

Modern ergometer with multifunctional applications





### **Highlights**

### High standards

Lode is a socially and environmentally responsible company. All Lode products are RoHS/WEE compliant and Lode is ISO 9001:2003, ISO 13485:2008 and FDA 510K certified. All medical products comply to MDD 93/42/EEC, incl. IEC 60601-1.

### Easy to operate

For Lode products this means:

- easy to connect
- easy to move around
- easy user interface

### Reliable and reproducible stress tests

The experience of professionals who calibrate many ergometers shows that the Lode ergometers are the most reliable across the complete workload and rpm range and still within specifications even after many years of intensive use.

### Additional features with PCU

Besides the possibility to program 24 protocols easily, this control unit offers the following features:

- better monitoring because of the additional and larger display
- a perfect combination with BPM
- possibility to measure SpO2







### Modern ergometer with multifunctional applications

The wall fastening consists of a vertical rail with hang-up mechanism which makes it possible to move the Angio up and down electrically over a range of 70 cm. Handgrips are standard included in this combination. The Angio is an ergometric unit that can be used for both arm and supine ergometry. Its compact design makes it universally applicable for ergometric studies in those sectors in which standard ergometry cannot be used. The Angio operates independent of pedaling speed in the range of 7 - 1000 watt. The Angio cpet is standard supplied with a communication module and can therefor be easily controlled by all known stress ECG and pulmonary devices in the world. The workload, rpm and time can be readout from the 3,5" colour display.

### **Features**



### Accurate over a long period of time

The Lode ergometers are supplied with an electro-magnetic braking mechanism of Lanooy (eddy current). The biggest advantage of this braking system compared to a friction braking system is the absolute accuracy and the accuracy over time. Moreover, friction braking systems have more wearing parts.



### Extreme low start-up load

The extreme low start-up load of 7 watts and the adjustability in small steps of 1 watt make this ergometer perfectly suitable for many different applications. The standard control unit shows multiple ergometry parameters and you can determine your specific default setting and start-up menu.



### Small adjustment steps

The workload of the Lode ergometers is adjustable in steps of only 1 watt. Depending on your wishes, the test operator or the test subject can adjust the workload. The steps of 1 watt are possible in the manual mode as well as within protocols.



### RS232 connectivity

RS232 ports enable connectivity to most ECG and ergospirometry devices as well as PC's.



### LEM compatible

This product can be used with Lode Ergometry Manager (LEM) software to manage data and to apply specific protocols when a Communication card or Network card is present



### LCRM compatible

This product can be used with Lode Cardiac Rehabilitation Manager software (LCRM)





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Angio cpet - with electrical adjustable wall fixation can a.o be extended with the following options:

### Control Unit with touch screen 7" for ergometer Multifunctionality



Partnumber: 945834

Programmable Control Unit with 7" Touchscreen Programmable



Partnumber: 945835

## Heart rate large distance

Heart rate in beats per minute



Partnumber: 945830

# SpO2 for control unit with touch panel (bicycle)

Saturation and heart rate



Partnumber: 945823

### Pedal shoes (pair)

Extra stability during cycling



Partnumber: 917803

## Pedal shoes pediatric (pair)

Pedal shoes for childen



Partnumber: 917833

## Pedal shoes extra large (pair)

For large feet sizes



Partnumber: 917834

### Adjustable cranks

Optimal force application



Partnumber: 928804

### Handgrip fixation set

Handgrip fixation set



Partnumber: 917822

## Handgrip fixation set pediatric

Versatile ergometry



Partnumber: 917823

### Network Module

Easy networking with LEM and LCRM



Partnumber: 945851

### USB to Serial converter

Easy connection



Partnumber: 226012

### RS232 cable

Easy connection



Partnumber: 930911





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### **Specifications**

Workload	
Minimum load	7 W
Maximum peak load	1000 W
Minimum load increments	1 W
Maximum continuous load	750 W
Hyperbolic workload control	~
Linear workload control	~
Fixed torque workload control	~
Maximum rpm independent constant load	150 rpm
Minimum rpm independent constant load	30 rpm
Optional heart rate controlled workload	<b>~</b>
Electromagnetic "eddy current" braking system	<b>~</b>
Dynamic calibration	~
Accuracy	
Workload accuracy from 7 to 100 W	3 W
Workload accuracy from 100 to 500 W	3 %
Workload accuracy from 500 to 1000 W	5 %
Comfort	
Adjustability range height	700 mm
User Interface	
Readout Distance	~
Readout RPM	<b>~</b>
Readout Heartrate	<b>~</b>
Readout target HR	<b>~</b>
Readout Energy	<b>~</b>
ReadoutTorque	<b>~</b>
ReadoutTime	~
Readout Power	~
Set Display	~
Set Resistance	~
Set P-Slope	~
Set Mode	~
Manual operation mode	~
Preset protocol operation mode	~
Terminal operation mode	~
External control unit	~

#### Dimensions

Product length (cm)	68 cm	26.8 inch
Product width (cm)	42 cm	16.5 inch
Product height	104 cm	40.9 inch
Product weight	55 kg	121.3 lbs
Power requirements		
VAC	100 - 240 V	
Phases	1	
Frequency	50/60 Hz	
Power consumption	250 W	
Power cord IEC 60320 C13 with CEE 7/7 plug	~	
Power cord NEMA	×	
Standards & Safety		
IEC 60601-1:2012	~	
ISO 13485:2003 compliant	~	
ISO 9001:2008 compliant	~	
Certification		
CTüVus according to NRTL - pending	~	
CB according to IECEE CB - pending	~	
CE class Im according to MDD93/42/EEC - pending	~	

### Order info

Partnumber: 967903

Selfdesigned protocol operation mode

\*Specifications are subject to change without notice.



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