

MONARK EVO



For virtual racing and smart training

Monark EVO is built for modern e-cycling and controlled training. With electronic shifters, sprint buttons, and Monark's trusted Electric Pendulum System (EPS), EVO delivers precise accuracy and a powerful cycling sensation.

KEY FEATURES

- > EPS Electric pendulum system
- > Monark Novo Duo display Monochrome touchscreen for clear and quick reading of data.
- ➤ Wireless connections Supports BLE and ANT+ for seamless device pairing
- ➤ Wired connections Includes USB-B port for stable ➤ Load is controlled with Watts (speed independent) data transfer
- > Communicates SMART Both via ANT+ and BLE

- > Easy to calibrate and control
- ➤ **Perfect fit** Vastly increases adjustability to fit every user
- > Electronic shifters and sprint buttons Set according to your own wishes
- or force (in kp, speed dependent)

Max userweight 150 kg

Specifikation **MONARK EVO**

Certifications	
FRAME	C 1 C 1 C 1
Type	Sport, perfect fit
Handlebar	Racing handlebar with shifters
Stem	adjustable horizontal 60 mm (2,36 inches) vertical 500-910 mm (20,87-37,01 inches)
Seatpost	adjustable horizontal 60 mm, vertical 530-940 mm
Saddle	Black, Racing
ВВ	68/110 mm
Crank	Steel, L:172.5 mm
Pedals	9/16", combipedals basket/ SPD
RESISTANCE	
System	Electronic pendulum system
Flywheel	Cast iron, 20 kg (44,09 lbs)
DISPLAY	
SCREEN	Mono Touch Screen
RPM	YES
HR	ANT+
Time	YES
Speed	YES
Distance	YES
Power/Watt	YES
CONNECTIVITY	
ANT+	YES, FE-C
Bluetooth	YES, FTMS
WEIGHT & DIMENSIONS	
Max userweight	150 kg (330 Ibs)
recommended user length	>150cm (>59 inches)
Length bike (mm)	1405 mm (55,31 inches)
Width bike (mm)	640 mm (25,20 inches)
Height bike (mm)	Max 1240 mm (48,82 inches)
weight bike (kg)	62 kg (137 lbs)
POWER REQUIREMENTS	220V (12V, 5,0 A)
WARRANTY	24 month

WIRELESS CONNECTIVITY

Supports both BLE and ANT+ for seamless device integration, ensuring accurate and reliable data transmission in real-time.



BLUETHOOTH (BLE) Compatible with FTMS

(Fitness Machine Service), enabling connection to various training software for data

tracking and analysis.



ANT+

Supports F-EC (Fitness Equipment Control), allowing seamless integration with ANT+ enabled devices for performance monitoring.



HEART RATE

Displays heartrate when connected via chestbelt (ANT+)

ISO 9001

Monark Exercise AB is since 1992 ISO 9001 certified. All our models are:

- Anti-corrosion treated and
- powder coated Made in Sweden

Edition 2. 2025_04

Description **MONARK EVO**

APPLICATIONS

Monark EVO combines accurate calibration with flexible system integration—ideal for indoor performance development, testing, and virtual cycling.

EVO is an ideal tool for:

- **E-cycling platforms and virtual racing** Delivering realistic resistance and smooth performance through smart connectivity
- **High-performance training environments** Allowing structured, controllable workouts with sprint buttons and programmable gear shifts
- Sports science and simulation labs Providing accurate, consistent data for power analysis and testing

CONNECTION

The Novo Duo system communicates via Bluetooth and ANT+ using standardized protocols (FTMS and FE-C), allowing integration with training applications across Android, iOS, Windows, and Mac. Monark EVO supports multiple connection modes to match the needs of both virtual cycling and structured training.

- **Simulation mode** The application sends data about a virtual environment that controls the ergometer's resistance (e.g. road slope in Zwift).
- **ERG mode** The application sets a target power output for the ergometer to maintain throughout the session.
- **Resistance mode** The application adjusts resistance in percentage steps (0–100%), converted into 0–7 kp by Monark.
- Manual mode No external control; the rider adjusts resistance manually, while the application can still read power and cadence values.

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Description **MONARK EVO**

MEASUREMENT ACCURACY

The Monark pendulum system is built for long-term accuracy and reliability. When calibrated regularly, the system consistently delivers power measurements with an error margin typically below 2%.

Thanks to its mechanical construction, calibration can be performed quickly and easily without the need for external tools or advanced software. This allows users to verify and ensure accuracy as often as needed – even daily – which is critical in research, rehabilitation, and performance testing.

Unlike many electronic systems that rely solely on internal sensors and estimated values, the Monark pendulum offers a direct, physical indication of the applied resistance. This makes it uniquely dependable in environments where trust in the workload is essential.

PRODUCTION AND SUSTAINABILITY

Monark has been manufacturing ergometers since 1954 with a philosophy of delivering precise, reliable, and durable products for research, rehabilitation, and performance development. EVO is assembled in Sweden, with the majority of its components sourced from Swedish manufacturers.

Our products are used daily by professionals in research, physiotherapy, and sports worldwide. Through continuous product development and close collaboration with experts, we have built a strong reputation for measurement accuracy and ergonomics.

Monark EVO - precision and performance for virtual racing and controlled training.

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