

### **MONARK LC6**



### High-precision testing and seamless connectivity.

The Monark LC6 is a professional ergometer with an easily calibrated electric pendulum system (EPS), designed for research, testing, and education. It supports full external system integration via BLE, ANT+, USB-B, and RS232.

#### **KEY FEATURES**

- > EPS Electric pendulum system
- Designed for external control
- Wireless connections Supports BLE and ANT+ for seamless device pairing
- Wired connections Includes USB-B and RS232 ports for stable data transfer
- > Easy to calibrate and control
- Perfect fit Vastly increases adjustability to fit every user
- Continuous workload range 5-1400 Watt (at 200 rpm).
- ➤ Monark Novo Duo display Monochrome touchscreen for clear and quick reading of data.

Max user weight 180 kg

Monark Test Software

Medical Device Class IIa

External systems

Wired/wireless connection



### Specifications MONARK LC6

FRAME	
	Consulta manufact fit
Type	Sports, perfect fit
Handlebar	Racing handlebar
Stem	Adjustable, horizontal 200 mm (7,87 inches). Vertical 500-910 mm (19,69-35,83 inches)
Seatpost	Adjustable, horizontal 200 mm (7,87 inches). Vertical 530-940 mm (20,87-37,01 inches)
Saddle	Racing
ВВ	68/107 mm
Crank	Steel, 172,5 mm
Pedals	9/16", combi SPD
RESISTANCE	
System	Electric pendulum system
Flywheel	20 kg (44,09 lbs)
DISPLAY	
RPM	Yes
HR	ANT+
Time	Yes
Speed	Yes
Distance	Yes
Watt	Yes
CONNECTIVITY	
Wired	RS232 and USB
Wireless	BLE and ANT+
WEIGHT & DIMENSIONS	
Max user weight	180 kg (396,83 Ibs)
Length (mm)	1405-1630 mm (55,31-64,17 inches)
Width (mm)	640 mm (25,20 inches)
Height (mm)	1265 mm at display (49,80 inches) 1240 mm at saddle (48,82 inches)
Weight (kg)	77 kg (169 Ibs)
POWER REQUIREMENTS	220V (12V, 5,0A)



#### **ECG**

Can be controlled from different ECG brands either analogue or digital.



#### **CONNECTION**

Direct connection to PC. **Wired:** RS232 and USB-B **Wireless:** BLE and ANT+



#### **SOFTWARE COMPABILITY For**

fitness testing and in some cases, even training can be used with this model.



#### **HEART RATE MONOTORING**

Displays heartrate when connected via chestbelt (ANT+)



#### **TEST FUNCTIONALITY**

For aerobic testing



#### **CONSTANT POWER MODE**

Maintains a fixed power output regardless of cadence (RPM)



#### **CONSTANT FORCE**

Keeps the resistance (kp) constant regardless of pedaling speed

#### MEDICAL CE

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

- Approved under CE Certificate No. 15 36 01 (MDD IIa)
- Anti-corrosion treated and powder coated Made in
- Sweden

Edition 2. 2025\_04



## Description MONARK LC6

#### **APPLICATIONS**

Monark LC6 is designed for advanced performance testing and academic research. With high accuracy, easy calibration, and full external control, it meets the demands of elite users in sport and science. Monark electric pendulum system ensures consistent resistance and repeatable test results.

#### LC6 is an ideal tool for:

- **Elite cycling teams and performance coaches** For precise performance testing and structured training.
- Sports science researchers For controlled power output studies and physiological measurements.
- Endurance athletes For reliable watt-based testing and long-duration assessments.
- Universities and academic labs For applied research using cycle ergometry and external data systems.

#### CONNECTION

- **Simulation Mode** The ergometer adjusts resistance based on simulated environments from applications like Zwift, where resistance reflects terrain and virtual gearing.
- **ERG Mode** The application controls the target power output, regulating resistance accordingly (also called "Workout Mode" in some apps).
- **Resistance Mode** The application sets a resistance level (0-100%), which Monark translates to 0-7 kilopond (kp).
- Manual Mode The ergometer operates independently, while applications can still receive power and cadence data for real-time monitoring.

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# Description MONARK LC6

#### 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. LC6 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 LC6 - A precision ergometer for reliable testing and system integration.

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