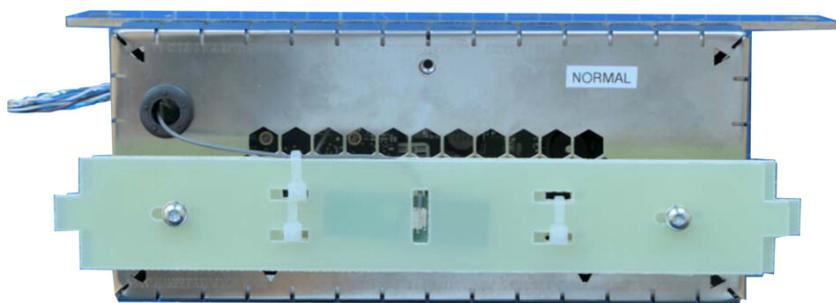


# FCP Gateway WL 2

## Instructions for Use



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## Table of Contents

<b>1</b>	<b>Notes on the instructions for use .....</b>	<b>5</b>
1.1	System name .....	5
1.2	Scope of application .....	5
1.3	Purpose and storage of the documentation .....	5
1.4	Questions and comments .....	5
1.5	Conventions in this document .....	5
1.5.1	Conventions in all text areas .....	6
1.5.2	Conventions in a course of action .....	6
<b>2</b>	<b>Safety notes .....</b>	<b>7</b>
2.1	Area of use .....	7
2.1.1	Intended use .....	7
2.1.2	Normal use .....	7
2.1.3	Discipline .....	7
2.2	Responsibilities and duties of the operator .....	7
2.2.1	Messages to manufacturer and authorities .....	9
2.3	Measures and duties of the operator .....	9
<b>3</b>	<b>Description of the system .....</b>	<b>11</b>
3.1	System markings .....	11
3.1.1	Labeling on the FCP Gateway .....	11
3.2	Structure of the system .....	11
3.2.1	Control elements .....	11
3.2.2	Connection panel .....	12
3.3	Functional description .....	12
3.3.1	FCP Gateway functions .....	12
<b>4</b>	<b>Cleaning and disinfection .....</b>	<b>13</b>
<b>5</b>	<b>Troubleshooting .....</b>	<b>15</b>
5.1	Resetting the FCP Gateway .....	15
5.2	Service information .....	15
<b>6</b>	<b>Technical specifications .....</b>	<b>17</b>
6.1	Essential performance features .....	17
6.2	Regulatory information .....	17
6.2.1	Canada / USA - IC warnings RSS-Gen & RSS-247 statement .....	17

<b>6.3</b>	<b>Technical data .....</b>	<b>18</b>
6.3.1	Electrical data.....	18
6.3.2	Dimensions and weight .....	18
6.3.3	Ambient requirements for operation .....	19
6.3.4	Ambient requirements for transport and storage.....	19
<b>7</b>	<b>Accessories and components .....</b>	<b>21</b>
7.1	<b>FCP Gateway .....</b>	<b>21</b>
<b>8</b>	<b>Disposal .....</b>	<b>23</b>
8.1	<b>Safety during disposal .....</b>	<b>23</b>
8.2	<b>Disposal of the system.....</b>	<b>23</b>
	<b>Glossary .....</b>	<b>25</b>
	<b>Index.....</b>	<b>27</b>

# 1 Notes on the instructions for use

## 1.1 System name

FCP Gateway WL 2 is referred to as "FCP Gateway" in the present Instructions for Use.

## 1.2 Scope of application

The present Instructions for Use apply to FCP Gateway with the following software version:

- Application:  
PicAppl-REGGIO\_GW.APP.01.02.063.CORE.01.04.000

## 1.3 Purpose and storage of the documentation

These Instructions for Use explain the safety features, functions and the performance parameters of the system. They are a guide for safe operation and specify the measures for maintenance and repair of the system.

The correct operation of the system is vital for safe and successful use.

*Action*

- ▶ Read these Instructions for Use before starting and using the system.
- ▶ Keep the Instructions for Use accessible at all times for all users.
- ▶ Pass the Instructions for Use on to the next owner of the system.

## 1.4 Questions and comments

*Action*

- ▶ If you have any questions or comments concerning these Instructions for Use or the system, please contact ZEISS Service.

You can find the ZEISS contact partner for your country on the following website: [www.zeiss.com/med](http://www.zeiss.com/med)

## 1.5 Conventions in this document

Certain types of information are specially marked in this document for better recognition.

### 1.5.1 Conventions in all text areas

- This is a list.
  - This is a second level list.

This is a cross-reference: Questions and comments [▶ 5].

This is **bold type**.

This is software code or program text.

