Parklio™ Brain

User manual

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Thank you for the confidence you have shown us by purchasing our Parklio Brain.

Please read this manual first!

Dear Customers,

We hope that all your expectations of this product will be fulfilled. Parklio™ Brain is manufactured using the latest technologies and has undergone rigorous quality control procedures.

The User Guide will help you use your product quickly and safely.

Read the user manual before installing and using your product.

Always follow the safety instructions.

Keep this user manual at hand for future reference.

Table of Contents

1. Package Contents

The product package should contain the following items:

	Parklio™ Brain
	2.4 GHz Antenna

Table 1.1 - Package Contents

If any of the parts are incorrect, missing, or damaged, contact your Parklio™ dealer. Keep the carton, including the original packing materials, in case you need to return the product for repair.

NOTE
- A 2 mm or 3 mm flat head screwdriver and a 8mm wrench is needed for installation

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2. Features

Parklio™ Brain is a universal electronic module that will turn any existing products into a smart one.

Parklio™ Brain enables control of the existing parking solutions with a smartphone. By integrating the module, it will be possible to benefit from all the advantages of smart Parklio™ solutions - control via free smartphone app, key sharing options, real-time information, user-friendly management and possibility of integration with any other systems.

With this assistive technology solution, automatic and reliable access control is possible on all existing facilities with Parklio™ Brain. With this smart electronic module, the user is never more than a few seconds away from any piece of digital information. From parking product status to occupancy information, it is all there in an instant.

The brain makes products smartphone-controlled, with a key sharing option. All the smart parking options offered by Parklio™ can now be integrated with your existing parking products. Parklio™ brain is a universal and unique electronic model so it can fit all your outdated products. You will be able to control your existing parking products with your smartphone and enjoy all the functionalities the system is providing. After making phones and homes "smart", it is time to make parking products smart with Parklio™ Brain.

Implementing a new hardware solution like a Parklio™ Brain is a short and easy consuming process. Parklio™ Brain can be interfaced with a mobile phone or with the Parklio™ Gateway to be controlled from Parklio™ CMS. In this way, monitoring of your parking products has never been easier. The Parklio™ Brain is installed in the access control's solution control panel and interfaces with the existing control board. It is rated for operation in environments with temperatures ranging from -20 °C to +60 °C and it allows smartphone-controlled on the range of 50 m in open space with the provided antenna.

3. Hardware Overview
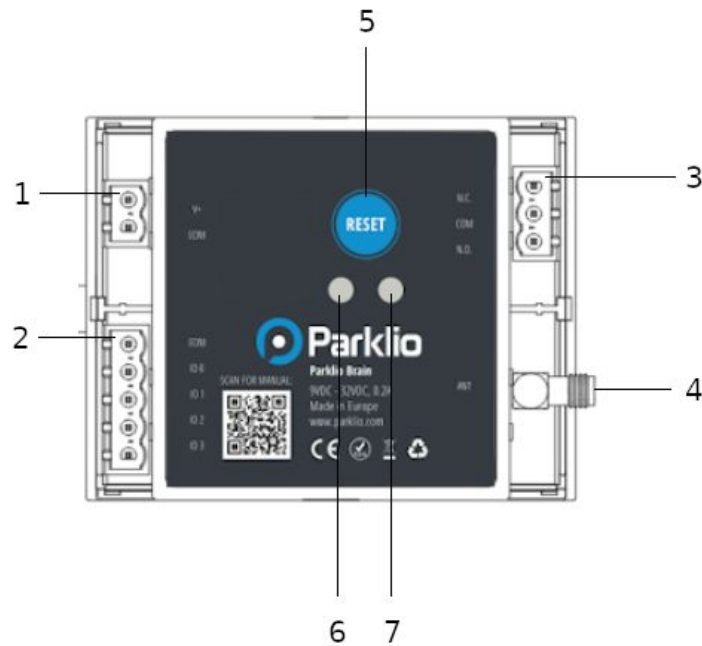
Figure 3.1 - Status and connection board

1	Power terminal	Connectors for powering the Parklio Brain.
2	Input terminals	**Input terminals** for receiving info about the device controlled by Parklio Brain
3	Relay terminals	Output terminals for providing open/close command to the device controlled by Parklio Brain
4	Antenna connector	**SMA female connector** for connecting the 2.4 GHz antenna provided with the Parklio Brain
5	Reset button	**Hold** to reset the Parklio Brain to the default settings
6	Power LED	**RED** light - Parklio Brain is powered on.
7	Status LED	**GREEN** light - activity of the Parklio Brain

