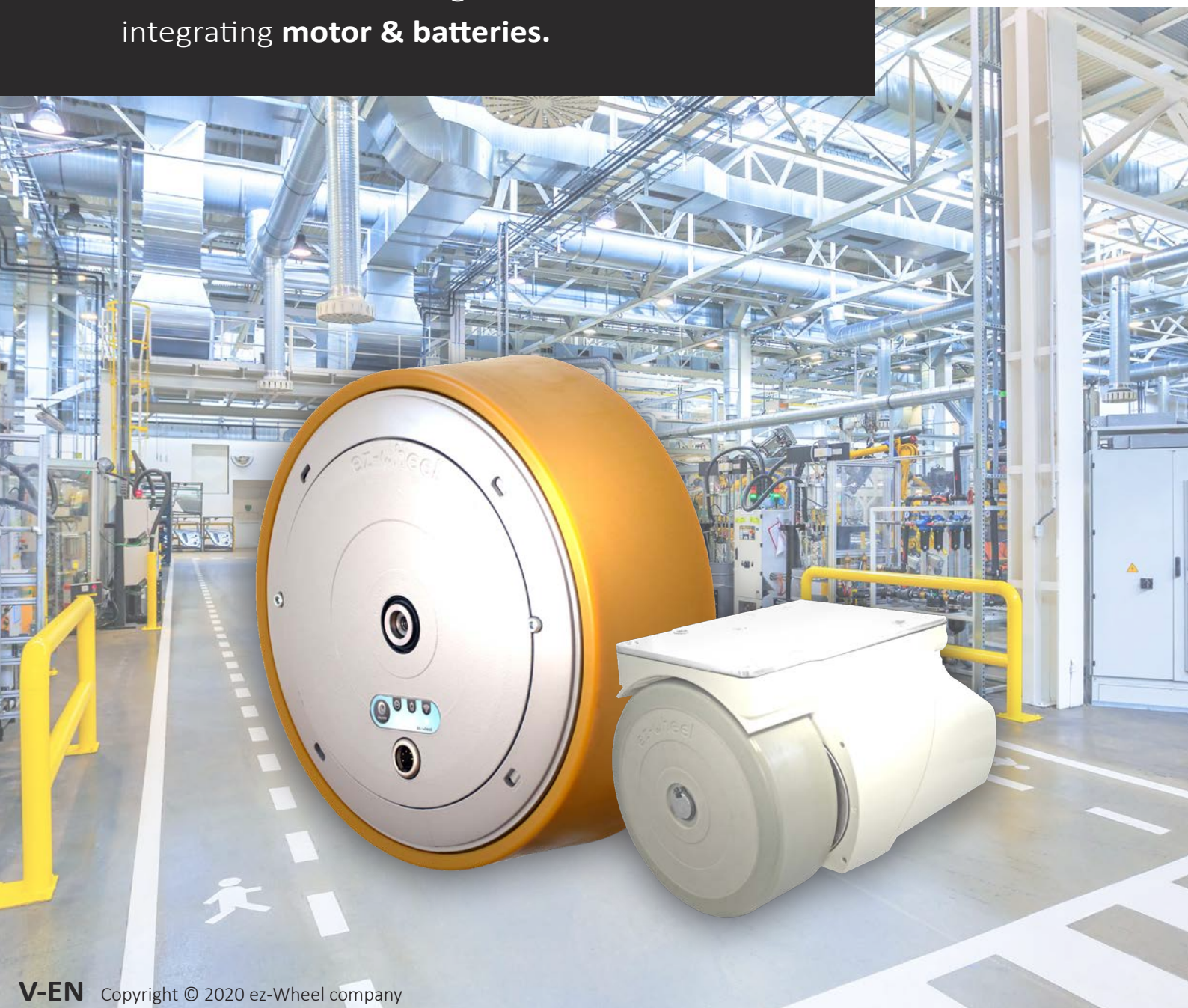




The most advanced range of electric wheels  
integrating **motor & batteries**.



# Summary

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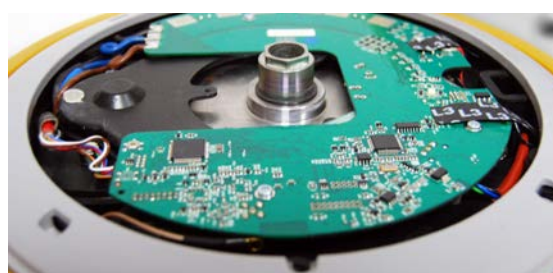
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# The most advanced range of electric wheels



## Concentrate of technology

- ✓ integrated wheel drive
- ✓ patented technology
- ✓ award-winning



## Modularity & simplicity

- ✓ the only autonomous and universal drive wheel
- ✓ multiple applications
- ✓ wide range of accessories



## ★ ★ ★ All-star Mobility

- ✓ prevents musculoskeletal disorders
- ✓ improves working conditions
- ✓ modernizes industrial tools

The ez-Wheel® is a simple and efficient solution to quickly bring electric assistance to any rolling equipment or vehicles.

**Applied to manual equipment, it can solve major issues for employees as well as for companies:**

- reduces professional risk, especially MSD (Musculoskeletal disorders)
- helps to reduce sick leave and offers an increase in productivity of up to +50%
- doubles the load for a fifth of the effort
- generates a return on investment in less than 1 year



## An innovative French company

ez-Wheel SAS is an innovative technology company founded in 2009. Based in Angoulême - in South-West France, the company develops a range of industrial electric traction solutions dedicated to handling equipment and green mobility.

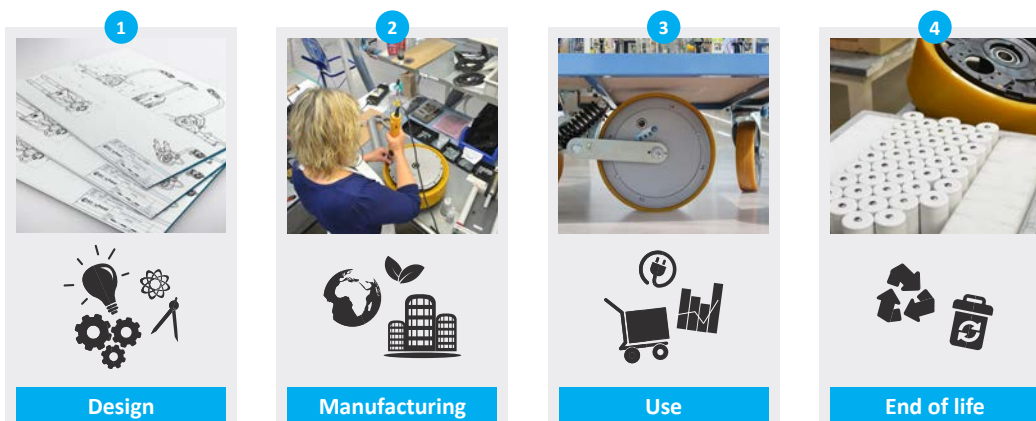
### A R&D-driven strategy

The company dedicates most of its resources to Research and Development into innovating methods. The ez-Wheel team's industrial experience ensures good assessment and management of the risk related to the delivery of innovative products to market. The product's embedded features correspond to those usually required by professionals in the field and the production process uses controlled and standardized methods.

### Eco-design

Our products have been developed following a life-cycle in which **production**, **use** and **end-of-life** conditions are taken into consideration from the **design** phase.

A lot of effort is made regarding the choice of components and the integration of mechatronics, with the intention of delivering to market reliable, powerful, sustainable and eco-friendly products, to satisfy your mobility issues.



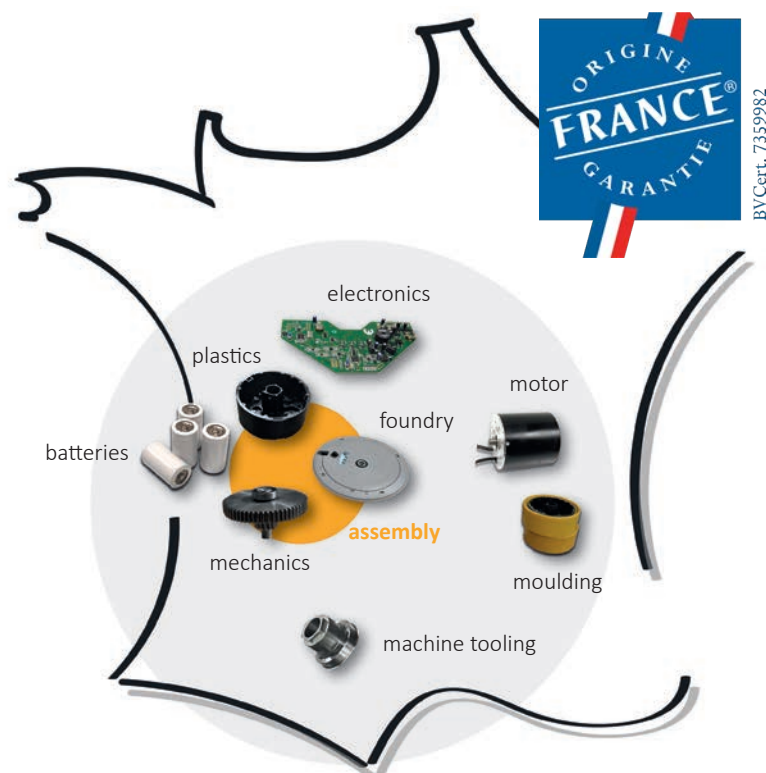


## Strong industrial partners

The production process is ensured by industrial partners selected on quality, competitiveness and local criteria, monitored by our quality/manufacturing departments and outside organizations.

Since 2012, ez-Wheel has been authorised to use the "ORIGINE FRANCE GARANTIE" quality label on its products.

Delivered by approved organisations (PRO France and Bureau Veritas) this certification is obtained by meeting precise tender specifications that validate the manufacturing origin of products in the French national territory.



## Implementation promoting the mechatronics innovation

Founded and located in Charente, a strategic location for electric motors and batteries in the Nouvelle-Aquitaine region, ez-Wheel benefits from geographical and economic advantages provided by a number of industrial players and SMEs implanted locally. The innovative technology of ez-Wheel is the result of recognized expertise and local know-how going back over 50 years.

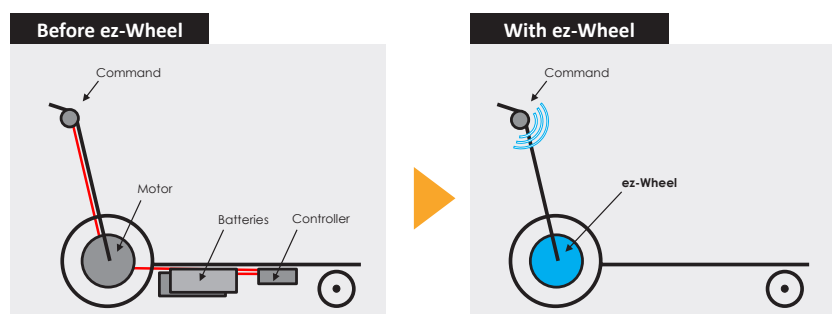


## The first electric wheel integrating motor and batteries

ez-Wheel proposes the first electric wheel featuring embedded motor, batteries and electronics, bringing electrical assistance to rolling equipment. Thanks to optimal integration of the motor, batteries, and electronics inside the hub, the wheel can be fixed quickly and easily – **a safe, clean and quiet solution.**

### Quick fitting

ez-Wheel® wireless technology removes all the peripherals, wire sets and connectors from the chassis, making the integration of our solutions a fast and easy task compared to other alternatives.



