



# 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
- **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 and RS232 ports for stable data transfer
- **Perfect fit frame** - Vastly increases adjustability to fit every unique user.
- **RPM independent or dependent** - Power or force mode.
- **Continuous workload range** - 5-1400 Watt (at 200 rpm).
- **Easy to calibrate and control**
- **Designed for external control**

Max User Weight 180 kg

Monark Test Software

Medical Device Class IIa

External Systems

Wired/Wireless Connection



# Specifications

## MONARK LC6

<b>CERTIFICATIONS</b>	EU directive 93/42/EU class IIa
<b>FRAME</b>	
Type	Sport, perfect fit
Handlebar	Racing handlebars
Stem	Adjustable, horizontal 200 mm Vertical 500-910 mm
Seatpost	Adjustable, horizontal 200 mm Vertical 530-940 mm
Saddle	Racing Unicus, black
BB	68/107 mm
Crank	Steel, 172,5 mm
Pedals	9/16", Combi SPD
<b>RESISTANCE</b>	
System	Electric pendulum system
Flywheel	20 kg (44,09 lbs)
<b>DISPLAY</b>	Monochrome touchscreen (Novo Duo)
RPM	Yes
HR	Yes, ANT+
Time	Yes, HH:MM:SS
Speed	Yes, km/h
Distance	Yes, km
Power/Watt	Yes
<b>CONNECTIVITY</b>	
Wired connection	RS232 and USB
Wireless connection	BLE and ANT+
<b>WEIGHT &amp; DIMENSIONS</b>	
Max user weight	180 kg (397 lbs)
Recommended user length	>150cm (>59 inches)
Length (mm)	1405 - 1630 mm (55.3-64.2 inches)
Width (mm)	640 mm (Max 25.2 inches)
Height (mm)	1240 mm at saddle 1265 mm at display, (48.8-49.8 inches)
Weight (kg)	77 kg (169.8 lbs)
<b>POWER REQUIREMENTS</b>	220V (12V, 5.0A)



### ECG

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



RS232



USB

### CONNECTION

Direct connectivity.

**Wired:** USB-B

**Wireless:** BLE and ANT+

BLE  
FTMSANT+  
FE-C

SOFTWARE

### SOFTWARE COMPABILITY

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



HEART

### HEART RATE MONITORING

Displays heartrate when connected via chestbelt (ANT+)



TEST

### TEST FUNCTIONALITY

For aerobic testing and advanced diagnostics in elite sports and research



POWER

### CONSTANT POWER MODE

Maintains a fixed power output regardless of cadence (RPM)

KP  
FORCE

### CONSTANT FORCE

Maintains a fixed resistance (kp) regardless of cadence (RPM)

### ISO 9001

Monark Exercise AB has been ISO 9001 certified since 1992. The model is:

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



# 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.

### SOFTWARE & INTEGRATION

The LC6 supports a wide range of connection modes for seamless integration with training and testing platforms:

- **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.



# 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.**



# Monark Exercise AB

Monark has over 100 years of experience in bicycle production.

This long tradition has resulted in deep know-how, hands-on expertise, and a genuine understanding of product quality and performance. Since the early 1900s, Monark cycles have represented precision, reliability, durability, and quality.

Today, we are a trusted global provider of high-precision cycle ergometers for research, sports science, clinical use and performance testing.

We develop, manufacture, and market ergometers and exercise bikes.

Our largest customer groups are within health care, sports medicine, and exercise physiology.

**For more information: [www.monarkexercise.se](http://www.monarkexercise.se) / [www.monarksportsmed.com](http://www.monarksportsmed.com)**



PRODUCTS FOR LIFE AND PERFORMANCE



MONARK EXERCISE

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