



MONARK 891E



Accurate upper body testing for anaerobic capacity

The 891E is a calibrated arm ergometer featuring Monark's weight basket system for immediate resistance and accurate workload control. Its height-adjustable stand allows use in both seated and standing positions, and accommodates testing from a wheelchair.

KEY FEATURES

- **For anaerobic testing** - Upper body
- **Monark's weight basket system** - Enables instant resistance application for precise workload.
- **Manual or automatic release** - Control the weight drop manually or via ATS software.
- **Connect through RS232**
- **Perfect fit frame** - Vastly increases adjustability to fit every unique user.
- **Extra rigid frame** - Built to withstand the extreme forces of anaerobic tests.
- **High sampling rate (50 Hz)** - Ensures detailed and accurate performance data.
- **Reliable calibration** - Pre-calibrated weights remove the need for electronic validation. Weights: 0,1kg, 0,5kg and 1kg.

Anaerobic Test Software

Medical Device Class IIa

Weight Basket

Wired Connection



Specifications

MONARK 891E

CERTIFICATIONS	EU directive 93/42/EU class IIa
FRAME	
Type	Arm ergometer
Handlebar	n/a
Stem	n/a
Seatpost	n/a
Saddle	n/a
BB	68/122 mm
Crank	Steel, 152 mm
Pedals	9/16", handles
RESISTANCE	
System	Weight basket
Flywheel	20 kg (44,09 lbs)
DISPLAY	
RPM	Yes
HR	5 kHz
Time	Yes, HH:MM:SS
Speed	Yes, km/h
Distance	Yes, km
Power/Watt	Yes
CONNECTIVITY	
Wired connection	RS232
Wireless connection	n/a
WEIGHT & DIMENSIONS	
Max user weight	n/a
Recommended user length	>150cm (>59 inches)
Length (mm)	1500 mm (59,06 inches)
Width (mm)	700 mm (27,56 inches)
Height (mm)	1660 mm (65,35 inches)
Weight (kg)	Ergometer: 26 kg (57,32 lbs) Stand: 35 kg (77,16 lbs) Total: 61 kg (134,48 lbs)
POWER REQUIREMENTS	220V (9V, 1,1A)



RS232

CONNECTION

Direct connectivity.

Wired: RS232



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 5.6kHz uncoded.



TEST

TEST FUNCTIONALITY

For anaerobic upper-body testing using weight basket resistance



WHEELCHAIR

Adapted for use from a wheelchair.

ISO 9001

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

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



Description

MONARK 891E

APPLICATIONS

Monark 891E is designed for anaerobic and aerobic testing of the upper body. With Monark's weight basket system and adjustable height, it enables precise workload calibration and accommodates both seated and standing use – including testing from a wheelchair. The system allows for rapid resistance application and repeatable testing conditions.

891E is an ideal tool for:

- **Sports Science and Research** – Designed for upper body Wingate and sprint tests with accurate workload control.
- **Rehabilitation and Recovery** – Suitable for measuring upper body capacity in clinical settings.
- **Inclusive Performance Testing** – Adapted for wheelchair use with full height adjustability and ergonomic handles.

SOFTWARE & INTEGRATION

The 891E is compatible with Monark's Anaerobic Test Software (ATS), enabling manual or automatic control of the weight basket. The software supports countdown, test signals, and fatigue index evaluation during multiple bouts.

The ergometer connects to a PC via RS232, ensuring reliable test control through the included Windows application. Calibrated weights (0.1, 0.5, 1.0 kg) ensure high measurement precision, and built-in heart rate monitoring is available via 5 kHz chestbelt.



Description

MONARK 891E

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.

891E 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 891E – Reliable ergometer for precise upper body testing.



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 / www.monarksportsmed.com



PRODUCTS FOR LIFE AND PERFORMANCE



MONARK EXERCISE

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KROONS VÄG 1, SE-786 33 VANSBRO, SWEDEN | [MONARKEXERCISE.SE](https://monarkexercise.se) | TEL: +46(0)281 59 49 40 |