Names of software dialogs, fields or menus, and software messages are marked by quotation marks:

- “View” menu.
- “Do you want to save the settings?”

The steps in menu and file paths are separated by slashes:

- “File / Save as”
- “My documents / Documents”

Keys, buttons, knobs, levers and other operating controls are marked by square brackets:

- [START] key
- [Next] button

### 1.5.2 Conventions in a course of action

#### ⚠ WARNING!

**This is warning information about hazards that can cause death or severe injuries if not avoided.**

The warning message names the possible consequences.

- ▶ This is a measure with which hazards can be prevented.

#### ⚠ CAUTION!

**This is warning information about hazards that can cause injuries if not avoided.**

The warning message names the possible consequences.

- ▶ This is a measure with which hazards can be prevented.

#### NOTE

**This is warning information about hazards that can cause property damage if not avoided.**

The warning message names the possible consequences.

- ▶ This is a measure with which hazards can be prevented.

Prerequisite

- ☒ This is a requirement that must be met before the start of a sequence of actions.

Action

1. This is a command.
2. **CAUTION! This is a warning message about hazards that can occur during a single action.** This is a command.
  - ⇒ This is the result of a sequence of actions.

## 2 Safety notes

### 2.1 Area of use

#### 2.1.1 Intended use

FCP Gateway is intended for performing tests for standard conformity and regulatory conformity.

#### 2.1.2 Normal use

FCP Gateway is designed for interfacing the Foot Control Panel (FCP) to provide power and to pass on data transmitted via cable or wirelessly.

#### 2.1.3 Discipline

Gateway between two devices

### 2.2 Responsibilities and duties of the operator

#### Operating personnel

The device may be operated only by properly instructed and trained persons.

- ▶ Make sure that the operating personnel are appropriately trained and instructed.
- ▶ Make sure that the operating personnel have read and understood the Instructions for Use.
- ▶ Keep the Instructions for Use available at all times for the operating personnel.
- ▶ To facilitate access for all operating personnel: Request additional copies of the Instructions for Use as required from ZEISS.
- ▶ Specify the competencies for handling the device and state who is authorized to perform what tasks.
- ▶ Determine the reporting obligations for malfunction and damage and make them known. Notification of the manufacturer and authorities. [▶ 9]
- ▶ Provide the necessary protective clothing.
- ▶ Regularly check that the legal regulations applicable in your country with regard to accident prevention and work safety are being complied with.

## Safety inspections

- ▶ To prevent a decrease in device safety due to aging and wear: Implement regular safety inspections as specified for this device by the applicable national regulations.

The safety inspections may only be performed by the manufacturer or qualified personnel.

- ▶ Comply with the specified time limits.
- ▶ Carry out checks according to the extent specified.

The safety inspections of the device should at least comprise the following points:

- Availability of the Instructions for Use
- Visual inspection of the device and accessories for damage, as well as legibility of the labels
- Leakage current test
- Test of protective ground conductor
- Function and wear test of the brakes
- Function test of all switches, buttons, sockets and indicator lamps of the device

## Maintenance and inspection

- ▶ To ensure safe operation of the device and reach the expected service life: Comply with the maintenance and inspection intervals specified in these Instructions for Use.

## Modifications to the product

- ▶ WARNING: This device must not be modified without the manufacturer's approval. If the device is modified, suitable inspections and testing must be completed to ensure that it can still be used safely.

## Accessories and additional equipment

- ▶ If you want to connect accessories or additional equipment to the device: Contact your ZEISS contact partner.

Any additional equipment connected to medical electrical devices must demonstrably comply with the applicable IEC or ISO standards (e.g. IEC 60950 for data processing equipment).

In addition, all configurations must meet the normative requirements for medical systems (see IEC 60601-1-1 or Clause 16 of the 3rd edition of IEC 60601-1 respectively).

Anyone connecting additional equipment to medical electrical systems is a system configurer and as such responsible for compliance of the system with the standards for systems.

Local legislation has priority over the above normative requirements.

### 2.2.1 Messages to manufacturer and authorities

If a serious incident occurs in connection with this medical device affecting the user, patient or another person, the operator or person responsible must report this incident to the manufacturer or seller of the medical product. In European Union countries, the operator or person responsible must report serious incidents to their responsible authority. In all other countries, the respective country-specific requirements must be followed.

## 2.3 Measures and duties of the operator

### Electrical safety

- ▶ Always switch off the device before connecting it to or disconnecting it from the power supply, for cleaning its surface, or if it will not be used for a prolonged period of time.
- ▶ Only connect the device to a power supply that complies with the values specified on the rating label.
- ▶ Do not use multiple sockets!
- ▶ Do not use extension cables!
- ▶ Do not touch the device if your body is electrostatically charged and the device is not grounded.
- ▶ Connect the device via the potential equalization connection (according to IEC 60601-1) to other active devices with the same ground potential or connect it to a protective ground connection.
- ▶ Please observe the information on electromagnetic compatibility (EMC).

