# **iToilet Project**

The iToilet project addresses older persons who are living independently at home and the needs they have when using a toilet.





iToilet mobile version

The project aims at developing an ICT enhanced toilet system, which is able to empower older persons to live more independently and with increased dignity. iToilet also aims at reducing the workload of the care persons when providing personal assistance on the toilet. It follows a strictly user centred approach and includes continuous ethical review and supervision. End-users are involved right from the beginning for eliciting user requirements and for participatory design activities.

#### **Benefits for primary end-users:**

- Support of body stability (individually adjustable height)
- Support of sitting down and standing up process (dynamic adaptation of toilet)
- Increased safety

## **Benefits for secondary users:**

- Reduced work load
- Less physically demanding

## Benefits for tertiary users (institutions):

- Enhances the care service offered
- Enhances health and well-being of the employees by reduced physical demands during personal assistance provision (e.g. transfer wheelchair / toilet).



iToilet fixed version

# iToilet mobile basic element

The business model aims at a modular product with scalability and customisation of the functionality and services according to the individual customer's needs and wishes.





#### iToilet chair BE (basic element)

- Stabile steel construction, with remote control
- Can be fixed on several Toilet types offer a separately adjustment in height and tilting
- Can be combined with intelligent iToilet components
- Available from: November 2018
- Supplier: Attris (attris.de)



#### **BE with Care Bidet**

- Jasmin Care a Danish developed care bidet in close collaboration with a number of occupational therapists from the country's leading municipalities in welfare technology.
- Available from: today



#### **BE with Toilet Seat**

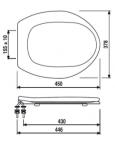
- Standard Toilet Seat
- Material Duroplast
- With stainless steel hinges
- Available from: today

# **Technical parameters**

- Dimensions: 730 x 570 x 820 (mm)
- Tilting: up to 34°
- Hight: 300 mm
- Connection: 230V50Hz, 16A
- Drive control: 24VDC
- Max. user weight: 130 kg
- Colour: White

#### **Technical parameters**

- Suitable for all existing toilets
- Max. user weight: 125 kg
- Size of seat opening: 26 cm
- 2 auto buttons for personal program setting
- Large accessory program
- User-friendly remote control



# iToilet fix basic element

The business model aims at a modular product with scalability and customisation of the functionality and services according to the individual customer's needs and wishes.





#### iToilet chair BE - STV 200

An existing height and tilt adjustable toilet module serves as base for adding several significant enhancements and services

- Available from: today
- Supplier: Attris (attris.de)

# **Technical parameters**

- Mass (H x B): 1200 x 582 mm; deep: 225 mm
- Weight: 78 kg
- Hight: 400 750 mm; tilting: -1° bis + 11°;
- Max use weight c:1,35 kN Max.
- Use weight grippbar:1,5 kN
- Flush: 6 Liter; water connection: G1/2", G3/8"
- Wastwater connection: D N110 HT Rohr
- Drive control: 24 V DC, Power P1 = 0,08 kW
- Connection: 220 230 V / 50 Hz



# iToilet fix basic element

The business model aims at a modular product with scalability and customisation of the functionality and services according to the individual customer's needs and wishes.





#### Your Individualisation

We offer you a wide range of facilities to optimise your personal LIFT TOILET. Just determine the type of handles, seating, toilet bowl or sort of control.

#### Configuration on our website

Compile your individual LIFT TOILET with all expandabilities and get further information on our website:

www.attris.de/produkte/lift-toilette/lift-toilette-stv100







# **iToilet Sensors & Control Box**

All further functions that follow can be combined with both basic elements – the mobile and the fixed version.





#### **BE** with iToilet Sensor

SensorBox system enables iToilet to be capable of continues detecting all the important (adverse) events, to implement SOS call and to coordinate the whole system that embodies complex data processing and remote care scenarios. Emergency procedures are started in different cases (e.g. no movement detection, fall, "HELP" voice detection, emergeny button is pressed).

- Available from: 2019
- Supplier: SMART COM (www.smart-com.si)



#### BE with PIR motion sensor

(wireless motion detector, battery supported)

Supporting SensorBox with necessary information about the user in the toilet facilities. In case user is not moving anymore for a specific period (which is defined to each specific user), emergency scenario is started.



#### BE with Door contact switch

(wireless battery supported)

Detecting if the toilet facility is used or not at specific moment (also some other sensors are involved).

## Technical parameters

- Measurments of the box: 160x100x30 (mm)
- Wireless connectivity with sensors, RFID reader and SOS capabilities.
- Hands-free phone device using standard mobile network (GSM).
- Intelligent inference detection module with virtual sensors.

# **Technical parameters**

- Wireless connected with SensorBox.
- Battery supported autonomy one year and more.

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# **BE with Emergency button**

(wireless battery supported with high visible red button)
In case emergency button is pressed, SOS phone call is proceeded automatically (caregiver is called on his / her mobile phone), any movements of the motor / iToilet is immediately stopped.

# Technical parameters

- Wireless connected with SensorBox.
- Battery supported autonomy one year and more.



#### **BE with RFID reader & Tags**

(battery supported RFID reader)

RFID reader & Tags module is necessary in institutional settings and multiuser environment, i.e. social care institutions. The main reason for integrating the RFID reader is to achieve personalisation of iToilet functionalities, e.g. height and tilt of the bowl, that is adapted to each individual user needs. User is uniquely identified with this identifier, but anonymous, his privacy is not breached.

### Technical parameters

 Freely mounted wherever user like to place it, due to its battery supported autonomy and wireless connectivity with SensorBox.

## **Speech Control**

- Height and tilt of the chair device can be adjusted
- Flush and bidet can be activated/stopped via the following basic speech commands in the three project languages: "sit down", "stand up", "higher", "lower", "flush", "bidet on", "bidet off", "forward", "backward", "stop"
- Additionally the "help" command initiates an emergency call to pre-stored phone numbers.
- Available from: 2020

# **iToilet Sensors & Control Box**

All further functions that follow can be combined with both basic elements

- the mobile and the fixed version.

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#### **Motor Control**

- This component comprises motor control and integrated current and position sensors and couples the toilet hardware to the other iToilet components by enabling them to steer and control it.
- Available from: 2020



## **Fall Control System**

- Fearless automatically alerts people in the event of a fall without having to wear a sensor on the body or any activity from the fallen person. This enables reliable and fast help. The use of fearless allows efficient deployment of nursing staff. At the same time, the system provides a decisive time advantage in an emergency
- Available from: 2020
- Supplier: COGVIS Gmbh (www.cogvis.at)



#### **Care Documentation**

- CareCenter Software GmbH provides automatic entries of the iToilet use in its care documentation system, which is a part of the software "CareCenter". The iToilet user can identify himself by an assigned RFID chip at the iToilet entrance, afterwards the iToilet will adjust to the preferred individual settings of height and tilt for him. After the iToilet user finished and has left the room, a short information about the use (with the Time and Date) is automatically send to the care documentation system. If an emergency case happens, this information is also automatically documented there.
- Care persons can always have a look at the statistics of the iToilet use in the care documentation.
- Available from: today
- Supplier: Care Center (www.carecenter.at)

# **International Partners**

See all of our international partner companies.



# Germany

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#### J. Honoré Care ApS

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