# Control Box
# MD6C-M

MD6C-M is a control box that uses Moteck's proprietary Bus communication protocol. Under this communication protocol framework, new firmware programs can be customized according to the function definitions required by customers. MD6C-M can control up to 4 actuators. It can be fixed on the bed frame or attached to specific Moteck actuators. With IPX5 waterproof protection, it can be used in medical, home care and other applications.

## Features and Options

**Main applications:** Home care, medical
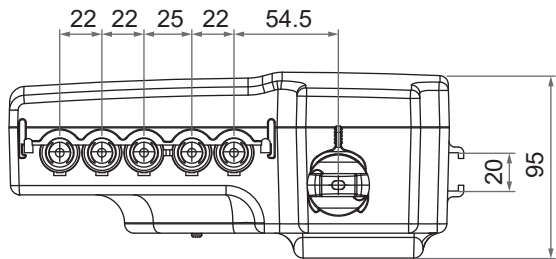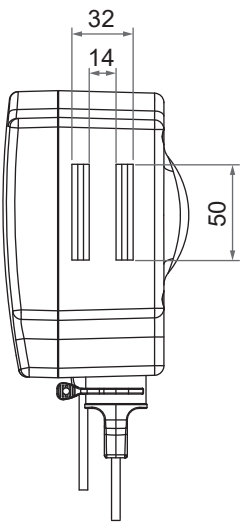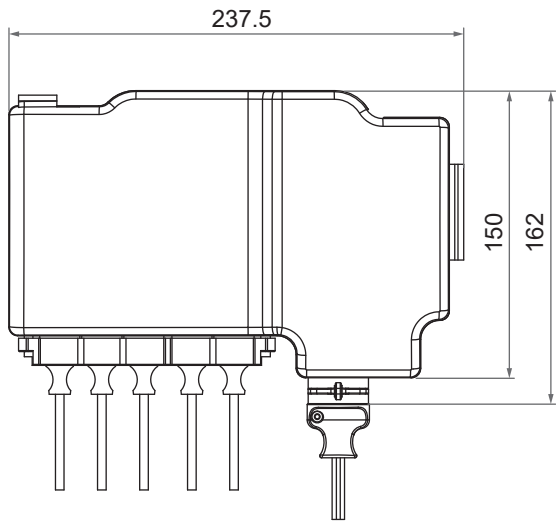**Standard features:**
- Input: 100～240V AC, 50/60Hz (SMPS)
- Output: 24V DC
- Power supply: 29V/2A SMPS
- Max. current: 5A per channel
- Max. number of actuators: 4 channels
