x 37 mm 102 x 105 x 37 mm 68 x 85 x 18 mm
Material of the box	PA 12	
Weight (without cables)	200g	

Environmental Data

Operating temperature range	-25 °C to +50 °C
RoHS compliant	

Accessories

Autonomous Charging Inlet Flap	Autonomous Charging Car Emulation & Display
Megawatt Charging Inlet	

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Autonomous Charging Inlet Flap

Application: Autonomous Charging of Electrical Vehicles

The grivix Autonomous Charging Inlet Flap opens and closes automatically at a charging spot. It is designed to be used with autonomous or semi-autonomous vehicles at automatic charging robots. But may also be used for higher convenience with conventional vehicles or to charge in areas which are dangerous for pedestrians.
The grivix Autonomous Charging Flap consists of an enclosure protecting a CCS2, CCS1 or MCS inlet and a communication interface (“grivix Autonomous Charging Communication & Positioning Interface”) according to the most recent version of IEC TS 61851-26. The communication interface enables the in-range detection and communication between an autonomous or regular Electrical Vehicle and an autonomous Charging Station.

Benefits

- Opens and closes automatically in range of an autonomous charging station for increased convenience.
- Enables your vehicle to charge autonomously.
- Guidance to the charging station.

Product Definition

Product Type	Charging Flap with Communication and Positioning
Connectivity	Ultra Wide Band (UWB) Bluetooth 5.0 CAN-Bus (J1939 or RAW) LIN-Bus
Standards	IEC TS 61851-26 IEC 62196
Ingress Protection	IP 54 (for CCS Inlet while mated or closed)
Conformance	CE compliant

Positioning / Transceiver

UWB Communication Channels	UWB Channel Number 5 9	Centre Frequency 6’489,6 MHz 7’987,2 MHz
Bandwidth	499,2 MHz	
Accuracy (UWB positioning)	15 cm	

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Electrical Data

Supply voltage	12 or 24 V/DC	
Power consumption	Transmission Peak (flap opening)	1,7 W 8 W

Mechanical Data

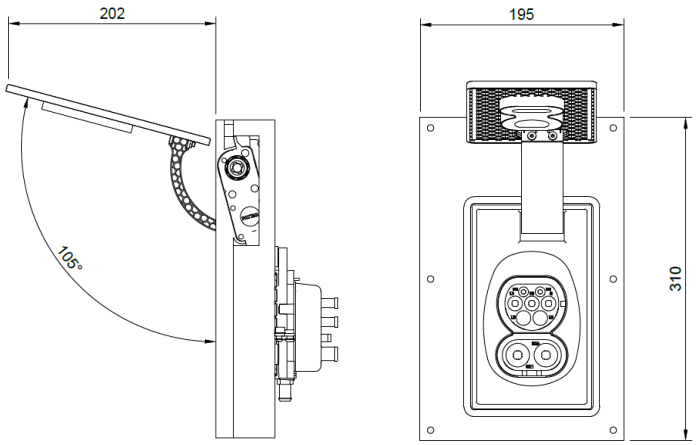
Size	195 x 310 x 136 mm
Material	PA 12
Weight (without cables and inlet)	2’300 g

Environmental Data

Operating temperature range	-40 °C to +80 °C
RoHS compliant	

Accessories

Autonomous Charging & Communication Module	Autonomous Charging Car Emulation & Display
Megawatt Charging Inlet	



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