



## Cyclus2 – Technical Data, Properties

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### Mechanical data:

- non-slip transmission of high brake resistances up to 3000W
- Elastic mounting of any individual bike allows sustained loading (swaying-technique possible)
- Precise test- and training results by using the own bike (racing bike, track bike, mountain bike, triathlon bike, hand bike)
- 9-speed Shimano cassette sprocket (other sprockets available on request)
- Track version without freewheel available
- Ideal for mobile performance diagnostics  
(Compact transport case, optional battery powered version available)

### Operation:

- User friendly graphical control unit
- PC keyboard port
- Multi-language support  
(German, English, French, Spanish, Polish, Russian, further languages in prospective)

### Load types:

- Power controlled (Watt)
- Torque controlled (Nm)
- Isokinetic (cadence)
- Inclination (simulation of downhill, rolling friction and aerodynamic drag)

### Operational modes:

- Manual control
- Programme controlled  
(Simple setup of user-defined load patterns for individual tests and trainings)
- Externally controlled  
(Spiro-ergometry, or ECG-systems respectively, direct ergometry control with the winlactat software by [mesics GmbH](#))

### Incorporated tests:

- OBLA test
- Sinustest
- Wingate Anaerobic Test
- Isokinetic maximum force test
- Maximal-cadence-test
- PWC-Test
- CPI-Test

### Analysis options:

- Direct analysis of test- and training results presented by visually impressive print-outs  
(Incorporation of an individual logo on the print-out possible)
- Comfortable, automated analysis of a lactate performance curve  
(Supporting various threshold models and compensating curves)
- Data export in CSV-format for further processing of the data with analysis software on the PC (e.g. MS Excel, Matlab, etc.)
- Storage of test- and training data including analysis in the internal memory, on a USB-stick or on a network drive, reloading of the original data for new analysis possible

#### Interfaces:

- 2 x USB (e.g. for USB-stick, printer or additional keyboard)
- 1 x RS232
- 1 x LAN
- 1 x WLAN (optional)
- Controlling via TCP/IP or serial interface via a standard protocol, in addition the external protocol Ergoline 900 is supported

#### Accuracy, Calibration:

- Performance measurement (10 min. warm-up time): max.  $\pm 2\%$  of the displayed value,  
with power < 250 W max.  $\pm 5$  Watts
- Cadence: maximum error  $\pm 1$  RPM
- Calibration: recommended annually, including calibration protocol with measurement data, before and after calibration

#### Dimensions, weight:

- Mounting measurements: approx. 140 x 50 x 105 cm (L x W x H) depending on the individual bike being used
- Weight Cyclus2: approx. 30 kg
- Transport case (optional): 76 x 47 x 45 cm (W x H x D) approx. 45 kg incl. Cyclus2