- Max. number of controls: 1 channel
- Duty cycle: 10%, max. 2 min. continuous operation in 20 min.
- Positioning memory function with dual hall sensors
- Customized software available
- IP Protection level: IPX5
- Protection class: Class II
- Color: Light gray RAL 7035
- Power cord length: 3000mm
- Certified: CE Marking, EN 60601-1-2, EN 61000-3-2, EN 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
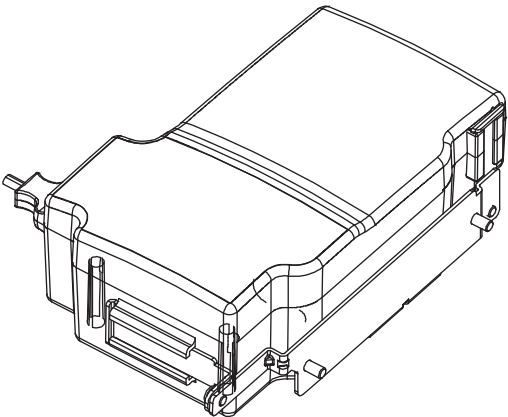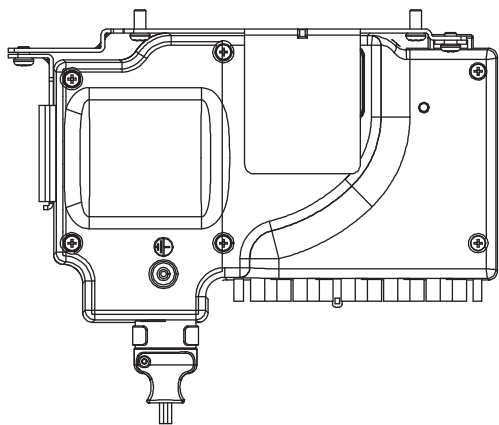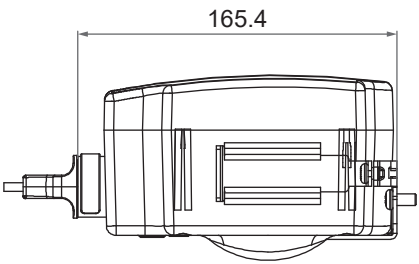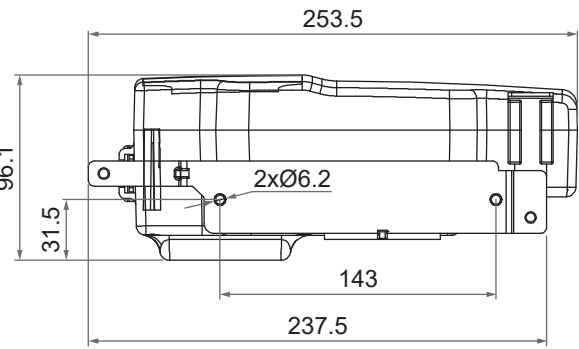
**Options:**
- Charging function, for dedicated external backup battery
- Bracket: Fix MD6C-M to the bed frame (Refer to p.6)
- C Clip: To hook on MD60 or MD66 actuator (Refer to p.6)
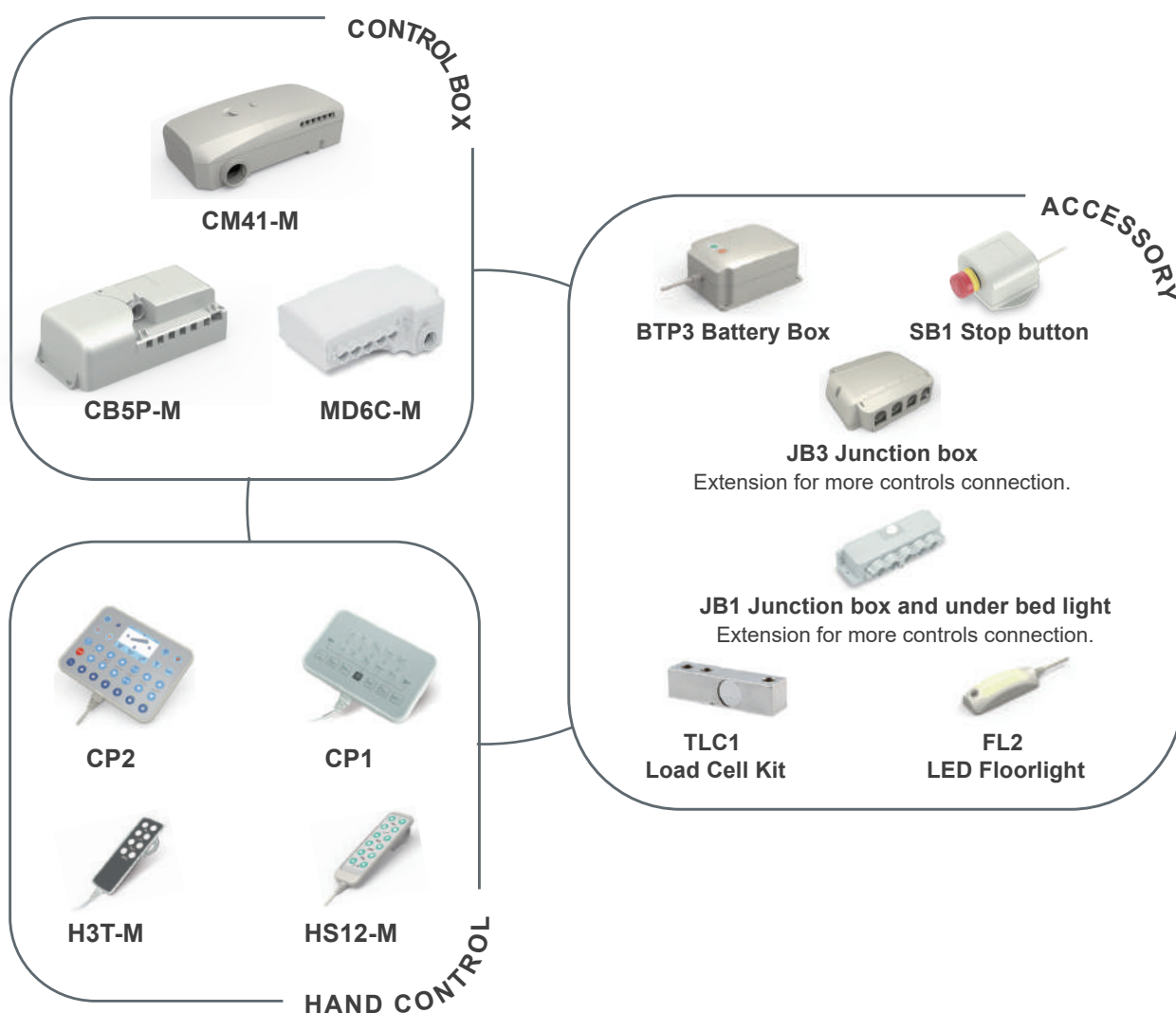
# Dimensions