The device contains freely accessible live components. If you remove the housing, you run the risk of electric shock.

- ▶ Never open the device!

### **Environmental conditions**

- ▶ Make sure that the installation conditions and the operation of the device comply with the surgical requirements:
  - Low vibration
  - Clean environment
  - Avoid extreme mechanical stress
- ▶ Do not use power-operated devices included in the delivery package
  - in explosive atmospheres,
  - at a distance of less than 25 cm from flammable anesthetics or volatile solvents such as alcohol, benzine or similar substances.
- ▶ Do not use or store the device in damp rooms. Do not expose the device to water splashes, dripping water or sprayed water.
- ▶ Ensure that fluids cannot enter the device.

### **Symbols and labels**

- ▶ Note the symbols and labels attached to the device!

### **Transport**

- ▶ Only transport the device over long distances (e.g. relocation, return for repair) in its original packaging or special return packaging.
- ▶ Please contact your dealer or ZEISS Service for this purpose.

## 3 Description of the system

### 3.1 System markings

#### ⚠ CAUTION!

#### Risk of injury due to illegible labels!

Over time, labels can become dirty and thus unidentifiable, making it difficult or impossible for hazards to be recognized or necessary operating instructions to be followed.

- ▶ Keep all safety and warning labels and operating instructions in good condition at all times.
- ▶ Damaged labels are to be replaced immediately. For replacement labels, contact ZEISS Service or an authorized ZEISS representative.

#### 3.1.1 Labeling on the FCP Gateway

Symbol	Explanation
	Conformity label for FCP Gateway, provides information on standards

### 3.2 Structure of the system

#### 3.2.1 Control elements

The FCP Gateway has no user-operable control interfaces.

### 3.2.2 Connection panel

The FCP Gateway is a system to convey information and deliver power. It mainly consists of a PCB in a housing that is connected to data (CAN) and power connectors.

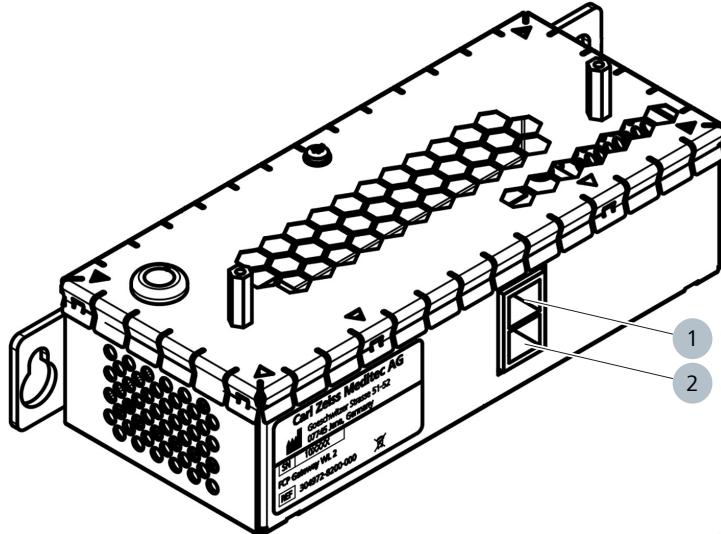


Figure 1: Connection elements of the FCP Gateway

Pos.	Designation	Explanation
1	System connection socket	Exchanges information and receives power from the system
2	FCP connection socket	Exchanges information and transmits power to the FCP

## 3.3 Functional description

### 3.3.1 FCP Gateway functions

The FCP Gateway serves as interface between the FCP and the system:

- It mediates the data exchange between FCP and system.
- It transmits power from the system to the FCP charging interfaces, i.e. the FCP cable or the system's FCP charging pins.

The signal transmission between the FCP Gateway and the FCP is handled via cable or wirelessly. Both communication modes allow the user to carry out the same functions via FCP.

## 4 Cleaning and disinfection

The FCP Gateway is located inside the system and has no contact to the operator or the patient. Therefore, no cleaning and disinfection is required.

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## 5 Troubleshooting

### 5.1 Resetting the FCP Gateway

The FCP Gateway is reset when power-cycled. As the power is controlled by the system, no direct intervention is required.

### 5.2 Service information

You can find the ZEISS contact partner for your country on the following website: [www.zeiss.com/med](http://www.zeiss.com/med)

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## 6 Technical specifications

### 6.1 Essential performance features

The system does not have any essential performance features as defined in IEC 60601-1.