### Designed to last

ez-Wheel® products are ready to operate in outdoor or indoor conditions, over an extended temperature range.

All the components including the battery are designed to withstand up to 7 years of operation without any maintenance required, confirmed by real returns on experience.

**IP43**  
**IP66**

Protection Index

**-20°**  
**+60°**

Functional temperatures  
range

**3Y.**  
**7Y.**

Maintenance period  
in years

## The solution fully integrates into a wheel all the functions of a conventional power train:

- ✓ high-end electric motor
- ✓ high energy and super long-life batteries
- ✓ power controller featuring state of the art motor control
- ✓ battery management
- ✓ wireless interface

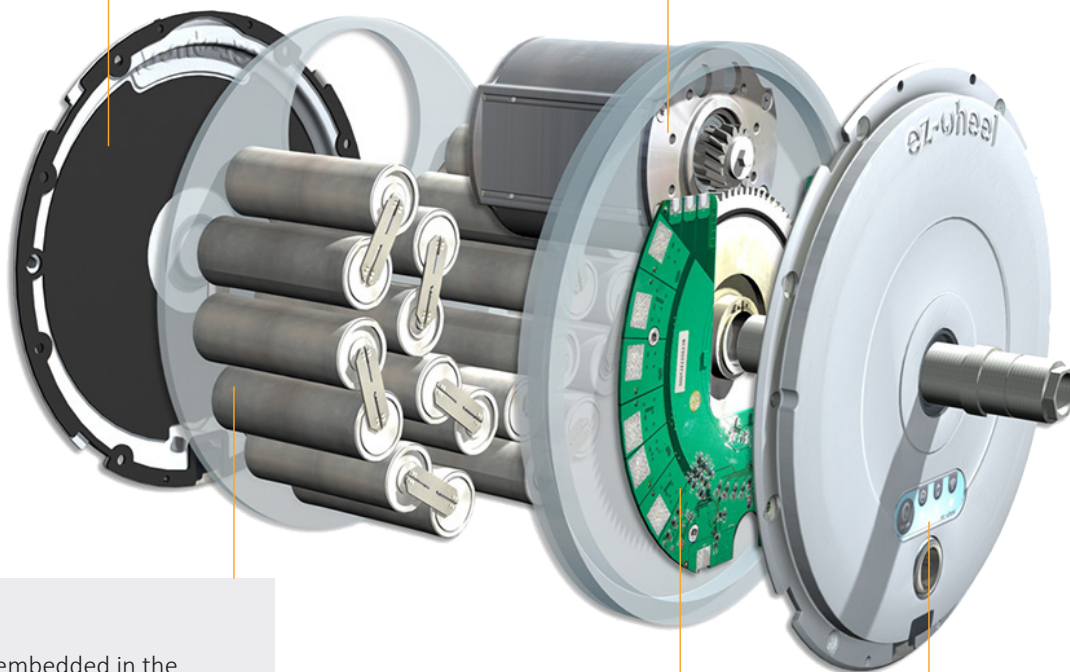


### Cover

All components of the autonomous wheel are contained in a robust and totally waterproof cover. The wheel is able to operate in the toughest environments.

### Motor

The high torque and ultra-compact drive is ensured by a high-tech permanent magnet motor, and a mechanical reducer fully integrated into the wheel's architecture.



### Battery

The energy embedded in the wheel is stored in a cutting-edge Ni-MH battery. Built to last, rock-solid and reliable, this technology is also one of the safest available on the market

### Electronics

The brain of the wheel is powered by two micro-controllers and two real-time operating systems. It enables wireless communication, battery management and full customization of the wheel's features.

### HMI

The user interface is extremely simple. It includes the wheel's recharge connector, a diagnostic button, and lights indicating the wheel, battery level and wireless communication status.



# Product features guide

## Follow the guide!

Our products offer is developed for specific environments and needs. The following pictograms will help you quickly define the product's main characteristics.

|  |  |  |   |
|--|--|--|---|
|  | Help guide<br>Aid to comprehension                   |  | Solid objects greater than 1 mm<br>Sprays of water at any angle up to 60° |
|  | Wireless communication                               |  | Limited ingress of dust<br>Splash-proof from all directions               |
|  | Serial Link communication                            |  | Dust-proof<br>Water jets  |
|  | Enables regenerative charging<br>from wheel rotation |  | Dust-proof<br>Powerful Water jets   |
|  | Maintenance free<br>Lifespan 3 to 7 years            |  | Automatic motor brake   |
|  | Designed to run quietly                              |  | Hygienic design   |
|  | Up to 1 ton moved                                    |  | Non-slip tyre   |
|  | Heavy load moved                                     |  | Shockproof  |
|  | Long-life battery                                    |  | High-pressure jet-cleaning  |
|  | Internal or External battery                         |  | Stainless-steel   |

# Business Sectors

Endless possibilities

Power any rolling equipment dedicated to load handling or people transportation, quickly and easily.

## INDUSTRY

p.10



## AUTOMOTIVE

p.12



## FOOD PROCESSING

p.14



## LOGISTICS / RETAIL

p.16



## MEDICAL / PHARMACEUTICAL

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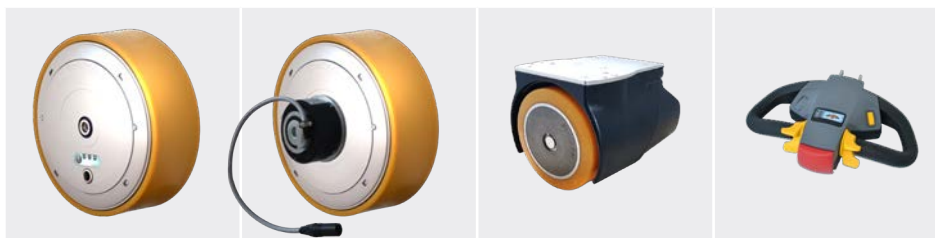
## PUBLIC SPACES

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# INDUSTRY

## Main products:



ezW300I/WR

ezW300I/CCR

ezW150I

ezRTH/W

## Key features:



Internal or external battery



Shockproof



Wireless or cabled control



Heavy load moved

## Endless possibilities:



### HEAVY LOAD CARRIERS

- ✓ Ref. ezW300I/WR **wheel**
- ✓ Ref. ezRTH/W **smart control**



### INDUSTRIAL HAND TRUCKS

- ✓ Ref. ezW150I **wheel**
- ✓ Ref. ezARH **control**
- ✓ **External battery**



### SPECIAL MACHINERY

- ✓ Ref. ezW300I/WR **wheel**
- ✓ Ref. ezR44IN/W **interface**
- ✓ Ref. ezAAR **control**

## They trust us:

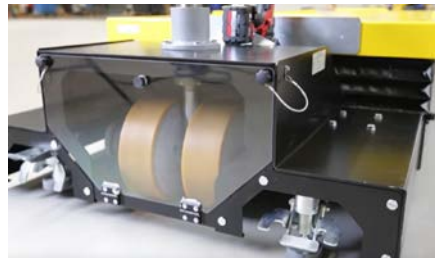




# Suitable for the **Industrial sector**

Up to 2 tons moved without effort!

ez-Wheel® self-propelled electric wheels are ideal for handling equipment and moving heavy loads.



## ◀ Up to 2 tons

Wheels can be paired to double the moved-load capacity. This platform has been fitted with 2 ezW300I/WR wheels and the load being moved is 2 tons.



## ◀ Continuous conveying

The transfer carriage or carousel can easily be powered to ensure repetitive motions. This example is fitted with 2 external batteries to allow for continuous use.

## ▲ Wireless control

The ezW300I/WR wheel is made for heavy load/large dimensions travel assistance. Its Wireless control offers great freedom of the manual control.



## ◀ Special machinery

Most industrial special machinery can be fitted with ez-Wheel® electric wheels and accessories.

# AUTOMOTIVE

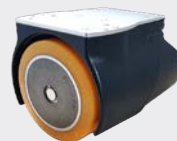
## Main products:



ezW300I/CCR



ezMCS/H/CC



ezW150I



ezRPP/UC

## Key features:



Enables regenerative charging  
from wheel rotation



Shockproof



Wireless or cabled control



Heavy load moved

## Endless possibilities:



### MILK RUN TROLLEYS

- ✓ Ref. ezW300I/WR **wheel**
- ✓ Ref. ezMCS/H **suspension bracket**
- ✓ Ref. ezR44IN/W **interface**
- ✓ **Specific button control (on request)**



### TOWED TRAILERS

- ✓ Ref. ezW300I/CCR **wheel**
- ✓ Ref. ezMCS/H **suspension bracket**
- ✓ Ref. ezRPP/UC **sensitive control**



### KITTING TROLLEYS

- ✓ Ref. ezW150I **wheel**
- ✓ Ref. ezMCS/160 **suspension bracket**
- ✓ Ref. ezARH **control**

## They trust us:

DAIMLER

**FCA**  
FIAT CHRYSLER AUTOMOBILES

**MAN**

**GROUPE RENAULT**

**SCANIA**



# Suitable for **Automotive Industry**

Ensuring continuous service

ez-Wheel® regenerative charging during towing feature is the perfect fit for towed material running 24/7.



## ▲ Sensitive control

The ezRPP/UC push-pull sensitive control resulting from collaboration with a well-known automotive group, is perfect for manoeuvring on the shop floor.



## ◀ Regen charge while towing

ezW300I/WR and ezW300I/CCR electric wheels equipped with the « Regen » option can recharge themselves whilst being towed between the warehouse and the production line.

## ◀ Moving platform

Operators movements may be also assisted by electric wheel ez-Wheel®. This motorized platform is foot-controlled, allowing you to follow the overhead line movement.



## ◀ Charging at workstation

ezW300I/CCR and ezW150I ez-Wheel® electric wheels, can be recharged on each back-to-workstation. The built-in batteries are designed to go through many micro-charging cycles without any premature ageing risks.



# FOOD PROCESSING

## Main products:



ezW300F/W

ezRTH/W/IP

Mascot1A8/IP

## Key features:

High pressure  
jet cleaning

High pressure jet-cleaning

Dust-proof  
Powerful Water jets

Stainless steel



Non-slip tyre

## Endless possibilities:



### PUSHER/PULLER

- ✓ Ref. ezW300F/W **wheel**
- ✓ Ref. ezRTH/W/IP **smart control**



### STAINLESS STEEL TANK

- ✓ Ref. ezW300F/W **wheel**
- ✓ Ref. ezRTH/W/IP **smart control**



### DRUM TROLLEYS

- ✓ Ref. ezW300F/W **wheel**
- ✓ Ref. ezRTH/W/IP **smart control**

## They trust us:



# Suitable for **Food processing**

## Reinforced for serious tasks

ez-Wheel® sealed and waterproof products can operate in severe environments over a wide temperature range.



### ▲ Wireless

ezW300F/W wheel controlled by the ezRTH/W/IP tiller head offers a wireless solution without connector, perfect for demanding and wet environments.



### ◀ Precise manoeuvre

The accurate motorization control allows precise positioning of machines. Here, a wine tank motorized by 2 ezW300F/W. Thanks to ez-Wheel® devices, the operator can easily position the tank above the fill access cover.

### ◀ High pressure jet cleaning

The high protection index and the stainless-steel cover of the ezW300F/W wheel allows high pressure jet cleaning, the robustness of the assembly being reinforced by the absence of connectors and fragile units.