Unit: mm

237.5

150
162

32
14
50

22 22 25 22 54.5

20
95

## With fixing bracket

253.5

96.1
31.5

2xØ6.2

143

237.5

165.4

# Compatibility

| Product | Model | Compatible requirement |
|---|---|---|
| **Actuator** | MD60, MD66, MD21, MD80, MD82 | - With dual hall sensors<br>- With Moteck V-type or H-type 6-pin DIN plug |
| **Hand control** | H3T-M, CP1, CP2, HS12-M | - With Moteck V-type or H-type 7-pin DIN plug |
| **Accessory** | JB1, JB3, SB1 | |
| **Battery Box** | BTP2 (dedicated version) | - DC jack input/output |

## Moteck Bus family



CONTROL BOX

**CM41-M**

**CB5P-M**    **MD6C-M**

ACCESSORY

**BTP3 Battery Box**    **SB1 Stop button**

**JB3 Junction box**
Extension for more controls connection.

**JB1 Junction box and under bed light**
Extension for more controls connection.

**TLC1**
**Load Cell Kit**

**FL2**
**LED Floorlight**

**CP2**    **CP1**

**H3T-M**    **HS12-M**

HAND CONTROL

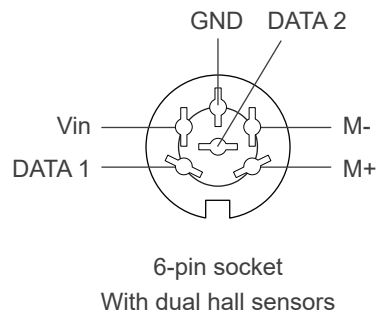**Remarks:**
Please refer to data sheet of each product for details.

