

# BA22 Li-Ion Data Sheet



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## Introduction



The BA22 Li-Ion battery pack, designed with additional mechanical safety features within its enclosure, is specifically developed for use with PCP 2.0 control boxes. This lightweight battery includes a built-in charger and boasts a 2.85 Ah capacity. It meets the IPX6 Washable standard and ensures high performance. The BA22 also adheres to the new and improved LINAK standard for battery safety.

The BA22 Li-Ion battery is based on Nickel Manganese Cobalt Oxide (NMC) technology, which utilises a composition free of heavy metals.

Further benefits of using the BA22 Li-Ion are:

- Extended lifetime compared to lead acid batteries
- Easy to remove and attach the battery with snap system and LINAK mounting bracket on application or under control box
- The battery provides charging status information to the control box. This makes it possible to receive an indication via the control box to the hand control or in the Service Data Tool/OneConnect™
- New vented design acts as a pressure valve to ensure a safe failure. This means that there must be an air gap of 5 cm on at least one of the sides so that the vent is not blocked in case of an emergency

## Features and options

|                         |                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------|
| Lithium Ion technology: | Nickel Manganese Cobalt Oxide (NMC)                                                                  |
| Nominal voltage:        | 25.2 - 25.7 V DC                                                                                     |
| Max. discharge current: | 10 A up to 25 °C                                                                                     |
| Charging current:       | 3 A - controlled by control box                                                                      |
| Battery capacity:       | 2.85 Ah                                                                                              |
| Weight:                 | 1 kg                                                                                                 |
| Housing colour:         | Light grey (RAL 7035)                                                                                |
| Protection class:       | IPX6 Washable                                                                                        |
| Cable:                  | Exchangeable                                                                                         |
| Stacking:               | Stacking of either 2 batteries or 1 battery and 1 control box possible                               |
| Packaging:              | Every battery is packed individually and is fitted with lithium caution (transportation requirement) |
| Classification:         | Internally powered                                                                                   |

## Usage

|                             |                                                                                                                                                                           |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compatibility:              | PCP 2.0 control boxes                                                                                                                                                     |
| Charging:                   | Integrated charger in battery                                                                                                                                             |
| Charging time:              | Up to 10 hours                                                                                                                                                            |
| Charging temperature:       | +5 °C to +40 °C<br>Charging at elevated temperatures can impact the charging time.                                                                                        |
| Recharging during storage:  | First recharge of the battery must be no later than 12 months after production date stated on the label. Hereafter the battery must be recharged at least every 12 months |
| Operating temperature:      | +5 °C to +40 °C                                                                                                                                                           |
| Storage temperature:        | -10 °C to +40 °C (+10 °C to +25 °C recommended)<br>The batteries must be stored in an applicable storage room without direct sunlight.                                    |
| Transportation temperature: | -20 °C to +40 °C                                                                                                                                                          |
| Relative humidity:          | 20% to 80% – non-condensing                                                                                                                                               |
| Atmospheric pressure:       | 700 to 1060 hPa                                                                                                                                                           |
| Height above sea level:     | Max. 3000 meters                                                                                                                                                          |
| Approvals:                  | IEC60601-1<br>ANSI/AAMI ES60601-1<br>CAN/CSA-22.2 No 60601-1                                                                                                              |

All BA22 batteries produced in Denmark as of 1 January 2025 will have an extended warranty of 60 months (counting from manufacturing date).

All BA22 batteries produced prior to this date will follow the standard 12 months warranty period for batteries.

## LED functionality



The LED functionality matrix below describes the battery behaviour when the control box is connected to mains.

| LED             | Indication of operation |
|-----------------|-------------------------|
| Solid orange    | Charging                |
| No LED light    | Fully charged           |
| Flashing orange | Error during charging   |

## Ordering Example

| BA22                |                                |                                                             |
|---------------------|--------------------------------|-------------------------------------------------------------|
| Colour              | <input type="text" value="1"/> | 1 = RAL7035                                                 |
| IP-Degree           | <input type="text" value="W"/> | W = Washable                                                |
| Label               | <input type="text" value="1"/> | 1 = Std. label      X = Special label                       |
| PCBA                | <input type="text" value="1"/> | 1 = BA22 PCBA                                               |
| Battery Type        | <input type="text" value="1"/> | 1 = 2850 mAh                                                |
| Enclosure           | <input type="text" value="1"/> | 1 = Std. enclosure (PP)                                     |
| Software            | <input type="text" value="1"/> | 1 = Std. BA22 SW                                            |
| ID (PCP2.0 address) | <input type="text" value="1"/> | 1 = Auto-addressing      (replaces all previous ID numbers) |