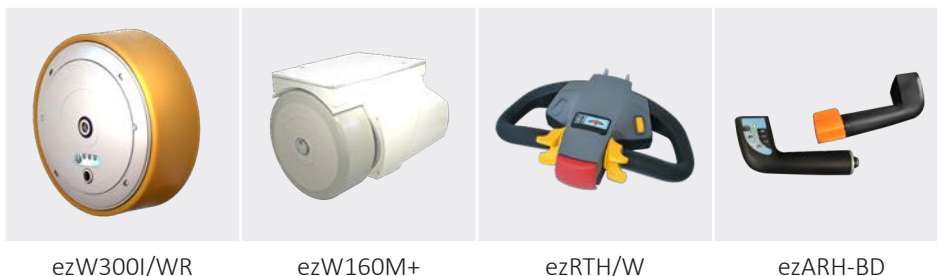


### ◀ Production machinery

Even the most complex production machineries can be motorized by ez-wheel® electric wheels, thanks to its small dimensions and its standard form factor.

# E-COMMERCE / RETAIL

## Main products:



ezW300I/WR

ezW160M+

ezRTH/W

ezARH-BD

## Key features:



Heavy load moved



Automatic motor brake

Maintenance free  
Lifespan 3 to 7 years

Long-life battery

## Endless possibilities:



### ORDER PREPARATION TROLLEYS

- ✓ Ref. ezW160M+ **wheel**
- ✓ Ref. ezMCS/L/160+ **suspension bracket**
- ✓ **Specific control (on request)**
- ✓ **External battery**



### PICKING TROLLEYS

- ✓ Ref. ezW160M+ **wheel**
- ✓ Ref. ezMCS/160 **suspension bracket**
- ✓ Ref. ezARH-BD **control**



### PUSHER/PULLER

- ✓ Ref. ezW300I/WR **wheel**
- ✓ Ref. ezRTH/W **smart control**

## They trust us:





# Suitable for e-Commerce & Retail

Flexible, time-saving solutions

ez-Wheel® solutions are ideal for picking trolleys and platform trucks designed for hundreds of starts and stops per working shift.



## ◀ Multiple starts and stops

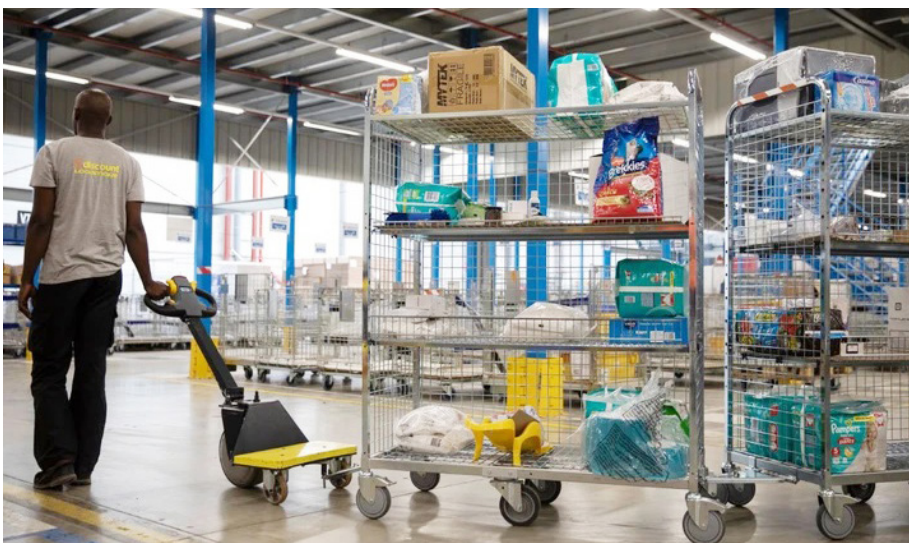
The ez-Wheel® electric wheels are specifically developed to ensure thousands of successive picking trolley starts and stops, and offer acceleration and deceleration assistance, with automatic motor brake and free-wheel control.

## ◀ Low height

The ezW160M+ electric wheel compactness with its castor standards dimensions facilitates mechanical integration, either as original equipment or retrofitted from existing trolleys.

## ▲ Full integration

The ezW160M+ wheels are easily integrated to control picking systems with other electronic components, such as these trucks fitted with Put-to-Light. The wheel is able to power the other components thanks to its on-board energy.



## ◀ Productivity gain

Motorization increases the carrying capacity and reduces the number of trips.

Here, a trolley's puller powered by the ezW300I/WR electric wheel moving a train of 4 preparation trolleys at the same time.

# MEDICAL / PHARMA

## Main products:



ezW300M/W

ezW160M+

ezRTH/W/IP

ezARH-BD

## Key features:



Quiet

Designed to run quietly

IP 66  
IndexDust-proof  
Powerful Water jetsMaintenance free  
Lifespan 3 to 7 years

Hygienic

Hygienic design

## Endless possibilities:



### PATIENT TRANSFER

- ✓ Ref. ezW300M/W **wheel**
- ✓ Ref. ezR44IN/W **interface**
- ✓ Ref. ezARH **control**



### LAUNDRY TROLLEYS

- ✓ Ref. ezW160M+ **wheel**
- ✓ Ref. ezMCS/160 **suspension bracket**
- ✓ Ref. ezARH-BD **control**



### PUSHER/PULLER

- ✓ Ref. ezW300M/W **wheel**
- ✓ Ref. ezRTH/W **smart control**

## They trust us:



# Suitable for **Medical & Pharmaceutical**

Clean, reliable and helpful

## Medical

ez-Wheel® self-propelled electric wheels are ideal to preserve the health of healthcare workers.



### ◀ Ability to climb slopes

The motorization offers a significant crossing torque, which allows a single person to climb slopes and access ramps without wasting time and effort.



### ◀ Multi-purpose

Most trolleys in hospitals can be motorized by ez-Wheel® electric wheels, either by direct motorizing, or by combining them with a motorized puller.

### ▲ Discreet & efficient

The ezW300M/W or ezW160M+ wheels are discreetly integrated to premium medical equipment, and their silent operation is highly appreciated by users.

## Pharmaceutical

ez-Wheel® pharma range is also made for clean-rooms / white rooms with the highest hygienic requirements.



### ◀ White and clean rooms

Thanks to its hygienic design and its special stainless-steel envelope, the ezW300M/W wheel can be used in a white and clean room.



# PUBLIC SPACES

## Main products:



ezW10R/W

ezW300I/WR

ezAAR

ezARH

## Key features:

|   |   |  |                   |
|---|---|--|-------------------|
| <b>IP 54</b><br>Index   | Limited ingress of dust<br>Splash-proof from all directions | <br>Grip      | Non-slip tyre     |
|  | Shockproof  | <br>Long life | Long-life battery |

## Endless possibilities:



### STREET TROLLEYS

- ✓ Ref. ezW10R/W **wheel**
- ✓ Ref. ezR44IN/W **interface**
- ✓ Ref. ezARH **control**



### STAGE MACHINERY

- ✓ Ref. ezW300I/CCR **wheel**
- ✓ Ref. ezR44IN/W **interface**
- ✓ Ref. ezAAR **control**



### FOOD CART

- ✓ Ref. ezW300I/WR **wheel**
- ✓ Ref. ezR44IN/W **interface**
- ✓ Ref. ezAAR **control**

## They trust us:



# Suitable for **Public spaces**

## Even for the craziest ideas

ez-Wheel® products can be used outside on bitumen or turf, as well as uneven terrain. The ez-Wheel® range offers a solution for every mobility need.



### ▲ It's show-time!

The ezW300I/WR wheels can be used on spectacular parade floats, both indoors and outdoors.



### ◀ Manoeuvrability

These two ezW10R/W wheels driven by two ezAAR joysticks allow all complex manoeuvres and are hidden under the full costume.



### ◀ Ability to react

ez-Wheel® devices can motorize the most bulky equipment quickly and easily, so just a single person is required for this kind of manoeuvre.

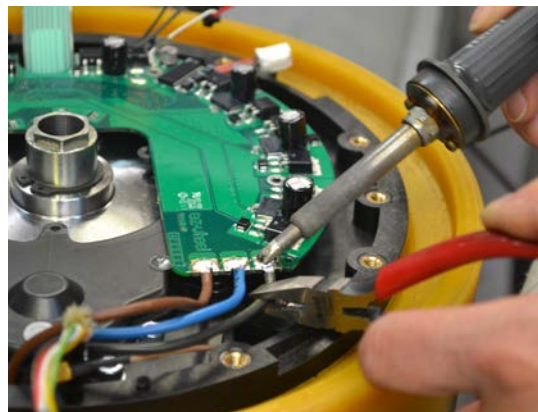
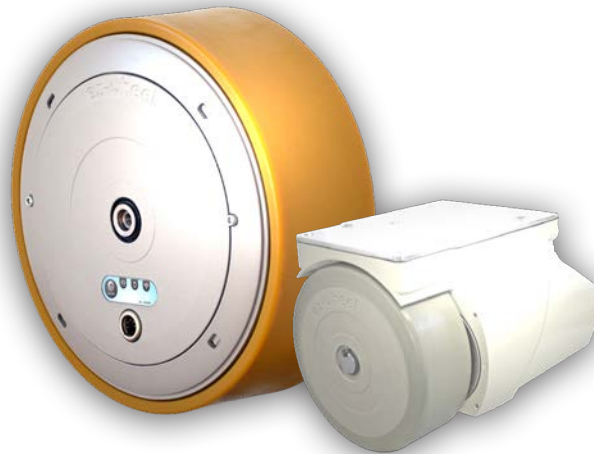


### ◀ Multi-environments

The ezW300I/WR or ezW10R/W wheels can be used on maintenance and delivery equipment or even agricultural machinery.



# ELECTRIC WHEELS





# ez-Wheel®

Electric wheel range



BYCert. 7359982

## Series 300

### electric wheel **Series 300I**

Developed for industrial use



p.24

### electric wheel **Series 300M**

Developed for the medical environment



p.26

### electric wheel **Series 300F**

Developed for the food processing industry

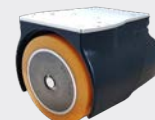


p.28

## Series 150/160

### electric wheel **Series 150I**

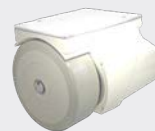
Developed for industrial use



p.30

### electric wheel **Series 160M**

Developed for the medical environment



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## Series 10"

### electric wheel **Series 10"**

Developed for the outdoors



p.34

# electric wheel Series 300I

Developed for industrial use



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



- Ø 300 mm
- 1000 kg moved
- IP 54
- PU 80 sh.A flat profile



## Ref. ezW300I/WR



### Uses

- industrial handling tools
- towed rolling equipment
- trolley
- pusher/puller

### Technical features

|                       |                         |
|-----------------------|-------------------------|
| Diameter              | 300 mm                  |
| Speed range           | 0 to 9 km/h             |
| Peak pushing effort   | 35 daN<br>Moves 1000 kg |
| Nominal performance   | 12 daN at 6 km/h        |
| Maximum rolling speed | 12 km/h                 |
| Battery capacity      | 240 Wh                  |
| Wheel weight          | 17 kg                   |
| Function ⊕            | Regen                   |

## Ref. ezW300I/CCR



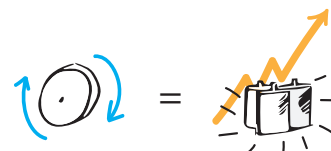
### Uses

- industrial handling tools
- towed rolling equipment
- trolley

### Technical features

|                       |                         |
|-----------------------|-------------------------|
| Diameter              | 300 mm                  |
| Speed range           | 0 to 9 km/h             |
| Peak pushing effort   | 35 daN<br>Moves 1000 kg |
| Nominal performance   | 12 daN at 6 km/h        |
| Maximum rolling speed | 12 km/h                 |
| Battery capacity      | 240 Wh                  |
| Wheel weight          | 18 kg                   |
| Function ⊕            | Regen                   |

### ⊕ Regen feature



⊕ It enables the built-in battery to be recharged using the kinetic energy produced by the rotation of the wheel.

