

ezW300M Technical datasheet

ez-Wheel $ext{ez} = 2000 \text{M}$ 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 Maximum speed Nominal power Peak torque	Brushless (BLDC PM) 240 rpm 200 W (S1 to 110 rpm) 55 Nm
Battery	
Electrochemistry Energy Lifespan Recharge Recharging time	Ni-MH 240 Wh >5 years Charger 3 hours (for 90%)
Interface	
Technology Frequency Protocol	Wireless (LR WPAN) 2.4 GHz 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 IP index Maintenance period	-20 to +60°C IP65 >5 years
Weight	
Total weight wheel Maximum load	17 kg 260 kg at 4 km/h 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.

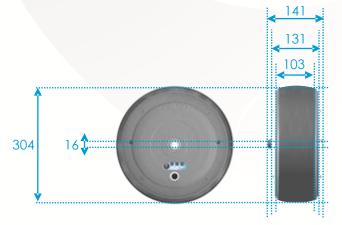


Standard

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