Table 3.1 - Connection and status board

4. Technical Specification

Parameter	Value
Input Voltage	8 VDC - 32 VDC
DC Current (Typ.)	~20 mA normal operation, add 2 mA for each active pullup maximum 100 mA
Inrush current	0.5 A
Working temperature range	-20 °C - +60 °C
Working humidity	Up to 90 % RH
Operating altitude	1000 m
Ingress rating	IP 44
Dimensions	31.25 mm x 70 mm x 89.6 mm (H x W x D)
Weight	100 g
LED	1 x power LED, 1 x status LED
Wireless Connectivity	BLE
Over-the-Air upgrades	Yes
Antenna interface	External 2.4 GHz antenna with SMA connector
Color	Light grey and black
Max. supported connections	max. 4 user may be connected to the device
Battery backup	CR1620, for clock only, non-user replaceable
Standards	RoHS compliant DIN EN 60715 TH35, DIN VDE 0470-1, DIN 43880 unit 1, REACH compliant, VBG 4,

	IEC 529
Regulatory standards	EN60950-1:2006 + A1:2010 + A11:2009 + A12:2011
	EN 300 328 EN 61000-6-2 EN 300 440 EN 61000-4-2 EN 301 489 - 1 EN 61000-4-3 EN 301 489 - 3 EN 61000-4-4 EN 301 489 - 17 EN 61000-4-5 EN 55024 EN 61000-4-6 EN 55032 EN 61000-4-8 EN 61000-6-3 EN 61000-3-3 EN 61000-3-2

Table 4.1 - Technical Specifications

5. Hardware Setup

Before You Begin

Placement of the Brain is very important. The brain has a possibility to be mounted on a DIN rail. Brain is not supposed to be exposed to direct weather conditions.
Before connecting Brain, ensure that the device in which the Brain is going to be embedded is disconnected from the power supply.

5.1. Input/output list

To connect the Parklio brain to the desired control unit, use cables up to 1mm^2.

V+	Positive power supply input
COM	Negative power supply input
ANT	Connector for external antenna
IO 0	Input/output terminal, can be configured through the mobile application
IO 1	Input/output terminal, can be configured through the mobile application
IO 2	Input/output terminal, can be configured through the mobile application
IO 3	Input/output terminal, can be configured through the mobile application

Table 5.1 - Input/output list

5.2. Connecting steps

Step 1	Connect the **V+** terminal on the Parklio Brain to the **VDC (9-32VDC)** terminal on the control unit.
Step 2	Connect the **COM** terminal on the Parklio Brain to the **COM** terminal on the control unit.
Step 3	Connect the provided antenna to the ANT connector on the Parklio Brain. (Antenna needs to be previously mounted on the desired spot!)

Table 5.2 - Connecting steps

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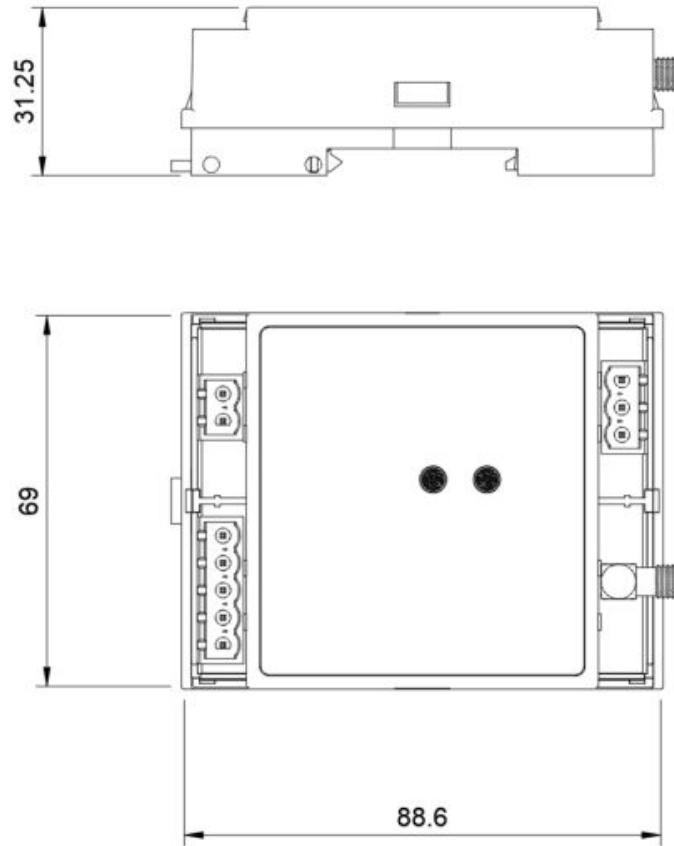**m:** + 385 97 724 7276

6. Dimensions

FIgure 6.1 - Dimensions of the Parklio Brain

7. Reset and Add Parklio Brain

To reset the Brain, Press and hold a Reset button on the Parklio Brain until the Green light turns on.

To add the Parklio Brain, click to add a new device through the Parklio Connect mobile application, and search for the device with the name stated on your Parklio Brain or scan the QR code from the Parklio Brain.

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