The wheel can be charged while rotating at a speed between 3 and 12 km/h, for instance during the towing phase of a trolley.

In this phase, the wheel switches into the charging mode automatically as soon as rotation is detected. The wheel then presents a resisting (braking) torque and the braking energy recovered by the motor is injected back into the battery.

Regenerative charging is an exclusive function developed by ez-Wheel.

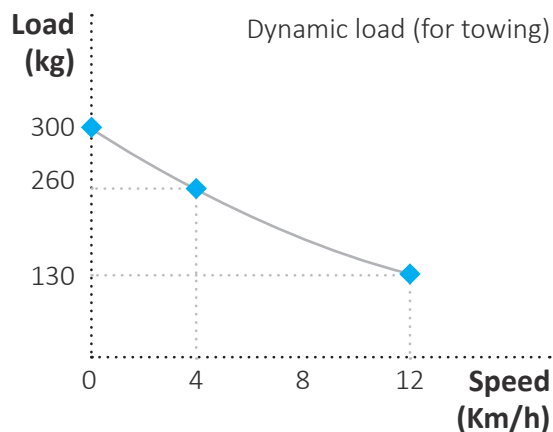
## Weight

The robust assembly can withstand knocks and severe vibration and enables the wheel to carry some load.

**17 kg**

 Wheel weight  
/WR

**18 kg**

 Wheel weight  
/CCR


## Conditions of use

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.

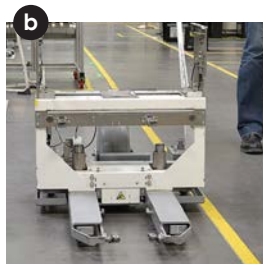
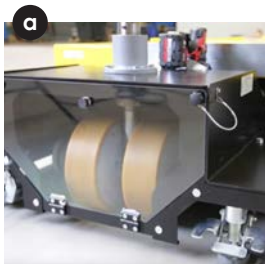
**-20°  
+60°**

 Functional temperatures  
range

**5Y.  
7Y.**

 Maintenance period  
in years

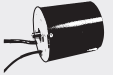
## Applications examples



- a. Heavy duty platform
- b. Special machinery
- c. Heavy load carrier

## Components specifications

### Motor



|                     |  |
|---------------------|--|
| Technology          | BLDC PM                                    |
| Gearbox             | 1-stage helical                            |
| Indicative lifespan | 5000 h / 15000 km<br>1500 000 starts/stops |
| Nominal Speed       | 110 rpm (6,2 km/h)                         |
| Nominal power       | 200 W (S1)                                 |
| Peak Torque         | 52 Nm                                      |

### Battery



|                       |  |
|-----------------------|--|
| Electro-chemistry     | Ni-MH long life                                    |
| Energy                | 240 Wh   |
| Indicative lifespan   | 5-8 years  |
| Recharge mode         | - Charger<br>- Towing /WR /CCR<br>- External power |
| Minimum charging time | 2.5 hours (to 90%)                                 |

### Interface



|          |                                  |
|----------|----------------------------------|
| Wired    | Serial                           |
| Wireless | LR WPAN 2.4 GHz<br>ieee 802.15.4 |



# electric wheel Series 300M

Developed for the medical environment



BV Cert. 7359982

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



- Ø 304 mm
- 1000 kg moved
- IP 65
- 70 sh.A Polyurethane bomb profile



Ref. ezW300M/W



#### Uses

- medical devices
- pusher/puller

#### Technical features

|                       |                         |
|-----------------------|-------------------------|
| Diameter              | 304 mm                  |
| Speed range           | 0 to 9 km/h             |
| Peak pushing effort   | 35 daN<br>Moves 1000 kg |
| Nominal performance   | 12 daN at 6 km/h        |
| Maximum rolling speed | 12 km/h                 |
| Battery capacity      | 240 Wh                  |
| Wheel weight          | 17 kg                   |
| Option                | -                       |

Ref. ezW300M/W



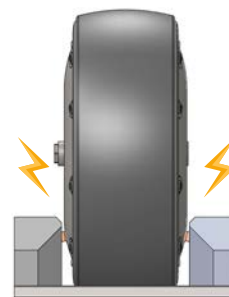
#### Uses

- medical devices
- clean room material
- pusher/puller

#### Technical features

|                       |   |
|-----------------------|---|
| Diameter              | 304 mm                                    |
| Speed range           | 0 to 9 km/h                               |
| Peak pushing effort   | 35 daN<br>Moves 1000 kg                   |
| Nominal performance   | 12 daN at 6 km/h                          |
| Maximum rolling speed | 12 km/h                                   |
| Battery capacity      | 240 Wh                                    |
| Wheel weight          | 17 kg                                     |
| Option ⊕              | - Stainless Steel<br>recharge per contact |

#### ⊕ Recharge per contact



⊕ Enables the built-in battery to be recharged by direct contact on wheel sides

Available on: stainless Steel wheel  
Ref. ezW300M/W

## Weight

The robust assembly can withstand knocks and severe vibration and enables the wheel to carry some load.

**17 kg**

Wheel weight

**300 kg**

Vertical load

## Conditions of use

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.

**-20°  
+60°**

 Functional temperatures  
range

**5Y.  
7Y.**

 Maintenance period  
in years

## Applications examples

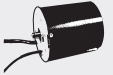


a. Emergency stretcher  
b. Stainless steel tank  
c. Pusher/Puller



## Components specifications

### Motor



|                            |  |
|----------------------------|--|
| <b>Technology</b>          | BLDC PM                                    |
| <b>Gearbox</b>             | 1-stage helical                            |
| <b>Indicative lifespan</b> | 5000 h / 15000 km<br>1500 000 starts/stops |
| <b>Nominal Speed</b>       | 110 rpm (6,2 km/h)                         |
| <b>Nominal power</b>       | 200 W (S1)                                 |
| <b>Peak Torque</b>         | 52 Nm                                      |

### Battery



|                              |                    |
|------------------------------|--------------------|
| <b>Electro-chemistry</b>     | Ni-MH long life    |
| <b>Energy</b>                | 240 Wh             |
| <b>Indicative lifespan</b>   | 5-8 years          |
| <b>Recharge mode</b>         | Charger            |
| <b>Minimum charging time</b> | 2.5 hours (to 90%) |

### Interface



|                 |                                  |
|-----------------|----------------------------------|
| <b>Wired</b>    | no                               |
| <b>Wireless</b> | LR WPAN 2.4 GHz<br>ieee 802.15.4 |

# electric wheel Series 300F

Developed for the food processing industry



BYCert 7359982

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



- Ø 304 mm
- 1000 kg moved
- IP 66
- 50 sh.A Polyurethane enhanced grip



## Ref. ezW300F/W



### Uses

- rolling equipment for harsh environment
- pusher/puller
- food processing material

### Technical features

|                       |                         |
|-----------------------|-------------------------|
| Diameter              | 304 mm                  |
| Speed range           | 0 to 9 km/h             |
| Peak pushing effort   | 35 daN<br>Moves 1000 kg |
| Nominal performance   | 12 daN at 6 km/h        |
| Maximum rolling speed | 12 km/h                 |
| Battery capacity      | 240 Wh                  |
| Wheel weight          | 17 kg                   |
| Option                | -                       |

## Ref. ezW300F/W



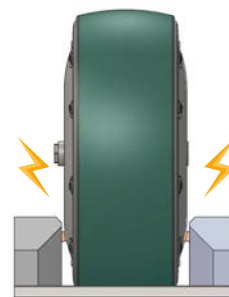
### Uses

- rolling equipment for harsh environment
- pusher/puller
- food processing material

### Technical features

|                       |   |
|-----------------------|---|
| Diameter              | 304 mm                                    |
| Speed range           | 0 to 9 km/h                               |
| Peak pushing effort   | 35 daN<br>Moves 1000 kg                   |
| Nominal performance   | 12 daN at 6 km/h                          |
| Maximum rolling speed | 12 km/h                                   |
| Battery capacity      | 240 Wh                                    |
| Wheel weight          | 17 kg                                     |
| Option ⊕              | - Stainless Steel<br>recharge per contact |

### ⊕ Recharge per contact



⊕ Enables the built-in battery to be recharged by direct contact on wheel sides

Available on: stainless Steel wheel  
Ref. ezW300F/W



## Weight

The robust assembly can withstand knocks and severe vibration and enables the wheel to carry some load.

**17 kg**

Wheel weight

**300 kg**

Vertical load

## Conditions of use

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.

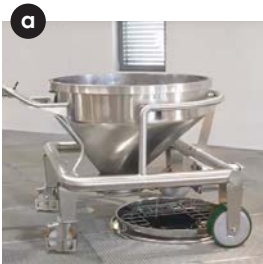
**-20°  
+60°**

 Functional temperatures  
range

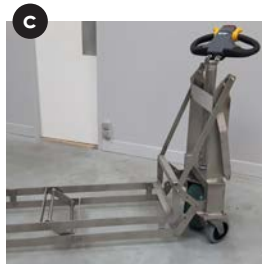
**5Y.  
7Y.**

 Maintenance period  
in years

## Applications examples

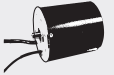


a. Mobile tank  
b. Pusher/puller  
c. Drum trolley



## Components specifications

### Motor



|                     |  |
|---------------------|--|
| Technology          | BLDC PM                                    |
| Gearbox             | 1-stage helical                            |
| Indicative lifespan | 5000 h / 15000 km<br>1500 000 starts/stops |
| Nominal Speed       | 110 rpm (6,2 km/h)                         |
| Nominal power       | 200 W (S1)                                 |
| Peak Torque         | 52 Nm                                      |

### Battery



|                       |                    |
|-----------------------|--------------------|
| Electro-chemistry     | Ni-MH long life    |
| Energy                | 240 Wh             |
| Indicative lifespan   | 5-8 years          |
| Recharge mode         | Charger            |
| Minimum charging time | 2.5 hours (to 90%) |

### Interface



|          |                                  |
|----------|----------------------------------|
| Wired    | no                               |
| Wireless | LR WPAN 2.4 GHz<br>ieee 802.15.4 |

# electric wheel Series 150I

Developed for industrial use



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



- Ø 150 mm
- 1000 kg moved
- IP 43
- 92 sh.A Blickle® Extrathane flat profile



## Ref. ezW150I



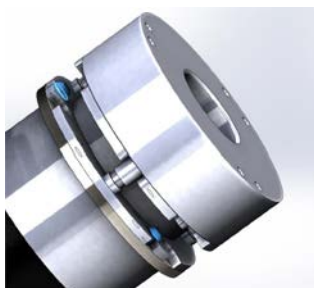
### Uses

- industrial trolleys
- rolling equipment for factories
- mobile workstations and tools

### Technical features

|                       |  |
|-----------------------|--|
| Diameter              | 150 mm                                     |
| Speed range           | 0 to 5 km/h                                |
| Peak pushing effort   | 35 daN<br>Moves 1000 kg                    |
| Nominal performance   | 15 daN at 4 km/h                           |
| Maximum rolling speed | 8 km/h                                     |
| Battery capacity      | 0 - 70 - 140 Wh                            |
| Wheel weight          | 10 kg                                      |
| Options +             | - Parking brake /B<br>- Additional battery |

### + Parking brake Option



#### + Parking Brake: Ref. /B

Electro-mechanical parking brake.

