

# BabyCart

Facilitates power and oxygen to transport incubator



Mobile power system creates 230VAC from battery



Flexible docking to connect to transport incubator



Oxygen cylinder holders for ventilator



**Jansen**  
medicars

## BabyCart – power & oxygen for incubator

During the transport of incubator babies within the hospital, it is desirable to provide the incubator and the necessary medical devices, such as ventilators and pumps, with electricity and oxygen. Only in this way a safe transport can take place.

Some medical devices are equipped with a battery, but most devices are not. The amount of energy that a device consumes often determines whether this device can be supplied with a battery. Because the energy required for an incubator is relatively high, most transport incubators are not supplied with a battery.

This BabyCart contains an uninterruptable power supply that provides energy to all connected devices. The lithium battery is a 900Wh energy source, that provides enough energy for a few hours of transport. The compartment for gas cylinders offers enough space for two oxygen cylinders, which is enough for a few hours of ventilation.



### Docking the incubator

The cart is equipped with a flexible docking system, that can easily be connected to a standard runner on the incubator. This docking system is a docking hook that moves vertically on two stainless-steel poles. The coupling is established by lifting the hook and lowering it over the standard runner of the incubator.

The advantage of this concept is that the standard runner on the incubator does not have to be at a fixed height. More importantly, the runner is usually mounted on the height adjustable part of the incubator and the docking will follow the height changes.

### Gas cylinder compartment

The gas cylinder compartment measures HxWxD = 87x46x20 cm, which is sufficient to place two 140mm (5 litre) cylinders or up to three 105mm (2 litre) cylinders. As the ventilator is always placed on top of the cart, the cylinder comparator is equipped with a hose entry.

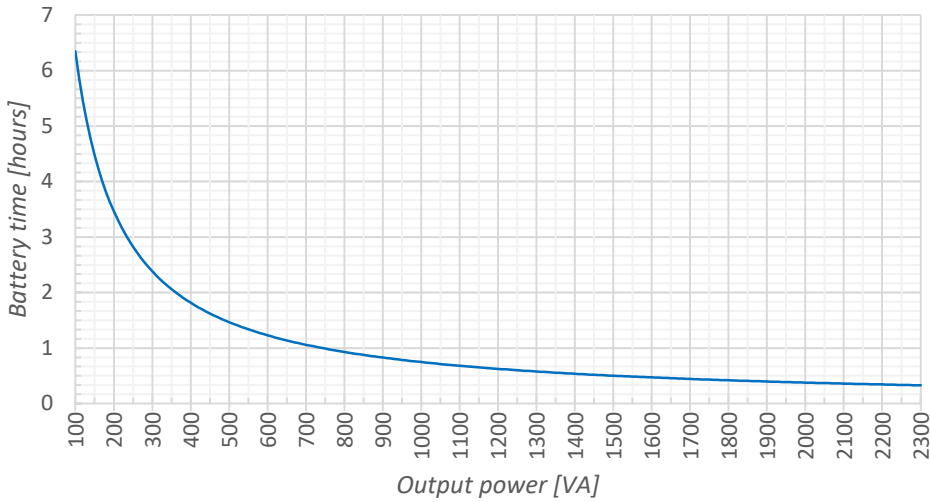
### Battery power supply

As the power system is set-up as an Uninterruptable Power Supply (UPS), it always provides energy from the internal power inverter. This means that the power supply is switched to the battery without interruption when the plug is removed from the wall outlet.

The power supply is based on a 40Ah 24VDC lithium (LiFePO<sub>4</sub>) battery. The integrated inverter generates a 230VAC 50Hz voltage with a maximum power of 2300W. The following diagram shows the battery time as function of the power output for 80% battery discharge.



Battery time = f(output power)



In a normal process, a transport incubator is stand-by (at operating temperature) so that it is immediately available in case it is needed. When connected to a wall outlet, the power supply of the cart delivers up to 450W, without using the battery to supply the connected equipment. This is sufficient to keep the incubator at its desired temperature.

### Various accessories available

Optionally a few accessories can be attached:

- one or two IV poles (ø38mm) can be attached to mount devices
- A 4-way power outlet can be attached to the optional IV pole to power the additional medical devices.
- Standard runners, monitor arms, etc. are available to connect to the IV-poles. Please contact us to discuss your requirements.

### Specifications

|                                |                              |     |
|--------------------------------|------------------------------|-----|
| • Cabinet dimensions (WxDxH)   | 470x570x1190                 | mm  |
| • Weight                       | 83                           | kg  |
| • Standards and classification | NEN/EN/IEC60601-1<br>Class 1 |     |
| • Power system input           |                              |     |
| - Voltage                      | 100 - 240                    | VAC |
| - Frequency                    | 47 - 440                     | Hz  |
| - Max output power             | 565                          | VA  |
| • Power system output          |                              |     |
| - Voltage                      | 230                          | VAC |
| - Frequency                    | 50                           | Hz  |
| - Max output power             | 2300                         | VA  |
| - Net energy storage           | 750                          | Wh  |

### Interested?

Feel free to contact us for an appointment or a quote. We look forward to discussing the best solution with you.

## Configurations and views

## APPLICATION EXAMPLES

