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 and 13485:2008 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.



## Multifunctional

The ergometer can be used in various ergometry settings, enabling a multifunctional deployment.

## 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





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The Angio cpet is an ergometer 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. The ergometer is supplied with standard pedals.

# **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 Watt 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.



# 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)

# Additional features with PCU

Versatile controls

#### 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



# Versatile Interfacing

Various interface protocols guarantee perfect communication with all commonly known stress ECG and spirometry equipment



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Angio cpet - single set can a.o be extended with the following options:

Pedal shoes (pair)	Pedal shoes pediatric (pair)	Adjustable cranks	USB to Serial converter	Handgrips (pair)
Extra stability during cycling	Pedal shoes for childen	Optimal force application	Easy connection	Versatile ergometry
		Come of the second		
Partnumber: 917803	Partnumber: 917833	Partnumber: 928804	Partnumber: 226012	Partnumber: 917812
Handgrip fixation set	Heart rate for bicycle ergometers	Control Unit with 7" touch screen for ergometer	Programmable Control Unit with 7" Touchscreen for	SpO2 for control unit with touch panel (bicycle)
Handgrip fixation set	Heart rate in beats per minute	Multifunctionality	Programmable	Saturation and heart rate
Partnumber: 917822	Partnumber: 945821	Partnumber: 945834	Partnumber: 945835	Partnumber: 945823

Blood Pressure with ECG trigger for bicycle ergometer with ECG trigger



Partnumber: 945828



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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	$\checkmark$			
Linear workload control	$\checkmark$			
Fixed torque workload control	$\checkmark$			
Maximum rpm independent constant load	150 rpm			
Minimum rpm independent constant load	30 rpm			
Optional heart rate controlled workload	$\checkmark$			
Electromagnetic "eddy current" braking system	$\checkmark$			
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 %			
User Interface				
Readout Distance	$\checkmark$			
Readout RPM	$\checkmark$			
Readout Heartrate	$\checkmark$			
Readout target HR	$\checkmark$			
Readout Energy	$\checkmark$			
Readout Torque	$\checkmark$			
Readout Time	$\checkmark$			
Readout Power	$\checkmark$			
Set Display	$\checkmark$			
Set Resistance	$\checkmark$			
Set P-Slope	$\checkmark$			
Set Mode	$\checkmark$			
Manual operation mode	$\checkmark$			
Preset protocol operation mode	$\checkmark$			
External control unit	$\checkmark$			
Selfdesigned protocol operation mode	$\checkmark$			
Dimensions				
Product weight	40 kg	88.2 lbs		

Power requirements			
V AC	100-240 V		
Phases	1		
Frequency	50/60 Hz		
Power consumption	160 W		
Power cord IEC 60320 C13 with CEE 7/7 plug	~		
Power cord NEMA	×		
Standards & Safety			
IEC 60601-1:2012	~		
ISO 13485:2016 compliant	~		
ISO 9001:2015 compliant	~		
Certification			
CE class Im according to MDD93/42/EEC	~		
CE class of product with optional SpO2	lla		
CE class of product with optional BPM	lla		
CB according to IECEE CB - pending	~		

#### Order info

Partnumber:

967900

\*Specifications are subject to change without notice.



Lode B.V. Zernikepark 16 9747 AN Groningen The Netherlands Tel: +31 50 5712811 Fax: +31 50 5716746 E-mail: ask@lode.nl Internet: www.lode.nl