### + Additional battery Option



#### + Additional battery: Ref. ezB24V3AH/160

Internal batteries.  
Delivered separately, to be installed in Series 150 and 160.

## Weight

Thanks to the reinforced cast iron housing and wheel hub, the Series 150 wheel can withstand knocks and severe vibration and enables the wheel to carry some load.

**10 kg**

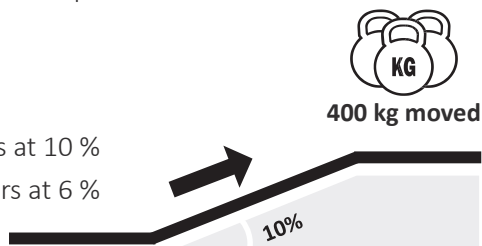
Wheel weight

**400 kg**

 Vertical load  
up to 5 km/h

On a PRM standards slope:

- 2 meters at 10 %
- 10 meters at 6 %



## Conditions of use

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.

**-10°  
+40°**

 Functional temperatures  
range

**2Y.  
3Y.**

 Maintenance period  
in years

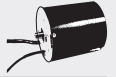
## Applications examples



- Conveyor transfer car
- Tool trolley
- Scissor lift trolley

## Components specifications

### Motor



|                     |  |
|---------------------|--|
| Technology          | BLDC PM                                    |
| Gearbox             | 2-stage helical                            |
| Indicative lifespan | 3000 h / 10000 km<br>1000 000 starts/stops |
| Nominal Speed       | 166 rpm (4,7 km/h)                         |
| Nominal power       | 170 W (S3, 15% duty cycle, 5 min max)      |
| Peak Torque         | 27 Nm                                      |

### Battery



|                       |   |
|-----------------------|---|
| Electro-chemistry     | Ni-MH long life                           |
| Energy                | 70 Wh (1 battery)<br>140 Wh (2 batteries) |
| Indicative lifespan   | 2-3 years                                 |
| Recharge mode         | - Charger<br>- External power             |
| Minimum charging time | 1.5 hours (to 90%)                        |

### Interface



|          |  |
|----------|--|
| Wired    | - Analog<br>- Serial / CAN<br>(upon request) |
| Wireless | no   |



# electric wheel Series 160M

Developed for the medical environment



BV Cert. 7359982

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



- Ø 158 mm
- 750 kg moved
- IP 66
- 70 sh.A Polyurethane flat profile



## Ref. ezW160M



### Uses

- catering trolleys
- transfer chairs and beds
- rolling equipment for hospitals

### Technical features

|                              |                        |
|------------------------------|------------------------|
| <b>Diameter</b>              | 158 mm                 |
| <b>Speed range</b>           | 0 to 5 km/h            |
| <b>Peak pushing effort</b>   | 20 daN<br>Moves 500 kg |
| <b>Nominal performance</b>   | 6 daN at 4 km/h        |
| <b>Maximum rolling speed</b> | 8 km/h                 |
| <b>Battery capacity</b>      | 0 - 70 - 140 Wh        |
| <b>Wheel weight</b>          | 6 kg                   |
| <b>Options +</b>             | Additional battery     |

## Ref. ezW160M+



### Uses

- catering trolleys
- transfer chairs and beds
- rolling equipment for hospitals

### Technical features

|                              |                        |
|------------------------------|------------------------|
| <b>Diameter</b>              | 158 mm                 |
| <b>Speed range</b>           | 0 to 5 km/h            |
| <b>Peak pushing effort</b>   | 27 daN<br>Moves 750 kg |
| <b>Nominal performance</b>   | 9 daN at 5 km/h        |
| <b>Maximum rolling speed</b> | 8 km/h                 |
| <b>Battery capacity</b>      | 0 - 70 - 140 Wh        |
| <b>Wheel weight</b>          | 6 kg                   |
| <b>Options +</b>             | Additional battery     |

## + Additional battery Option



### + Additional battery: Ref. ezB24V3AH/160

Internal batteries.

Delivered separately, to be installed in Series 150 and 160.

## Weight

The robust assembly can withstand knocks and severe vibration. The wheel is designed to be installed as a fifth wheel with a suspension.

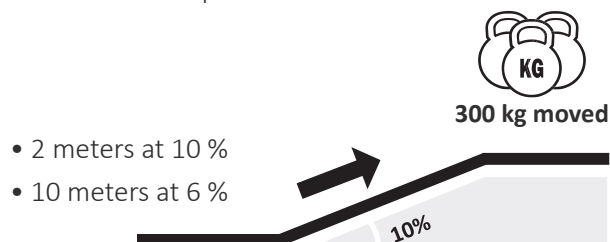
**6 kg**

Wheel weight

**50 kg**

 Vertical load  
up to 5 km/h

On a PRM standards slope:



## Conditions of use

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.

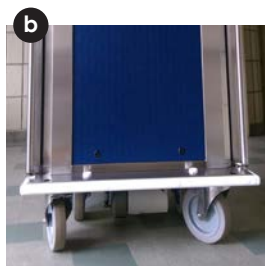
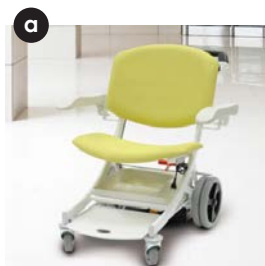
**-10°**  
**+40°**

 Functional temperatures  
range

**2Y.**  
**3Y.**

 Maintenance period  
in years

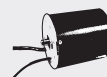
## Applications examples



- a. Transfer chair
- b. Hot & cold food cart
- c. Catering trolley

## Components specifications

### Motor



|                     |  |
|---------------------|--|
| Technology          | BLDC PM                                  |
| Gearbox             | 2-stage helical                          |
| Indicative lifespan | 2000 h / 5000 km<br>600 000 starts/stops |
| Nominal Speed       | 167 rpm (5 km/h)                         |
| Nominal power       | 130 W (S1)                               |
| Peak Torque         | 22 Nm                                    |

### Battery



|                       |   |
|-----------------------|---|
| Electro-chemistry     | Ni-MH long life                           |
| Energy                | 70 Wh (1 battery)<br>140 Wh (2 batteries) |
| Indicative lifespan   | 2-3 years                                 |
| Recharge mode         | - Charger<br>- External power             |
| Minimum charging time | 1.5 hours (to 90%)                        |

### Interface



|          |                      |
|----------|----------------------|
| Wired    | - Analog<br>- Serial |
| Wireless | no                   |

# electric wheel Series 10"

Developed for the outdoors



BV Cert. 7359982

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



- Ø 400 mm
- 150 kg moved
- IP 54
- 10x4 road tyre



Ref. ezW10R/W



## Uses

- delivery carts
- land drone

## Technical features

|                       |              |
|-----------------------|--------------|
| Diameter              | 400 mm       |
| Speed range           | 0 to 18 km/h |
| Peak pushing effort   | -            |
| Nominal performance   | -            |
| Maximum rolling speed | 18 km/h      |
| Battery capacity      | 240 Wh       |
| Wheel weight          | 14,5 kg      |
| Option                | -            |



## Weight

The robust assembly can withstand knocks and severe vibration and enables the wheel to carry some load.

**14,5 kg**

Wheel weight

**150 kg**

Recommended maximum load per wheel on a 10% slope

## Conditions of use

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.

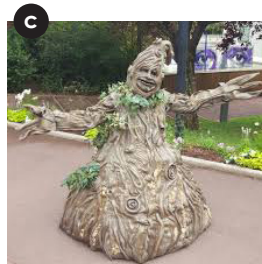
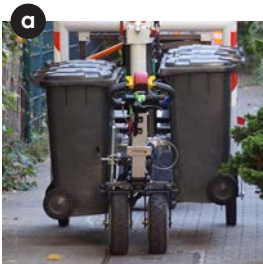
**-20°  
+60°**

Functional temperatures range

**5Y.**

Maintenance period in years

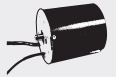
## Applications examples



- a. Street trolley
- b. Agricultural drone
- c. Motorized parade/float character

## Components specifications

### Motor



|                     |  |
|---------------------|--|
| Technology          | BLDC PM                                    |
| Gearbox             | 1-stage helical                            |
| Indicative lifespan | 5000 h / 15000 km<br>1500 000 starts/stops |
| Nominal Speed       | 240 rpm (18 km/h)                          |
| Nominal power       | 250 W (S1 at 10 Km/h)                      |
| Peak Torque         | 55 Nm                                      |

### Battery



|                       |                  |
|-----------------------|------------------|
| Electro-chemistry     | Ni-MH long life  |
| Energy                | 240 Wh           |
| Indicative lifespan   | > 5 years        |
| Recharge mode         | Charger          |
| Minimum charging time | 3 hours (to 90%) |

### Interface



|          |   |
|----------|---|
| Wired    | -   |
| Wireless | Wireless (LR WPAN)<br>2.4 GHz<br>Based on IEEE 802.15.4 |

# ez-Config® software

## Configure your wheel

ez-Config® is the core of the ez-Wheel® solutions. Thanks to their open connectivity, wheels and hand controls are programmable and can be perfectly adapted to any situation.



1



### Environment

Evaluate and understand the working place characteristics

2



### Connection

Open ez-Config® and connect ez-Wheel® devices via a USB port

3



### Configuration

Configure wheels and accessories  
Save parameters

EN

English interface



Windows compatibility  
7 and above



Offline support

## Available versions:

### Ref. ez-Config/300

Configuration software suitable for:

- ✓ Series 300
- ✓ Series 10"
- ✓ Smart controls

### Ref. ez-Config/150-160

Configuration software suitable for:

- ✓ Series 160
- ✓ Series 150

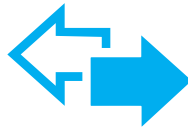
## Features specifications:

This set of intuitive features have been developed and adapted thanks to years of return on experience and meet every user's demands.

### KM/H

#### Speed definition

Define the speed of the wheel.  
Forward and Backward speed can be differentiated.



#### Direction change

Adjust the behaviour of the wheel during a change in the set direction.  
2 modes are available: «Deceleration» and «Inversion».



#### Max speed mode

Set up the behaviour of the wheel when the rolling speed exceeds the maximum speed value entered in ez-Config®.



#### Acceleration time

Set up the acceleration time according to your needs.  
e.g. slow for patient moving, fast for picking trolley.



#### Deceleration mode

Choose the deceleration behaviour when releasing the hand control.  
e.g. motor brake resistance, free wheel to continue rolling.



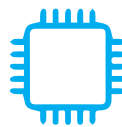
#### Start time limiter

Limit the motor drive time for each start. When the hand control is released the wheel goes back to the selected deceleration mode.



#### Auto stand-by

Enter a value in seconds corresponding to the waiting time between the absence of activity on the hand control and switching back to stand-by.



#### Inputs Outputs

Configure external interfaces for the displays, buttons, external supply...