# Socket

## Actuator socket (for V-type or H-type DIN plug)



GND  DATA 2

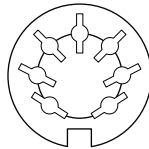Vin ——  —— M-

DATA 1 ——  —— M+

6-pin socket
With dual hall sensors

**Remarks:**
Connect Pin (M+) to "+" & Pin (M-) to "-" of DC power, the actuator will extend.
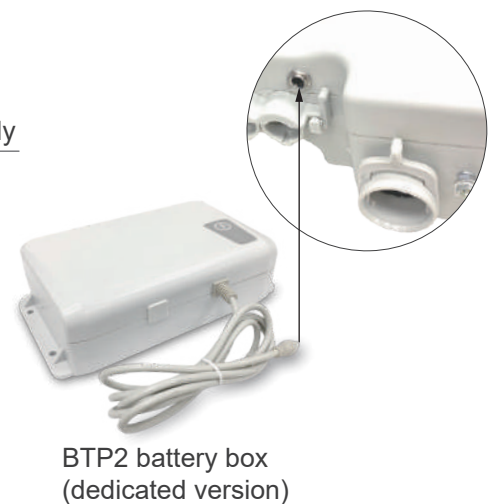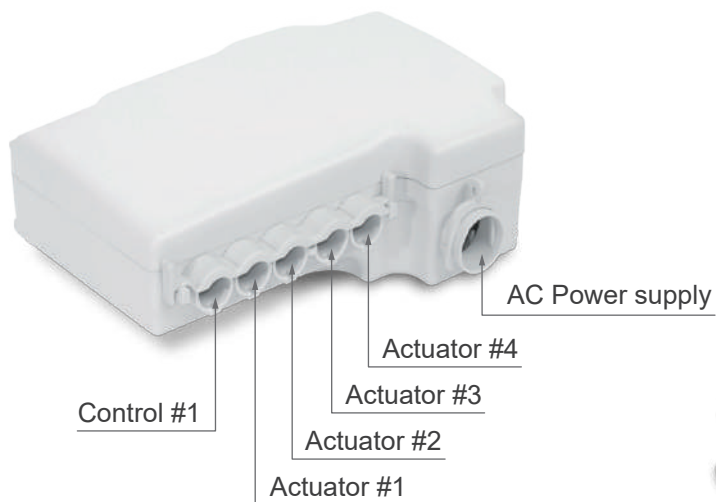
## Control socket (for V-type or H-type 7-pin DIN plug)



7-pin socket



V-type



H-type

# I/O Introduction



AC Power supply

Actuator #4

Actuator #3

Actuator #2

Actuator #1

Control #1



BTP2 battery box
(dedicated version)

# Ordering Key

MD6C-M- **24** - **1** - **4** - **H** **C** **0** **3**

| Output | **24**: 24V DC |
|---|---|
| **Number of control** | **1**: 1 channel |
| **Number of actuator** | **2**: 2 channels<br>**3**: 3 channels<br>**4**: 4 channels |
| **Positioning memory function** | **H**: Positioning memory function with dual hall sensors |
| **Charger function** | **0**: None<br>**C**: With charging circuit for external battery box. |
| **Accessory** | **0**: None<br>**1**: Fixed on MD60 actuator with C Clip<br>**2**: Fixed on MD66 actuator with C Clip<br>**3**: With fixing bracket |
| **AC Power cord length** | **0**: None<br>**3**: 3000mm straight |

# Installation

- Bracket

  ● The contents are as shown below.
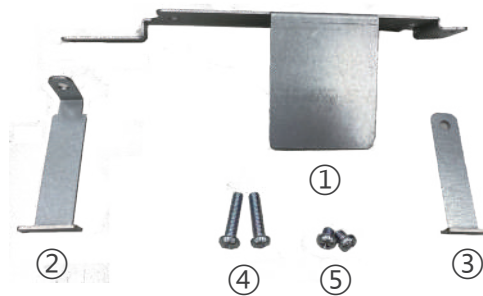
  

  ● Installation Steps

    1. Use screws ④ to lock the bracket parts ① to the bed frame.

    

    2. Put bracket parts ② and ③ in the notch of the control box.

    

    ②                    ③

    3. Use screws to lock the control box to the bracket parts of Step 1, and the installation is completed as shown in the figure below.

    

- C Clip

  ● Put the C Clip onto the actuator, then fix the control box on it, then the control box can be attached to the actuator.

  

  C Clip (for MD60)                                    C Clip (for MD66)

**MOTECK**®
www.moteck.com