



Empulse®



Empulse

SLEEK, STYLISH POWER FOR YOUR
MANUAL WHEELCHAIR,
WITHOUT WEIGHING YOU DOWN.

YOUR WHEELCHAIR, POWERED.

NO COMPROMISES

The **Empulse M90 power assist** removes the strain of manual wheelchair propulsion, helping you save energy for what matters most.

Lightweight and versatile, it **integrates seamlessly** with your wheelchair - no bulk, wires, or extra components. Keep your preferred tyres and handrims while choosing to drive with or without power using a removable joystick or steer with the handrim.

As the **lightest in its class**, the M90 adds sleek, stylish power to your life without weighing you down.



Scan the QR code with
your phone's camera
to watch video.



LIGHTWEIGHT

Only 5.3kg Per Wheel!

Compact and lightweight, the entire package **weighs just 12.2 kg (27 lbs)** – everything included! **M90 makes transport easy and efficient** as it adds minimal weight to the wheelchair, preserving its maneuverability and ease of use for everyday activities.



1



DRIVE YOUR WAY

Whether you prefer the ease of a joystick or the familiarity of handrim steering, the M90 drive control options put you in control of your journey – this includes individuals with limited hand dexterity or those who prefer simplified control options.

1 Joystick Control:

- Navigate the M90 effortlessly with precise Joystick control indoors and outdoors.
- Switch between Indoor and Outdoor Drive modes for optimal speed and power - modes are adjustable to match personal driving preferences.
- Activate Joystick Cruise Control by pressing the Joystick down to maintain speed while steering.
- Let the M90 do the work - no need to propel, saving your energy and shoulders.

2



2 Two-Way Toggle with Handrim Steer:

- Intuitive handrim steering ensures precise control, ideal for tight spaces and busy areas.
- Tap the toggle forward to increase speed or backward to slow down.
- Reduce propulsion effort while keeping your manual wheelchair - no need for a bulky power chair.
- Ideal for those who prefer handrim steering but need power assist throughout the day.

Easily remove and **position the wireless controller wherever it's most convenient** – whether using the quick-release frame mount of any of the M90 mounting options the transportation and set up of the M90 is effortless. ➤





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The quick-release wheels attach and detach just like standard wheels, making transport easy and hassle-free.

Ride your way >

Use **your preferred tyres and handrims**:
Need a handrim that works with reduced hand dexterity or grip? We've got you covered. Looking for tyres that perform on both smooth indoor floors and rugged outdoor terrain? The choice is yours.



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Simply rotate the M90 hub to engage the power assist or switch to free mode for a zero resistance manual drive.



DYNAMIC PERFORMANCE

Safe, easy and intelligent

Cruise and downhill speed control make driving with M90 safe, simple, and intuitive. Components centered on the hub means they don't impact a user's centre of gravity, resulting in better maneuverability and a better ride.

Up to 15 km (9.3 mi) range

Powered by a lightweight (0.6 kg/1.32 lbs) battery, the M90 delivers a range of up to 15 km (9.3 mi)* – so you can travel worry-free without needing to charge between journeys.

*Range depends on the ground surface, the weight of the rider, driving behavior, temperature and terrain.



CHARGING

Charge off-chair, keep the M90 on chair

Easily swap or replace batteries for uninterrupted mobility. Charge on or off the device and extend your range by carrying an extra battery - perfect for staying on the move.

TRANSPORTABILITY

Effortless travel, anytime, anywhere

Designed to be easily transported. The M90 wheels offer a standard quickie release axle and weigh only 5.9 kg (12.9 lbs.), meaning they will fit nicely into the trunk of even small cars.

Thanks to the IATA-certified battery, the M90 is ideal for riders seeking a convenient solution for long and short distance travel.

* Individual airlines have differing requirements relative to transport of products with Li-Ion batteries. Prior to arranging any air travel with the wheelchair, please confirm with your airline or carrier that they accept battery-powered vehicles under UN classification: UN3171. Please refer to the owners manual for further details



The premium, durable travel bag is designed to securely hold the wheels with batteries, keeping everything organized in a convenient, easy-to-carry package.

The travel bag is not available in all regions.

TECHNICAL DATA

HPCPS Code	E0986
Weight Capacity	100 kg (220 lbs.)
Wheelchair Rear Wheel Size	540 mm (24")
Battery Range ¹	15 km (9.3 mi)
Max Slope	6°
Total Device Weight	12.2 kg (27 lbs.)
Each Wheel, with battery	5.9 kg (12.9 lbs.)
Each Wheel, w/o battery	5.3 kg (11.6 lbs.)
Battery Weight	0.6 kg (1.3 lbs.)
Frame Compatibility	Folding Frames Rigid Frames
Max Speed	6 kph (3.7 mph)
Electronics	Bluetooth / Wireless
Batteries Flight friendly ²	Lithium Ion (<100Wh dangerous goods limit)
Motors	150 W / 24 V

1. Range is dependent on the ground surface, the weight of the rider, driving behavior, temperature and terrain.

2. Always verify with your airline for current regulations.

⚠ WARNING

Using a power assist device can change your center-of-gravity or the way your chair rides. To reduce any risk of tip-over or fall, consult your healthcare provider about proper wheelchair configuration, including use of anti-tips and any other necessary adjustments.



Seamless integration into your chair and your life

Fully-integrated hub design provides seamless power, keeping your chair sleek and compact, without extra components or wires hanging off your ride.



M90 Web Page

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For further information on the full specification, options, and accessories, please refer to the order form. All information is subject to change without notification. Please consult Sunrise Medical with any queries you may have.



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