Free of charge software



ID login & Password on demand





# ez-Wheel® devices

## High level of compatibility

ez-Wheel® products have been developed to be integrated into many applications in various environments. Hundreds of accessories combinations are possible thanks to the high level of compatibility!

Wheels and accessories are designed to ensure a plug-and-play compatibility. ez-Wheel's catalogue features a full range of wireless controls and predefined cables, ready to use.





## Product compatibility

|                   |                    |                  |                  |                |                |                 |
|-------------------|--------------------|------------------|------------------|----------------|----------------|-----------------|
|                   |                    |                  |                  |                |                |                 |
| <b>ezW300I/WR</b> | <b>ezW300I/CCR</b> | <b>ezW300M/W</b> | <b>ezW300F/W</b> | <b>ezW150I</b> | <b>ezW160M</b> | <b>ezW10R/W</b> |

### Controls compatibility

|                                 |                               |  |                               |                               |                              |                              |                               |
|---------------------------------|-------------------------------|--|-------------------------------|-------------------------------|------------------------------|------------------------------|-------------------------------|
| <br><b>ezRTH/W</b>              |                               |  |                               |                               | No                           | No                           |                               |
| <br><b>ezRPP/UC</b>             |                               | <br><b>ezUCxM</b>  | No                            | No                            | No                           | No                           | No                            |
| <br><b>ezR44IN/W</b>            |                               |  |                               |                               | No                           | No                           |                               |
| <br><b>ezR44IN/U</b>            | No                            | <br>with<br><b>ezACxM-UC/Box</b><br>and<br><b>ezUCxM</b> | No                            | No                            | No                           | No                           | No                            |
| <br><b>Wired control ezAxxx</b> | <br>+<br><b>ezACxM-UC/Box</b> | <br>+<br><b>ezACxM-UC/Box</b>                            | <br>+<br><b>ezACxM-UC/Box</b> | <br>+<br><b>ezACxM-UC/Box</b> | with<br><b>ezACxM-BD/160</b> | with<br><b>ezACxM-BD/160</b> | <br>+<br><b>ezACxM-UC/Box</b> |
| <br><b>ezARRH-BD</b>            | No                            | No   | No                            | No                            | with<br><b>ezACxM-BD/160</b> | with<br><b>ezACxM-BD/160</b> | No                            |

### Switches compatibility

|                                     |                                |                                |                                |                                |                              |                              |                                |
|-------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|------------------------------|------------------------------|--------------------------------|
| <br><b>Switches ezSxxx</b>          | <br>+<br><b>ezACxM-UCB/Box</b> | <br>+<br><b>ezACxM-UCB/Box</b> | <br>+<br><b>ezACxM-UCB/Box</b> | <br>+<br><b>ezACxM-UCB/Box</b> | with<br><b>ezACxM-BD/160</b> | with<br><b>ezACxM-BD/160</b> | <br>+<br><b>ezACxM-UCB/Box</b> |
| <br><b>ezSPBC-BD</b>                | No                             | No                             | No                             | No                             | with<br><b>ezACxM-BD/160</b> | with<br><b>ezACxM-BD/160</b> | No                             |
| <br><b>Emergency button ezSExxx</b> | No                             | No                             | No                             | No                             | <b>Cable included</b>        | <b>Cable included</b>        | No                             |

### Internal and External batteries

|                             |    |                              |    |    |  |  |    |
|-----------------------------|----|------------------------------|----|----|--|--|----|
| <br><b>ezB24V3AH/160</b>    | No | No                           | No | No | <b>Cable included</b>                                    | <b>Cable included</b>                                    | No |
| <br><b>External battery</b> | No | with<br><b>Mascot1A8/BAT</b> | No | No | with<br><b>ezBCEXT/160</b><br>or<br><b>ezBCEXMxM/160</b> | with<br><b>ezBCEXT/160</b><br>or<br><b>ezBCEXMxM/160</b> | No |



Stainless-Steel stopper under **ezRTH/W/IP** tiller head. To protect the charge connector against washing water jets.



**ezRTH/W**: an award-winning tiller head housing, combining ergonomics and robustness, fitted with the best control features from ez-Wheel.





# Wireless **tiller head** control

## Bi-directional and ergonomic

Ensures a proper handling of equipment thanks to ergonomic shapes and well organised commands. The integrated wireless interface allows a simple and quick integration on rolling equipment.

### Other functions:

The interface remotely displays the battery level of the wheel and the system status. It is powered by its own internal battery.

**Ergo** Ergonomic control

**IP54**  
**IP65** Protection Index

## Which tiller head for which use?

### Ref. ezRTH/W



**IP 54**  
Index

Wireless

#### Uses

- pusher/puller
- industrial hand trucks
- heavy load carriers

#### Technical features

|                         |  |
|-------------------------|--|
| <b>Functions</b>        | - On/Off button<br>- Progressive accelerator |
| <b>Protection Index</b> | IP54   |
| <b>Communication</b>    | Wireless                                     |

|                      |                              |
|----------------------|------------------------------|
| <b>Compatibility</b> | ✓ Series 300<br>✓ Series 10" |
|----------------------|------------------------------|

### Ref. ezRTH/W/IP



**IP 65**  
Index

Wireless

Horn

#### Uses

- pusher/puller
- food processing machines
- outdoor applications

#### Technical features

|                  |  |
|------------------|--|
| <b>Functions</b> | - On/Off button<br>- Progressive accelerator<br>- Warning horn<br>- Charge & USB plugs caps<br>- Sealed inner components |
|------------------|--|

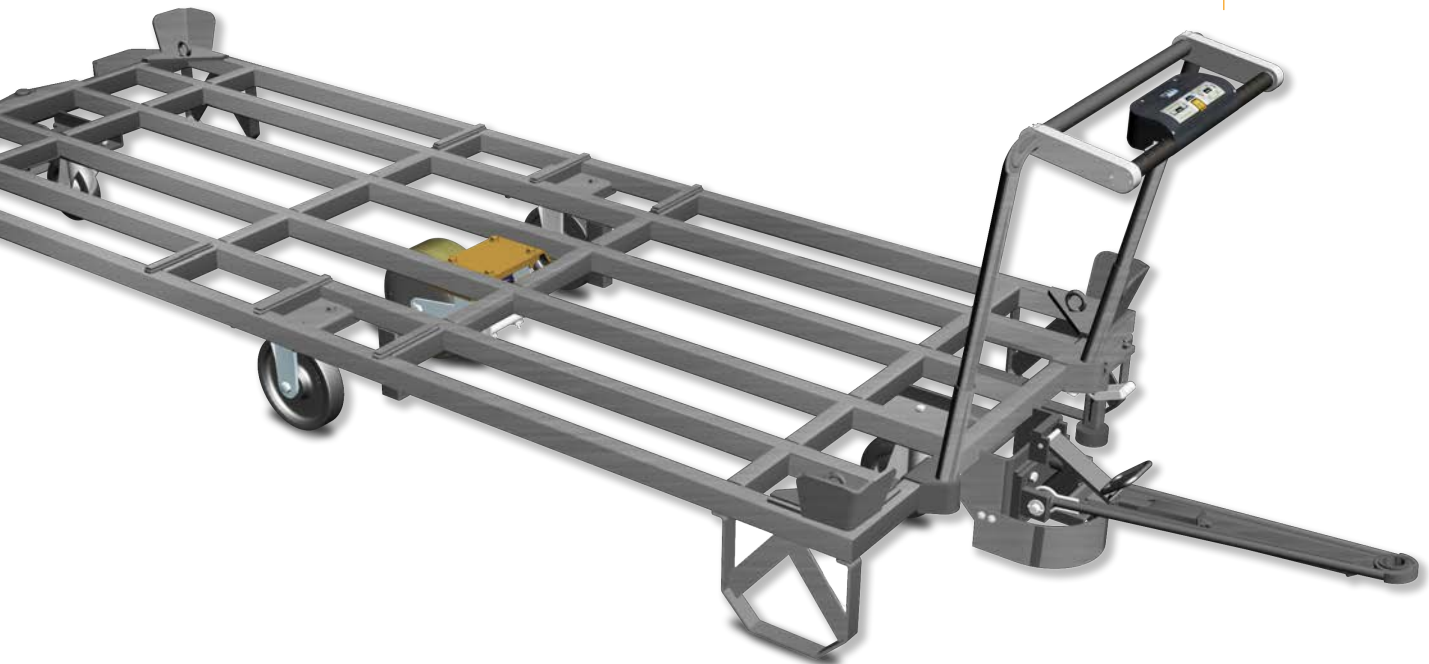
|                         |      |
|-------------------------|------|
| <b>Protection Index</b> | IP65 |
|-------------------------|------|

|                      |          |
|----------------------|----------|
| <b>Communication</b> | Wireless |
|----------------------|----------|

|                      |                              |
|----------------------|------------------------------|
| <b>Compatibility</b> | ✓ Series 300<br>✓ Series 10" |
|----------------------|------------------------------|



**ezRPP:** an intuitive control bringing best practices in lean manufacturing, co-designed with automotive players, for automotive players.



# Push pull **sensitive control**

## Bi-directional and sensitive sensor

Ensures a natural handling of equipment thanks to sensitive sensors, ergonomic shapes and intuitive use.

### Other functions:

The interface remotely displays the battery level of the wheel and the system status. Its magnetic connector ensures a quick charger connection when coming back to the parking station.

**Ergo** Ergonomic control



Magnetic connector for immediate and easy connection

## Push Pull Sensitive control:

Ref. ezRPP/UC



### Uses

- towed trailers

### Technical features

#### Functions

- Pressure sensors in push and pull directions
- On/Off button
- Progressive accelerator
- Battery and status indicator

#### Protection Index

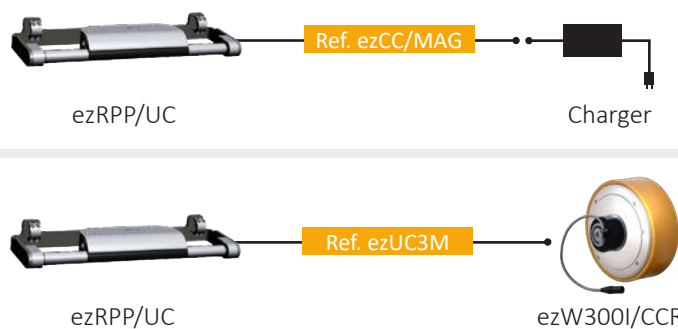
IP54

#### Communication

Serial  
Wireless

#### Compatibility

✓ Series 300-CC



Cables compatibility

# The ez-Box® interface

## Control one or two wheels

### Wireless Communication /W

The wireless interface allows a simple and quick integration on rolling equipment.

### Serial Link Communication /U

The serial link is used in ez-Wheel solutions for insuring a wired communication recommended for noisy environments or wireless restricted areas.



