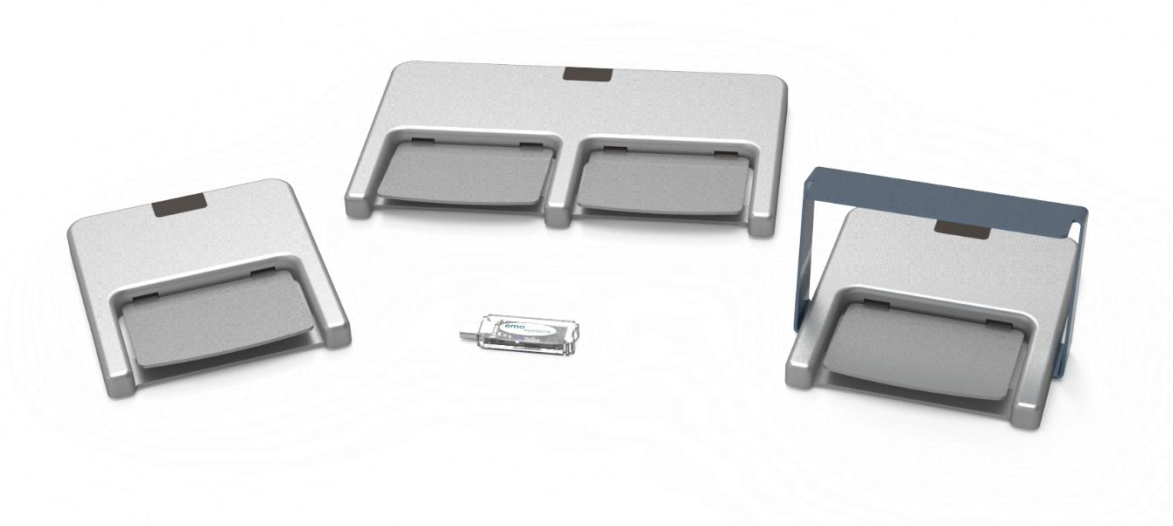
emoswitch-wireless

Product data sheet

Wireless Foot Switch

Instructions



1 FEATURES AND BENEFITS

- Wireless connection via USB dongle
- IP67
- IEC 60601-1- compliant
- UL Recognized Component
- RoHS- compliant
- 100% testing - every **emoswitch** is tested before shipping
- Housing made of natural anodized aluminum, pedals made of steel
- Made in Germany

2 GENERAL DESCRIPTION

EMO Systems GmbH stands for innovative foot switch solutions of the highest quality. With the **emoswitch**, we offer both proven standard versions and customized, customer-specific variants. The **emoswitch-wireless** is available with one or two pedals and connects via USB dongle.

Designed for professional use, all **emoswitch** foot switches meet the highest standards of safety, ergonomics, and design. Their robust, waterproof, and exceptionally flat construction ensures maximum ease of use and a long service life – even under demanding conditions. The materials used are resistant to common disinfectants and cleaning agents, making them ideal for everyday medical use.

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In combination with medical devices, the **emoswitch** ensures reliable operation in the patient environment. Each **emoswitch** meets the design requirements of the IEC 60601-1 standard.

In addition, the UL certification underlines its international usability: The **emoswitch** is therefore also approved for the Canadian and US markets.

3 APPLICATIONS

The **emoswitch-wireless** uses a HID connection and is recognized by the end device as a keyboard input device.

4 VARIANT OVERVIEW

The **emoswitch-wireless** is available in the following versions:

- emoswitch-single-wireless (A10085)
- emoswitch-single-wireless guarded (A10301)
- emoswitch-double-wireless (A10092)

There are several options available to customize the base model to your needs.

The housing is milled from high-quality aluminum. The standard finish is natural anodized. Color anodizing is also available as an option.

The base and pedals are made of stainless steel and can also be finished with various surface treatments.

The switching functions can be identified by laser markings, stickers, or engravings on the housing and pedals, or by a color code.

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5 DRAWINGS

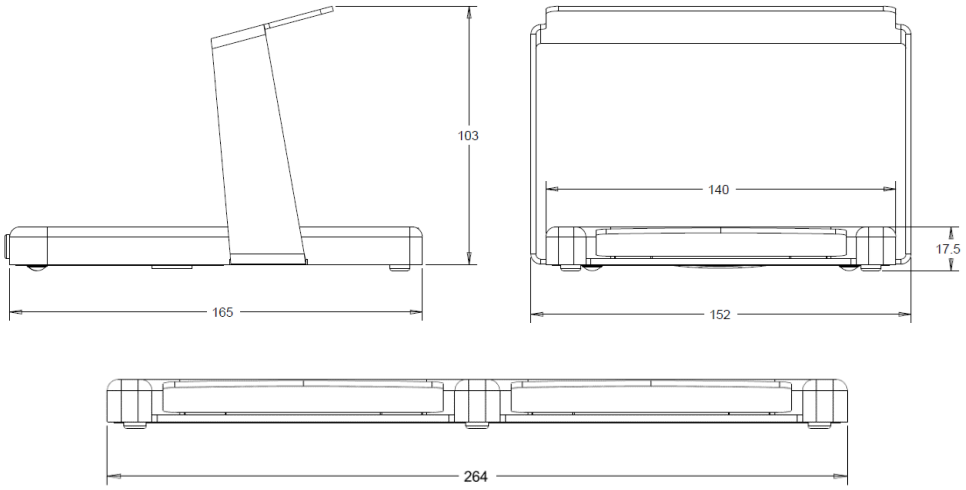


Fig. 1 Dimensional drawing of emoswitch-wireless. All dimensions in millimeters.