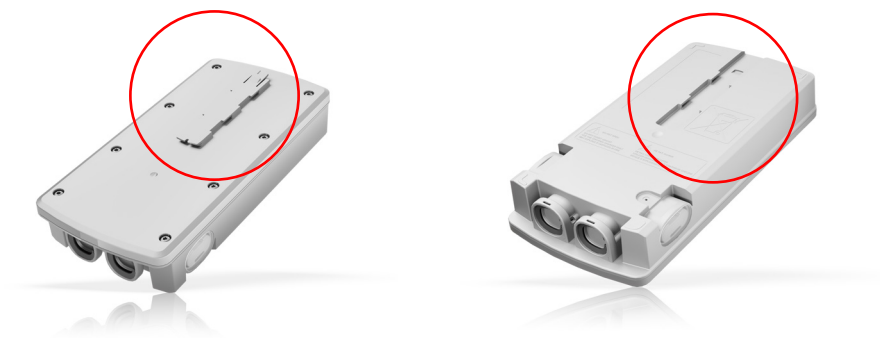
Chosen item number:

BA221W111111

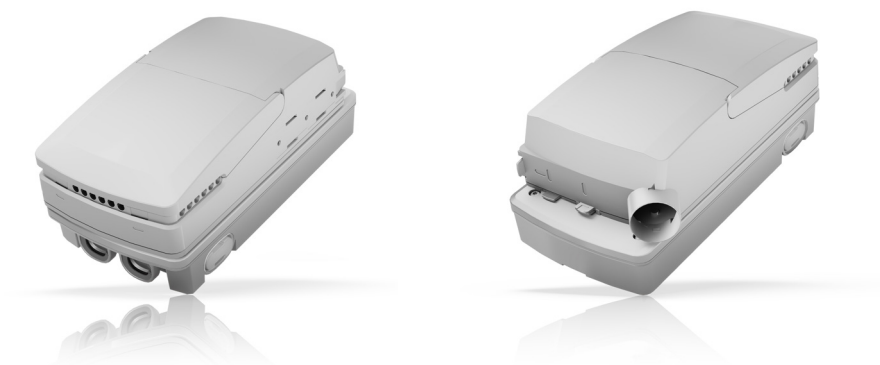


## Mounting

The BA22 battery is equipped with the LINAK mounting clip system, which allows the user to easily mount the control box on top of the battery or mount the battery to the frame of the application, with the mounting bracket seen below.



BA22 mounted with CA/CO control box.



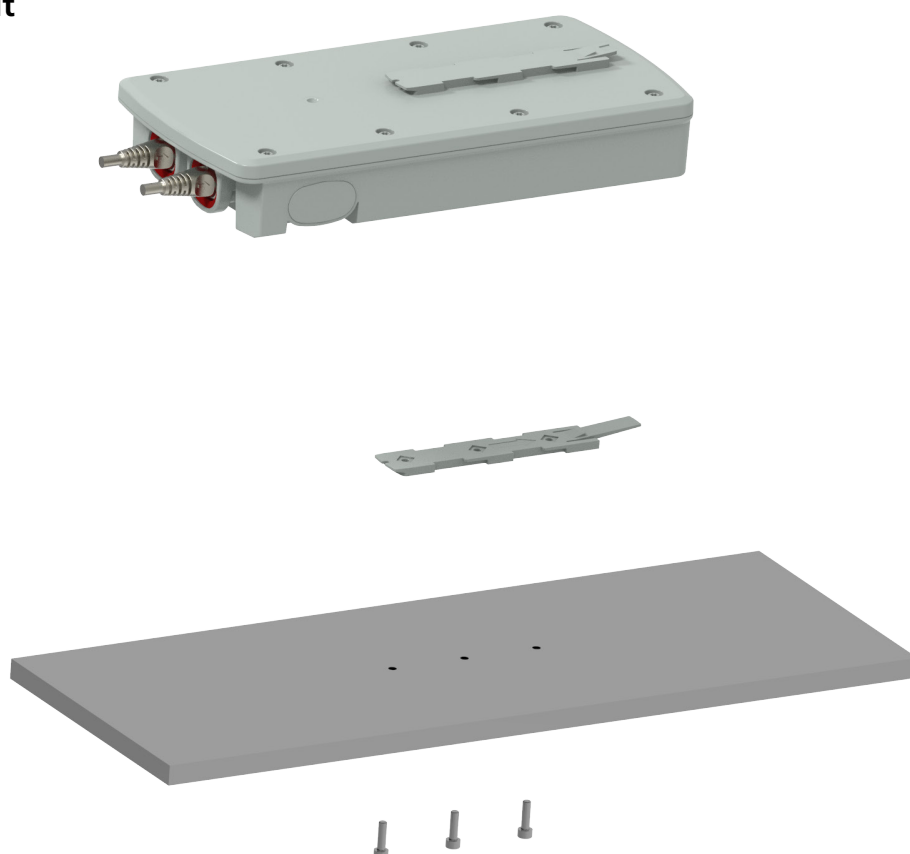
2 x BA22 batteries stacked.