Displays the battery level of the wheel and the system status



Panel or tube mount

## ez-Box® interface:

### Ref. ezR44IN/W

W



#### Uses

- remotely controls one or two wheel(s)
- the wheel control is ensured by a wired control connected to the ez-Box® wireless interface

#### Technical features

|               |                    |
|---------------|--------------------|
| Communication | Wireless 2.4 GHz   |
| Protocol      | IEEE 802.15.4      |
| Battery       | Ni-MH rechargeable |
| Dimensions    | 124 x 75 x 27 mm   |

Compatibility

- ✓ Series 300
- ✓ Series 10''

### Ref. ezR44IN/U

U



#### Uses

- controls one ezW300I/CCR wheel
- uses a serial protocol to ensure an effective bi-directional dialogue between the wheel and ez-Box®

#### Technical features

|               |                    |
|---------------|--------------------|
| Communication | Serial             |
| Protocol      | -                  |
| Battery       | Ni-MH rechargeable |
| Dimensions    | 124 x 75 x 27 mm   |

Compatibility





- ✓ Series 300/CC

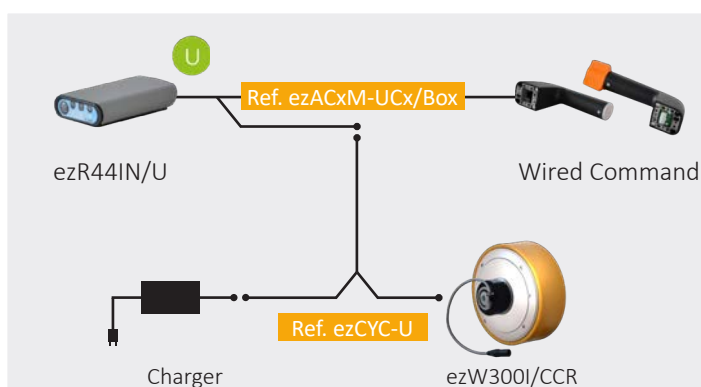




## Which box for which use?

- ✓✓ Highly recommended
- ✓ Compatible
- ✗ Not recommended

|  |   |                     |
|--|--|--|
|  |  <p>Wireless (LR WPAN) 2.4 GHz<br/>Based on IEEE 802.15.4</p> |  <p>Serial link</p> |
| Environment informations               | Wireless communication   | Serial link communication  |
| White RF noise environment             | ✗  | ✓✓   |
| Wireless restricted areas              | ✗  | ✓✓   |
| Agro/pharma environment<br>(300M/300F) | ✓✓   | ✗  |
| Humid environment                      | ✓✓   | ✗  |
| Two wheels system                      | ✓✓   | ✓  |



Cables compatibility

# Wired hand controls

## Wired and Bi-directional



ezAARmini

### Mini joystick

This finger operated mini joystick can control the speed in both directions (forward and backward). It can be mounted at the end of a tube, or on a panel.

| Suitable for:    | Cable required     |
|------------------|--------------------|
| ✓ ez-Box®        | Ref. ezACxM/Box    |
| ✓ Series 150/160 | Ref. ezACxM-BD/160 |



ezAAR

### Joystick

The joystick can control the speed in both directions (forward and backward). It can be mounted on a panel and is suitable for tough environments.

| Suitable for:    | Cable required     |
|------------------|--------------------|
| ✓ ez-Box®        | Ref. ezACxM/Box    |
| ✓ Series 150/160 | Ref. ezACxM-BD/160 |



ezARH

### Rotating handle

The ezARH controls the speed in both directions (fwd and bck) with the thumb. The handle features an ergonomic and very rugged design.

| Suitable for:    | Cable required     |
|------------------|--------------------|
| ✓ ez-Box®        | Ref. ezACxM/Box    |
| ✓ Series 150/160 | Ref. ezACxM-BD/160 |



ezARH-BD

### Rotating handle with button and display

The ezARH-BD controls the speed in both directions (fwd and bck) with the thumb. The handle features an ergonomic and very rugged design. The second handle is equipped with a battery display and a start button.

| Suitable for:    | Cable required     |
|------------------|--------------------|
| ✓ Series 150/160 | Ref. ezACxM-BD/160 |



ezAFB

Forward & Backward control

This simple button control is suitable for a basic forward and backward operation (non-progressive).

| Suitable for:    | Cable required     |
|------------------|--------------------|
| ✓ ez-Box®        | Ref. ezACxM/Box    |
| ✓ Series 150/160 | Ref. ezACxM-BD/160 |

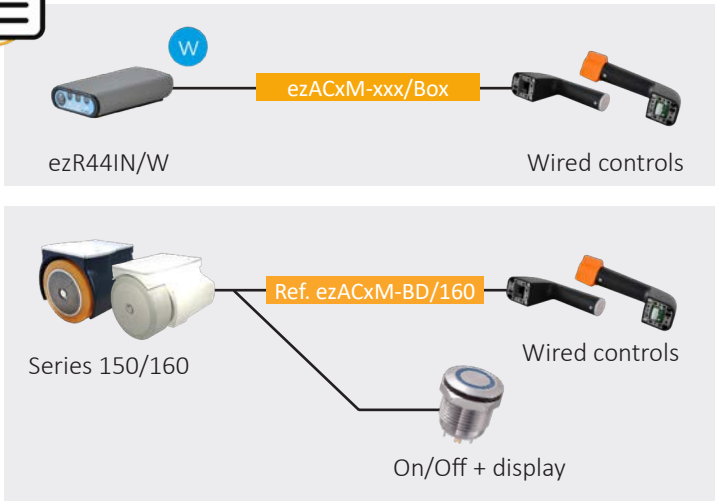


ezATH

Tiller head

The ezATH command is a tiller head type control. It ensures a proper handling of equipment thanks to ergonomic shapes and well organized commands. It can control the speed in both directions (forward and backward). For safety, the control includes a belly button.

| Suitable for:    | Cable required     |
|------------------|--------------------|
| ✓ ez-Box®        | Ref. ezACxM/Box    |
| ✓ Series 150/160 | Ref. ezACxM-BD/160 |



# Wired switches

## Standard switches



ezSONF-B

### Switch On/Off Button

The ezSONF-B is a bistable toggle switch, to start and stop the system.

| Suitable for:    | Cable required      |
|------------------|---------------------|
| ✓ ez-Box®        | Ref. ezACxM-UCB/Box |
| ✓ Series 150/160 | Ref. ezACxM-BD/160  |



ezSKEY-B

### Switch Key Button

The ezSKEY-B is a bistable key switch, to secure the start of the system.

| Suitable for:    | Cable required      |
|------------------|---------------------|
| ✓ ez-Box®        | Ref. ezACxM-UCB/Box |
| ✓ Series 150/160 | Ref. ezACxM-BD/160  |



ezSPBC-BD

### Switch Push Button Colour

The ezSPBC-BD is an impulse push button featuring a status or battery level LED display.

| Suitable for:    | Cable required     |
|------------------|--------------------|
| ✓ Series 150/160 | Ref. ezACxM-BD/160 |



ezSEMRxM/160

### Switch Emergency

The ezSEMRxM/160 is an emergency push button, to disconnect the motor power on Series 150/160 wheels.

| Suitable for:    | Cable required |
|------------------|----------------|
| ✓ Series 150/160 | Included       |



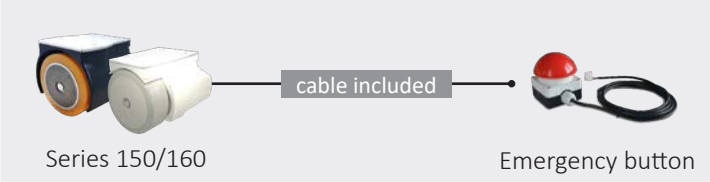
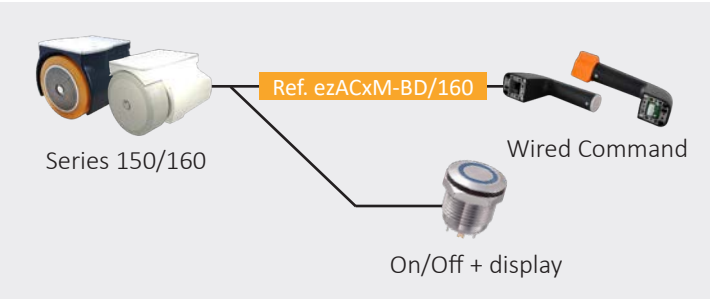
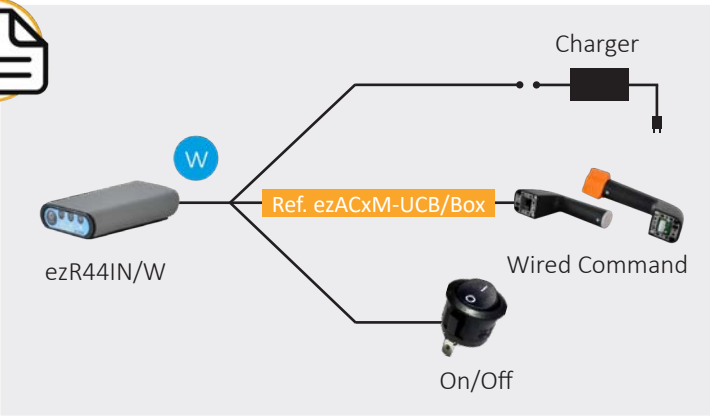
ezSERBxM/160

### Switch Emergency Reverse Button

The ezSERBxM/160 is an emergency reverse button, to secure an operator trapped between the tiller head and an obstacle.

| Suitable for:    | Cable required |
|------------------|----------------|
| ✓ Series 150/160 | Included       |





Cables compatibility

# Internal battery

For Series 150 & 160



ezB24V3AH/160

Internal batteries

Ni-MH 24V 3Ah - Extra energy for continuous use

| Suitable for:    | Cable required |
|------------------|----------------|
| ✓ Series 150/160 | No             |

# External batteries

For continuous use



ezB24V6AH/L

External battery with handle

Ni-MH 24V 6Ah - Long life

| Suitable for:    | Cable required     |
|------------------|--------------------|
| ✓ Series 300/CC  | Ref. Mascot1A8/BAT |
| ✓ Series 150/160 | Ref. ezBCEXMxM/160 |



ezB24V9AH

External battery with handle

Ni-MH 24V 9Ah

| Suitable for:    | Cable required     |
|------------------|--------------------|
| ✓ Series 300/CC  | Ref. Mascot1A8/BAT |
| ✓ Series 150/160 | Ref. ezBCEXMxM/160 |

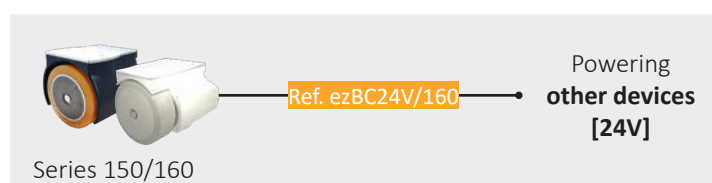
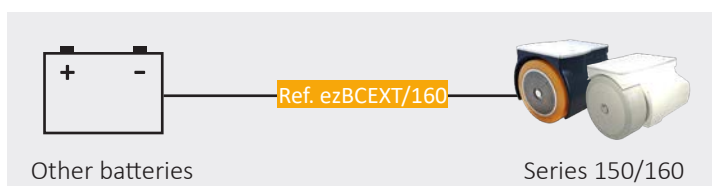
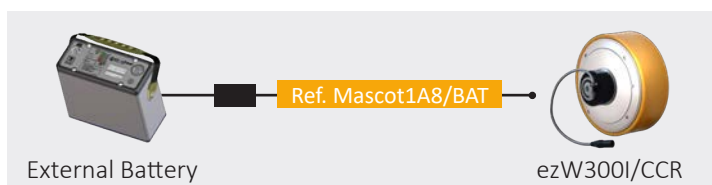
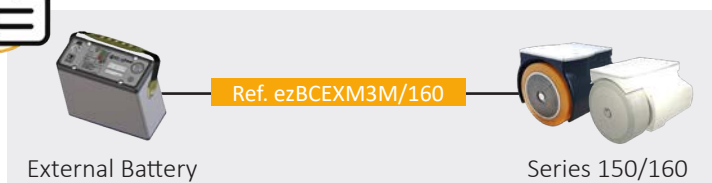


ezB24V15AH

External battery with handle

Ni-MH 24V 15Ah

| Suitable for:    | Cable required     |
|------------------|--------------------|
| ✓ Series 300/CC  | Ref. Mascot1A8/BAT |
| ✓ Series 150/160 | Ref. ezBCEXMxM/160 |



Cables compatibility

# Mechanical accessories for **Series 150/160**

## Suspension bracket



ezMCS/160

### Heavy Duty suspension bracket

The suspension bracket ezMCS/160 features a suspension for height compensation. The ground contact is optimal and the charge on the wheel stays stable, ensuring a good grip for the torque transmission.

