

## Cyclus2 - Technical data

### Operation modes:

Load types:	power controlled (Watt), torque controlled (Nm), isokinetic (cadence), inclination (simulation of downhill force, rolling friction, air resistance)
Controls:	manual, program controlled, by recorded track profiles, by external systems (CPET, ECG, VirtualTraining)
Integrated tests:	OBLA Test, Sinus Test, Wingate Anaerobic Test, Isokinetic Maximum Strength Test, Maximal Cadence Test, PWC-Test
Maximal power:	3000 Watt (short-term)

### Compatibility:

Cassette:	10 speed cassette Shimano (11, 12, 13, 14, 15, 16, 17, 19, 21, 23), other types of cassettes or other gradations on request
Clamping front:	quick release skewer 9mm x 100 optional through axle QR12 x 100, QR15 x 100, QR15 x 110 and QR20 x 110
Clamping back:	quick release skewer 9mm x 135 optional through axle 12 x 142 with specialised spanning adapter
Axial distance:	min. 80cm, max. 119cm (different distances on request)
Hand bike:	special designed hand bike version and special rack available
Track bike:	special optimized sprint version without freewheeling and sprocket 12T available
Heart rate sensor:	ANT+ heart rate transmitter (e. g. Garmin)

### Accuracy, Calibration:

Power:	maximal error 2% of reading (for power values less than 100 Watt maximal 2 Watt)
Cadence:	error maximal $\pm 1$ RPM
Calibration:	dynamic calibration, incl. Calibration protocol, recommended on a yearly basis
Mechanical feedback:	HBM T5 torque flange (accuracy class 0, 1)

**Interfaces:**

2 x USB:	for USB-stick, printer, LactateSCOUT, handle bar switch or external keyboard
1 x RS232:	for external control (e. g. CPET, ECG), LactateSCOUT, BIOSEN
1 x LAN:	100/10MBit Ethernet for remote control via VNC, external control (e. g. CPET, ECG, VirtualTraining), network printer
1 x WLAN:	optional, 802.11g/ 2.4/5GHz WiFi, for remote control via VNC, external control (e.g. CPET, ECG, VirtualTraining), network printer
Protocols:	Cyclus2-protocol and Ergoline900 emulation on RS232, LAN and WLAN
Printer driver:	PCL3, PCL5 compatible (e.g. HP Officejet H470, HP Officejet 100) PDF, TIFF
Data export:	user-defined CSV-format, CycleOps CSV-format, TrainingPeaks PWX-format
Track profiles:	general GPX-format, Garmin TCX-format SRM powermeter SRM-format

**General information:**

Languages:	German, English, French, Italian, Polish, Russian, Spanish, Portuguese, Japanese
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**Voltage supply:**

Power input:	6W typical
Power adaptor:	wall power supply 100-240V AC/ 50-60Hz output voltage 12V DC/ 2,08A, medical registration according to IEC 60601-1:2005 (3rd Edition)
Internal battery:	optional, Ni-MH rechargeable battery 7,2V DC/ 2000mAh
Output connector:	on request
Special feature:	During pedalling the Cyclus2 remains fully functional without an external power adaptor and/ or without internal battery

**Dimensions, Weight:**

Assembly dimensions:	approx. 140 x 50 x 105 cm (L x B x H) depending on the type of bicycle used
Weight Cyclus2:	approx. 30 kg
Transport case:	76 x 48 x 45 cm (L x H x T) ca. 45 kg inclusive Cyclus2 Standard Version
Shipping dimensions:	79 x 51 x 46 cm (L x H x T) ca. 45 kg stowed in the transportation case with covering box 52 x 52 x 59 cm (L x H x T) ca. 30 kg in cardboard box