### 6.2 Regulatory information

**The FCP Gateway meets the requirements of the standards:**

- EN 62368-1:2014 + Corr.1:2015 / EN
- 62368-1:2014 + AC:2015 EN 62311:2020
- ETSI EN 301 489-1 V2.2.3
- EN ETSI 301 489-17 V3.2.4
- ETSI EN 300 328 V2.2.2
- FCC - Title 47 CFR Part15
- ICES-003, Issue 7: 2020-10

#### 6.2.1 Canada / USA - IC warnings RSS-Gen & RSS-247 statement



Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Part 15 Statement gem. FCC 15.19/RSS Gen Issue 3 Sect. 7.1.3  
This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:  
(1) this device may not cause harmful interference, and  
(2) this device must accept any interference received, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et  
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Selon les règlements de Canada d'Industrie, cet émetteur de radio peut seulement fonctionner en utilisant une antenne du type et de gain maximum (ou moindre) que le gain approuvé pour l'émetteur par Canada d'Industrie. Pour réduire lesinterférences radio potentielles avec les autres utilisateurs, le type d'antenne et son gain devraient être choisis de façon à ce que la puissance isotrope rayonnée équivalente(P.I.R.E.) ne soit pas supérieure à celle qui est nécessaire pour une communication réussie.

## 6.3 Technical data

### 6.3.1 Electrical data

	Value
Operating Frequency	Bluetooth® BR/EDR 2400 MHz to 2483.5 MHz
Type of transmission	FHSS
Output power	BT classic: Class 2 Output Power (+1.5 dBm typical)
Power Supply	15.0 V DC by external power supply
Voltages	3.3 V (BT Module)
Module(s)	Brand: Microchip Technology, Inc. Model name: GW: BM78SP-P05MC2
Antenna type	GW: External antenna (Laird NanoBlue)
Antenna gain	GW: 2.0 dBi
Radiated power	BDR: 5 dBm EDR: 5 dBm
Modulation	GFSK, Pi/4-DQPSK, 8DPSK
Transmission rate	up to 10 Kbytes/s

### 6.3.2 Dimensions and weight

	Value
Length	220 mm
Width	120 mm
Height	24 mm
Weight	610 g

### 6.3.3 Ambient requirements for operation

	Value
Temperature	+10 °C to +40 °C
Rel. humidity (without condensation)	30% to 75%
Maximum operating height	3000 m above N.N.
Air pressure	700 hPa to 1060 hPa

### 6.3.4 Ambient requirements for transport and storage

	Value
Temperature	-40 °C to +70 °C
Rel. humidity (without condensation)	10% to 90%
Air pressure	500 hPa to 1060 hPa

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## 7 Accessories and components

### 7.1 FCP Gateway

Designation	Specification	Order no.
FCP Gateway WL 2	N/A	304972-8200-000

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## 8 Disposal

### 8.1 Safety during disposal

#### ⚠ CAUTION!

#### Pollution of the environment

Inappropriate disposal may contaminate the environment.

- ▶ Do not dispose of the systems along with normal domestic waste.
- ▶ Dispose of the system according to the local laws/regulations governing the disposal of electrical and electronic equipment.

### 8.2 Disposal of the system

- ▶ Keep packing material in the event of a relocation or repair.
- ▶ If you want to dispose of the packing material: Dispose of packing material by sending it for recycling through an acknowledged collection system.

The system contains electronic components with integrated batteries.

- ▶ Dispose of the system and integrated batteries correctly, in accordance with national legislation.



The system specified on the delivery note must not be disposed of via household waste or communal disposal companies according to the applicable EU guidelines valid at the time the system was placed on the market.

- ▶ For more information about the disposal of the system, please contact the ZEISS contact partner in your country.

You can find the ZEISS contact partner for your country on the following website: [www.zeiss.com/med](http://www.zeiss.com/med)

- ▶ If you want to sell on the system or its components: Inform the purchaser that they must dispose of the system according to the regulations valid at that time.

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## Glossary

### **CAN**

Controller Area Network

### **FCP**

Foot Control Panel

### **PCB**

Printed Circuit Board

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# Index

## A

### Ambient conditions

Operation.....	19
Transport .....	19

## C

Connection elements .....	12
---------------------------	----

## D

Dimensions.....	18
-----------------	----

### Disposal

Batteries.....	23
Electronics.....	23
Packing material.....	23

## E

Electrical data .....	18
Electrical safety .....	9
Electromagnetic compatibility .....	17
Environmental conditions .....	10
Essential performance.....	17

## I

Intended use.....	7
-------------------	---

## O

Operating personnel .....	7
---------------------------	---

## P

Product modifications .....	8
-----------------------------	---



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Specification subject to change without notice

G-30-2285-en - 1.1 - 2024-06-13