✓ Series 150/160



ezMCS/L/160

### Compact suspension bracket

The compact suspension bracket ezMCS/L/160 features a suspension for height compensation without increasing footprint. This suspension is suitable for medium loads, up to 500 kg.

✓ Series 150/160



ezMCS/L/160+

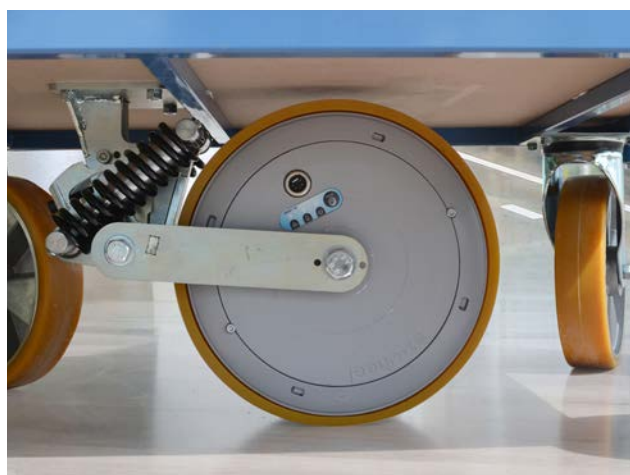
### Horizontal suspension bracket with stronger spring force (+)

The suspension bracket ezMCS/L/160+ features a suspension for height compensation. This model is preferred for heavier loads, between 500 and 1000 kg.

✓ Series 150/160



ezMCS/L/160+ on a Series 160 wheel



ezMCS/H on a Series 300 wheel



# Mechanical accessories for **Series 300**

## Suspension bracket

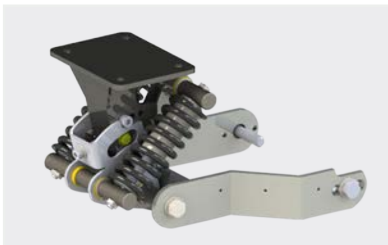


ezMCS/H

### Horizontal suspension bracket

The suspension bracket ezMCS/H features a suspension for height compensation. The ground contact is optimal and the charge on the wheel stays stable, ensuring a good grip for the torque transmission.

✓ **Series 300**



ezMCS/H/CC

### Horizontal suspension bracket

The suspension bracket ezMCS/H/CC is a specific version of the ezMCS/H for the Series 300/CC wheels. It includes collars to attach the wheel's cable output.

✓ **Series 300/CC**

# Mechanical accessories for **Series 300 & 10"**

## Accessories



ezMAR

### Anti-rotate ring

The ezMAR is used to block the rotation of the wheel's axis, ensuring the transmission of the motor torque to the chassis.

✓ **Series 300**  
✓ **Series 300/CC**  
✓ **Series 10"**

# ez-Wheel® Chargers

Adapted to ez-Wheel® devices



Universal plug available



Universal voltage 90-264 V AC



Mascot1A8

## Charger 1,8 Amp

1,8 Amps charger  
XLR charge plug + EU power cord

| Suitable for:      | Cable required  |
|--------------------|-----------------|
| ✓ Series 300 & 10" | cable included  |
| ✓ Series 150/160   | Ref. ezCCxM/160 |



Mascot1A8/IP

## Charger 1,8 Amp IP67

1,8 Amps charger IP67  
XLR charge plug + EU power cord

| Suitable for:      | Cable required  |
|--------------------|-----------------|
| ✓ Series 300 & 10" | cable included  |
| ✓ Series 150/160   | Ref. ezCCxM/160 |



Mascot4A

## Charger 4 Amp

4 Amps charger  
XLR charge plug + EU power cord

| Suitable for:      | Cable required  |
|--------------------|-----------------|
| ✓ Series 300 & 10" | cable included  |
| ✓ Series 150/160   | Ref. ezCCxM/160 |

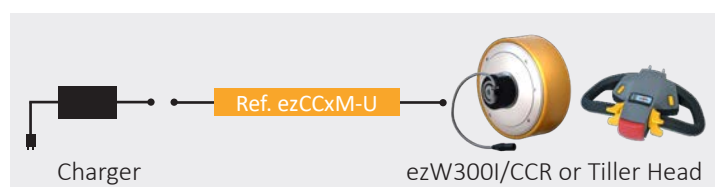
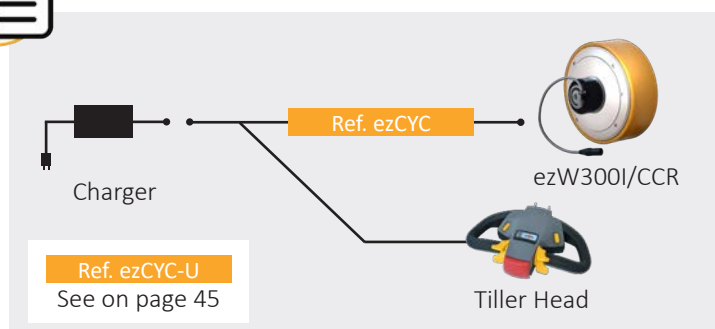


Mascot1A8/160

## Embedded charger 1,8 Amp

Charger for Series 150/160 (embedded)  
Molex charge plug + EU power cord

| Suitable for:    | Cable required  |
|------------------|-----------------|
| ✓ Series 150/160 | Ref. ezCCxM/160 |

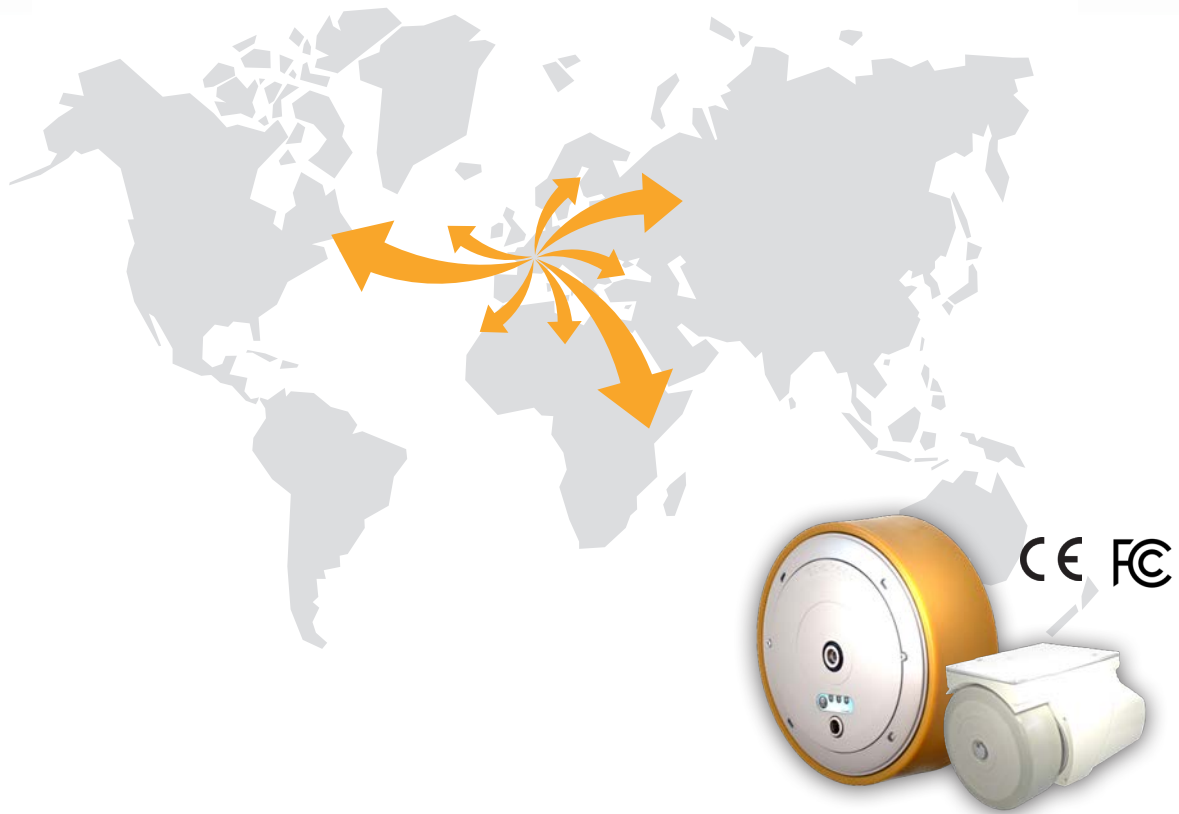


Cables compatibility

## A Worldwide Distribution network

ez-Wheel relies on a strong worldwide distribution network, highly-experienced and specialising in mobility and logistics needs.

**Contact our expert partners!**



**A strong and specific  
expertise in motorization**



**Dedicated local  
product assistance**



**Smart tools  
for field support**



# Who are you?

An End user, a manufacturer, an integrator?



## End User

1



Visit our website **ez-wheel.com**  
heading **contact**

2



Complete the **online form**

3



Our sales network will get back to you and connect you with **local integration partners**.



## Integrator

1



Visit our website **ez-wheel.com**  
heading **contact**

2



Complete the **online form**

3



Our sales network will provide you with **all the necessary technical data to properly integrate our products**.

(We will be pleased to welcome you to our network of qualified integration partners!)



## OEM / Manufacturer

1



Visit our website **ez-wheel.com**  
heading **contact**

2



Complete the **online form**

3



Our technical experts will define with you the **best solutions to power your devices**.

(Customized solutions available for high volumes)



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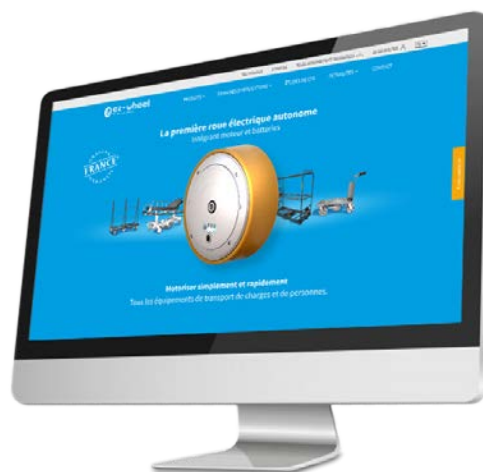


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datacenter and our latest news at:  
**[www.ez-wheel.com](http://www.ez-wheel.com)**



#### INDUSTRY



#### AUTOMOTIVE



#### FOOD PROCESSING



#### LOGISTICS / RETAIL



#### MEDICAL / PHARMACEUTICAL



#### PUBLIC SPACES



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