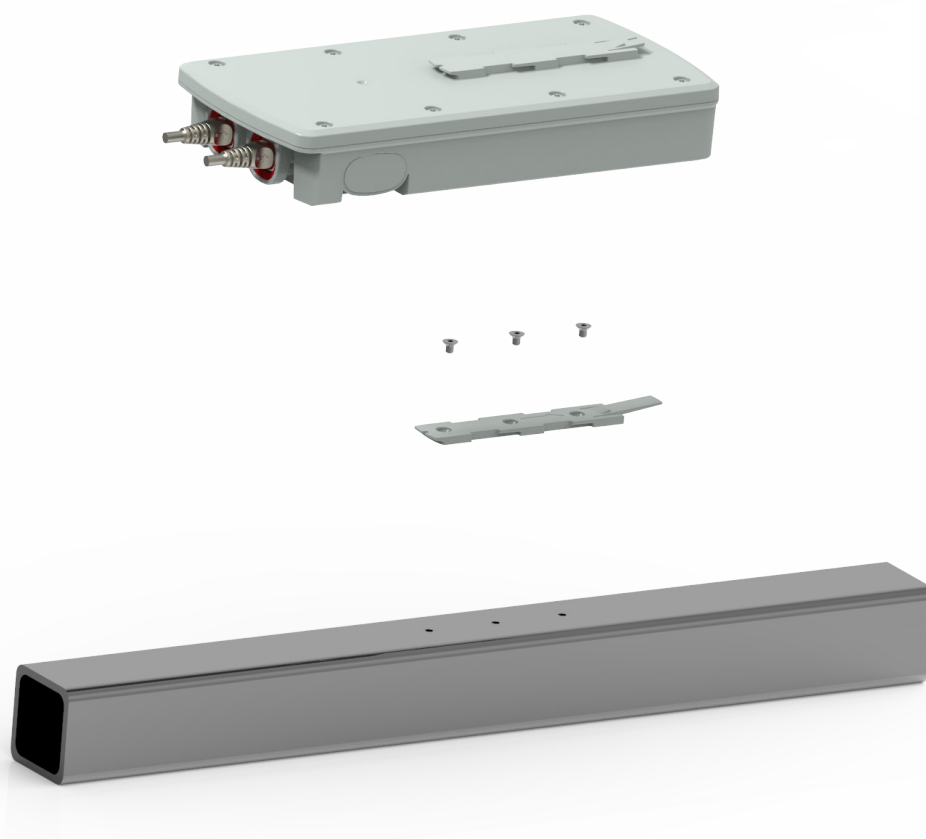


## Mounting possibilities

### Mounted with nut



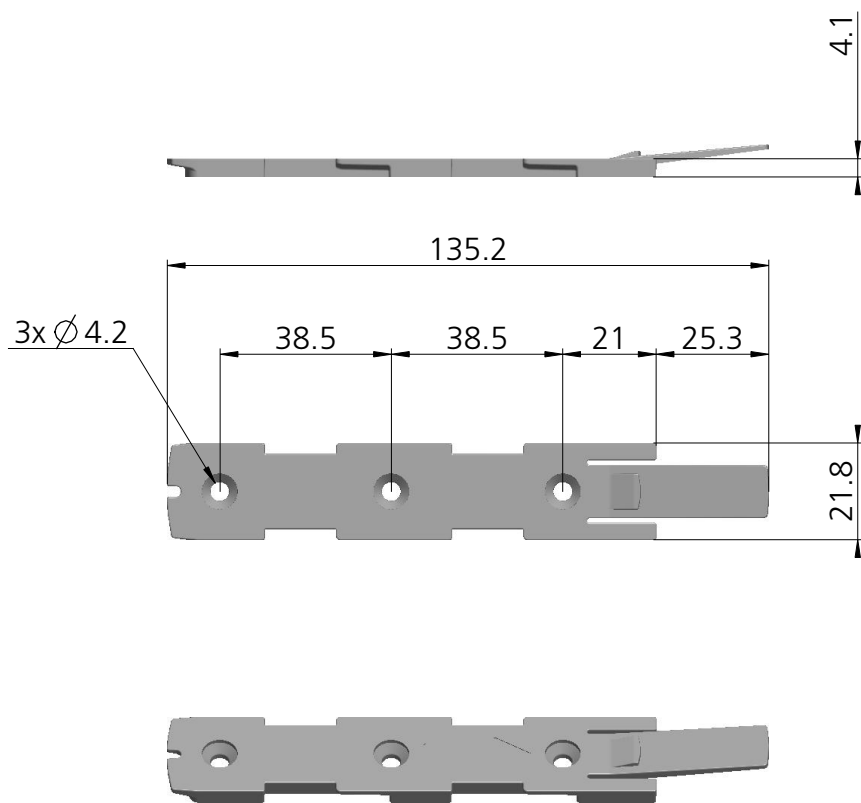
### Mounted without nut



## Mounting brackets

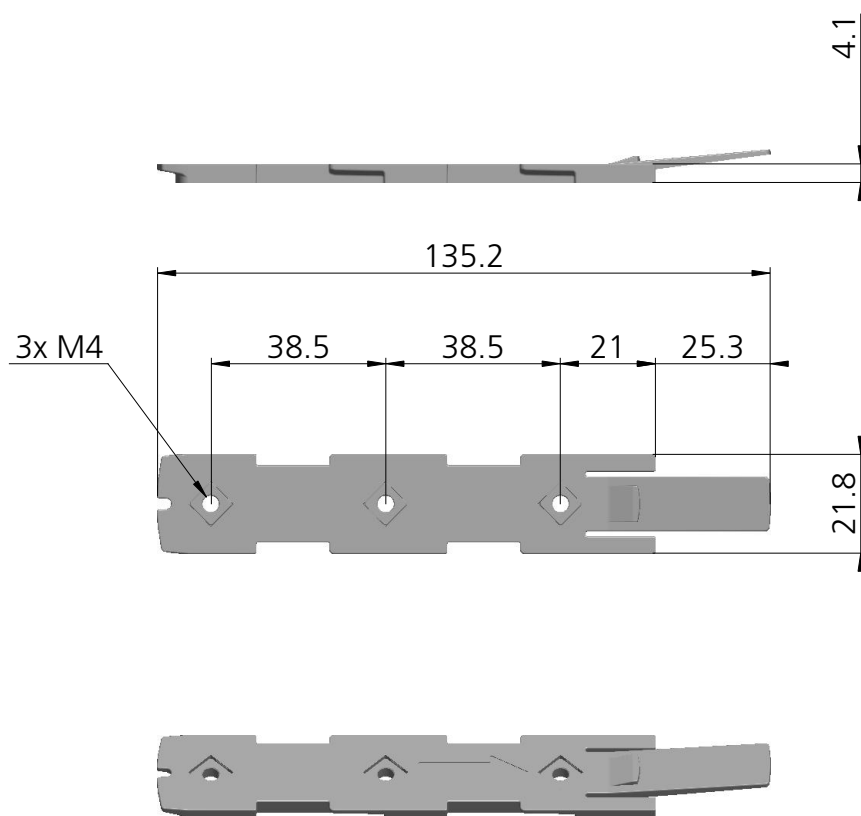
All dimensions are in millimeters (mm).

### Long-tail bracket



Drawing No.: 1015W4026

### Long-tail bracket with nut



Drawing No.: 1015W4027

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