

# ezW300M/W Technical datasheet

ez-Wheel **ezW300M/W** can electrically power:

Hospital equipment Stretchers and wheelchairs Indoor mobile equipment

# Immediate fitting

The self-propelled ez-Wheel can be fitted immediately on any vehicle chassis or mobile equipment. No electrical connection is needed, since the wheel is self-powered by the built-in battery and driven by wireless communication.

# High torque

With peak torque of 55 Nm, the electric motor develops a pushing force of 35 daN. It provides exceptional clearance capability and equipment fitted with the motor can carry loads of several hundred kg.

# Compact and robust

All electric propulsion components are built into the hub itself, freeing the whole chassis from batteries or electric switch boxes. The aluminium hub fairing protects all components from knocks and splashing.

### Quiet

The motor technology and mechanical transmission are designed to run extremely quietly and vehicles fitted with them do not cause any noise pollution.

# Maintenance-free

All components are designed for a maintenance-free lifespan of more than 5 years. The very long-life batteries used in the wheel can sustain thousands of use and recharging cycles.



| Main specifications |                      |  |  |
|---------------------|----------------------|--|--|
| Format/Diameter     | 300 mm               |  |  |
| Type of tyre        | 70 sh. A solid tyre  |  |  |
|                     | Round profile        |  |  |
| Speed               | 0 to 12 km/h         |  |  |
| Nominal power/Peak  | 200 W (S1 at 6 km/h) |  |  |
| Battery capacity    | 240 Wh               |  |  |
| Torque peak         | 55 Nm                |  |  |
|                     | 35 daN of force      |  |  |
| Options             | -                    |  |  |

### **Environmentally responsible**

The approach to ez-Wheel product design is to minimize environmental impact. Collection and recycling are organized for products reaching the end of their lifecycle. Contact your dealer for more information.

# High-Tech built-in solution

All the components necessary for traction are built into the wheel: the electric motor, high energy, very long life batteries, a power controller ensuring optimum motor control and battery management and a wireless interface.

| Motor specification   |   |
|---|---|
| Technology<br>Maximum speed<br>Nominal power<br>Peak torque | Brushless (BLDC PM)<br>240 rpm<br>200 W (\$1 to 110 rpm)<br>55 Nm |
| Battery   |   |
| Electrochemistry Energy Lifespan Recharge Recharging time   | Ni-MH<br>240 Wh<br>>5 years<br>Charger<br>3 hours (for 90%)       |
| Interface   |   |
| Technology<br>Frequency<br>Protocol                         | Wireless (LR WPAN)<br>2.4 GHz<br>Based on IEEE 802.15.4           |

# Multi-purpose

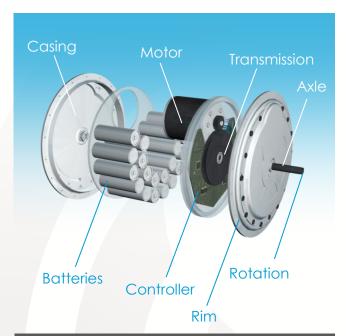
The wheel can be used inside or outside, over a wide range of temperatures. The components – including the battery – do not need any inspection or maintenance over the product's whole lifespan of more than 5 years.

The aluminium casing enables the wheel to bear a load of up to 300 kg. The robust assembly can withstand the stresses of knocks and severe vibration.

| Conditions of use                             |  |
|---|--|
| Temperature<br>IP index<br>Maintenance period | -20 to +60°C<br>IP65<br>>5 years               |
| Weight  |  |
| Total weight wheel<br>Maximum load            | 17 kg<br>260 kg at 4 km/h<br>130 kg at 12 km/h |

### Warranty

ez-Wheel products are guaranteed 1 year from the date of purchase. Consult the general conditions of sale for more information.

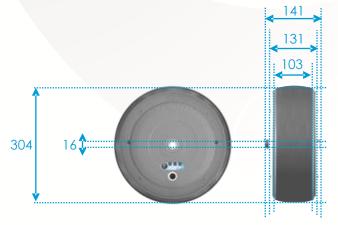


### Standard

The standardized dimensions and mechanical interface make it simple and quick to fit the product. The bored axle of the wheel is mounted on a 16 mm shaft just like a free wheel and the rotation stop consists of a locking collar at the end of the axle.

The wheel hub is fitted with a solid, 25 mm thick polyurethane tyre 70 shore A for drive wheels. The solid tyre does not require any maintenance or servicing and does not need to be replaced.

| Functional dimensions   |        |  |  |
|-------------------------|--------|--|--|
| Outer diameter          | 304 mm |  |  |
| Bore diameter           | 16 mm  |  |  |
| Width of solid tyre     | 103 mm |  |  |
| Thickness of solid tyre | 25 mm  |  |  |
| Width of wheel          | 131 mm |  |  |
| Width of axle           | 141 mm |  |  |



Design blueprint available on the website www.ez-wheel.com



