

## BayLock R-MCS

### Application: Autonomous Charging of Electrical Vehicles

The grivix BayLock opens and closes automatically at a charging spot. It is designed to be used with autonomous or semi-autonomous vehicles together with an automatic charging station. But may also be used for higher convenience with conventional vehicles or to charge in areas that are dangerous for pedestrians. The grivix Autonomous Charging Flap consists of an enclosure protecting a MCS inlet and a communication interface according to the most recent version of IEC TS 61851-27 IEC TS 61851-28. The communication interface enables the in-range detection and communication between an autonomous or regular Electrical Vehicle and an autonomous Charging Station.



### Benefits

- Reduces risk & mistakes: minimizing potential errors and increasing the success rate of charging both for human-driven electric vehicles now and autonomous driving vehicles in the future.
- Provides safety for drivers in harsh environments.
- High reliability: locks inlet after charging, guarantees no water, dust, or mud ingress.
- Integrated design: seamless with grivix MCS & R-MCS inlets.

### Product Definition

Product Type	Charging Flap with Communication and Positioning	
Connectivity	Ultra-Wide Band (UWB) Bluetooth CAN-Bus LIN-Bus	
Standards	IEC TS 61851-27 IEC TS 61851-28 IEC 62196 IEC PT 63379	
Ingress Protection	IP 54 (for CCS or MCS Inlet while mated or closed)	
Conformance	CE compliant	

### Positioning / Transceiver

UWB Communication Channels	UWB Channel Number	Centre Frequency
	5 9	6'489,6 MHz 7'987,2 MHz
Bandwidth	499,2 MHz	

## Electrical Data

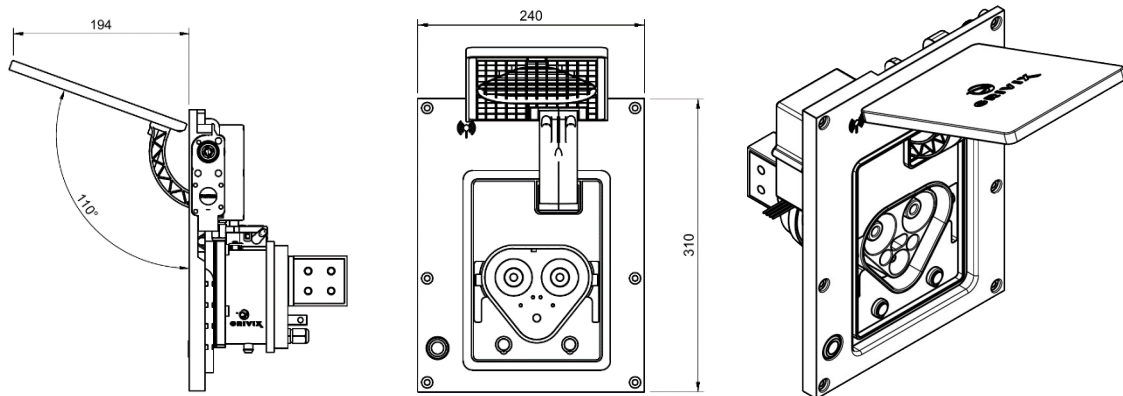
Supply voltage	12 or 24 V/DC	
Power consumption	Transmission Peak (flap opening)	1,2 W 8 W

## Mechanical Data

Size	240 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	



### Note

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