6 COMMISSIONING

To use the **emoswitch-wireless**, you will need a free USB-A port on your computer.

Plug the USB receiver into a free USB port on your computer. Then test its functionality by pressing a pedal. An LED on the USB receiver should light up when pressed. Place the footswitch within a 10-meter radius of the receiver at the location where it will be used.

7 SAFETY INSTRUCTIONS

- The **emoswitch-wireless** is not suitable for triggering safety-relevant control commands (e.g., for winches, laser systems, etc.).
- Improper battery replacement can cause an explosion.

8 HOW IT WORKS

Each **emoswitch-wireless** receives a unique 48-bit code, thus preventing accidental activation by a different wireless footswitch. The key combination triggered by the **emoswitch-wireless** can be changed if necessary.

A free tool is available in the download area of our website*.

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Power is supplied by a 3V lithium battery. The **emoswitch-wireless** sends a short signal to the receiver only when a pedal is pressed. Therefore, depending on the application, a battery life of typically five years can be expected.

Should a battery replacement become necessary, this will be carried out by EMO Systems GmbH or one of its authorized partners.

A low battery level is indicated by a continuously flashing USB module.

* Link to manual entry: https://emosystems.de/en/downloads/

9 SPECIFICATIONS

Technical data:

Frequency	ISM Band 2.475 GHz (Ch. 25) IEEE 802.15.4™ Compliant RF Transceiver
International approvals	Radio Regulation Certification for United States (FCC), Canada (IC) and Europe (ETSI)
Reach	approx. 10 m*
Power supply	One internal 3 V Lithium batteries
Type	CR2450, 620 mAh
Life	Typically, 5 years per use case
HF-Output	+0 dBm
USB Standard	USB 2.0 and later
RX-sensitivity e.r.p.	-90 dBm
TX-performance	4 dBm
Protection class (Housing)	IP65
Weight	
emoswitch-single-wireless	739 g
emoswitch-single-wireless guarded	942 g
emoswitch-double-wireless	1484 g

*The range of the radio link can vary greatly depending on environmental conditions. Other radio transmissions can interfere with and disrupt the transmission. Obstacles such as metallic objects can attenuate or deflect the signals.

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Classification:	
Manufacturer	EMO Systems GmbH
Company headquarters	Berlin, Germany
Product name	emoswitch-wireless
Item number	
emoswitch-single-wireless	A10085
emoswitch-single-wireless guarded	A10301
emoswitch-double-wireless	A10092
Operating conditions	
Temperature	1°C to 45°C (typical 25°C)
Humidity	10% to 90% (non-condensing)
Air pressure	860 hPa to 1060 hPa
Storage and transportation	
Temperature	-25°C to 70°C (typical 25°C)
Humidity	10% to 90% (non-condensing)
Air pressure	600 hPa to 1060 hPa

10 SIGNIFICANCE OF THE LED

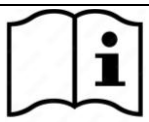
A continuously flashing LED on the USB receiver indicates a low battery level.

11 MAINTENANCE

The **emoswitch-wireless** is maintenance-free when used as intended.

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12 PRODUCT IDENTIFICATIONS

CE	This mark confirms the product's conformity with all applicable EU directives.
UKCA	The UKCA mark is a conformity mark that indicates compliance with the applicable requirements for products sold in Great Britain.
c UL us E362969	Identifies the product as UL „Recognized Component“; File No. E362969.
FC	This device complies with **part 15 of the FCC Rules**. 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. Changes or modifications not expressly approved by the entity responsible for compliance could void the user’s authority to operate this device.
	Read the operating instructions and this data sheet before commissioning.
	This product must not be disposed of with household waste.
	This product contains no lead-based substances and was manufactured with lead-free solder.
RoHS compliant	This product complies with the requirements of the current EU directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

13 ACCESSORIES

There are currently no accessories available for the **emoswitch** footswitches.

14 QUALITY

EMO Systems GmbH maintains a certified quality management system for development and manufacturing according to ISO 9001 and ISO 13485. Every **emoswitch** undergoes a comprehensive quality check before delivery.

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15 PACKAGING

Package contents:

- 1 **emoswitch-wireless** foot switch according to the order.
- 1 USB receiver

16 ENVIRONMENTAL PROTECTION NOTICE

This device contains electronic components.

- It must be returned to the manufacturer for disposal after use.
- It must not be disposed of with household waste.

17 CONTACT AND SUPPORT

You can find the current contact details on our website.: https://emosystems.de/en/downloads/

Or you can reach us by email at the following address: support@emosystems.de

18 LEGAL NOTICES

The information on this data sheet has been compiled to the best of our knowledge and with the utmost care. Nevertheless, we cannot guarantee that it is completely error-free.

The user is responsible and liable for the proper use of this product; we assume no liability. We reserve the right to make changes to this data sheet without prior notice.

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