



CORTEX21

THE MASTER KEY TO METABOLIC TESTING

PERFORMANCE DIAGNOSTICS

- completely redefined

The combination of decades of experience, a dose of courage and innovative technology results in spiroergometry that transcends traditional boundaries.

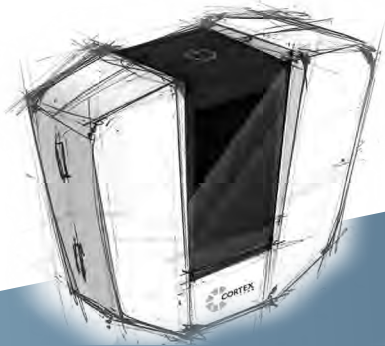
The CORTEX21 integrates stationary and mobile spiroergometry applications in one solution.

THE MASTER KEY TO METABOLIC TESTING



PROGRESSIVE DESIGN

- functionality combined with style



OUR GOALS

everything is possible

knowing the experiences of our customers

fulfilling wishes of our users

building on the strengths and qualities of
METAMAX® and METALYZER®



THE WAY

critically analyzing and developing new
approaches for measurement technology

analysis of currently available measurement
technology

development of solutions beyond the
standards

collaboration with many experts



THE RESULT

dissolution of the boundary between stationary and mobile spiroergometry
usability, that can handle any test situation
improvement in measurement accuracy
partly patented new special solutions
RedDot® awarded design



DESIGN

SIMPLIFY YOUR WORLD

- fast, convenient, safe



touch display

additional keys for usage with gloves

enormously reduced warm-up time

cable-free charging of the Mobile Unit

prepared for new O₂ measurement technology

tool-free replacement of O₂ sensor

room air monitoring

STATIONARY



MOBILE

endless battery capacity during field test

data protection through removable SD card

display of usage status of gas sample line

improved position and speed determination

FEATURES

PRECISE MEASUREMENT

- with know-how that inspires

PNEUMATICS

optimized flow conditions in the gas extraction system through:

- improved extraction control
- reduced dead spaces
- control & correction of the extraction flow during calibration

SENSORS

numerous internal

- pressure sensors
- temperature sensors
- and humidity sensors

for improved compensation of changing environmental conditions

ALGORITHM

further development of the internal algorithms

- calculation algorithms for the basic physiological variables
- signal synchronization between gas and respiratory flow signal
- temperature adaptive filtering of the O₂ & CO₂ signals

PROCESSOR

- powerful processor with very high computing speed and bandwidth
- increased sampling rate

CALIBRATION

- automatic gas calibration of the CORTEX21
- use of a calibration-free CO₂-Sensors in the docking station for calibration to real ambient conditions



PRECISION

ADAPTABILITY

- *to any condition*

The CORTEX21

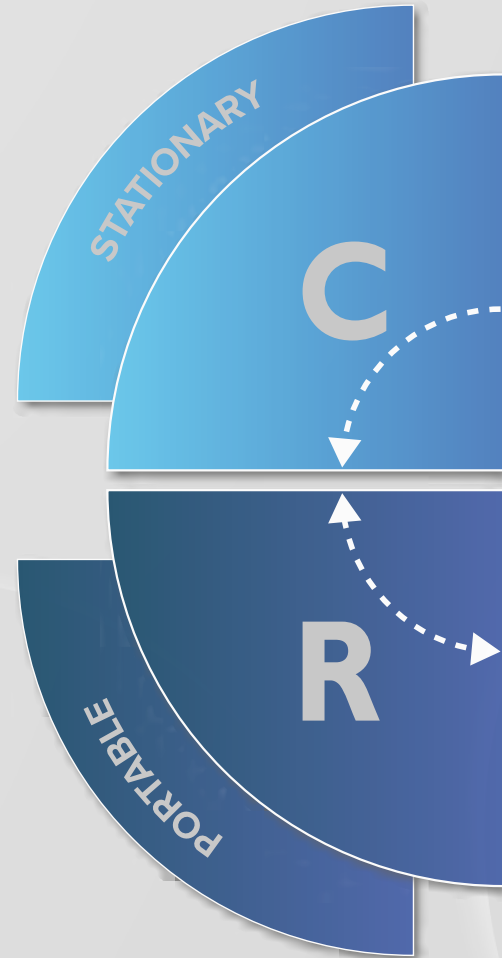
adapts flexibly to any of your measurement situations - from stationary test to mobile indoor applications and outdoor measurements, everything is possible with just one device.

typical stationary application

power supply and exercise ergometer at the measuring station

portable stationary application

independent of power supply, selection of load devices at a greater distance



MOBILE OUTDOOR

X

field test of all kind

with geo-positioning
and long radio range

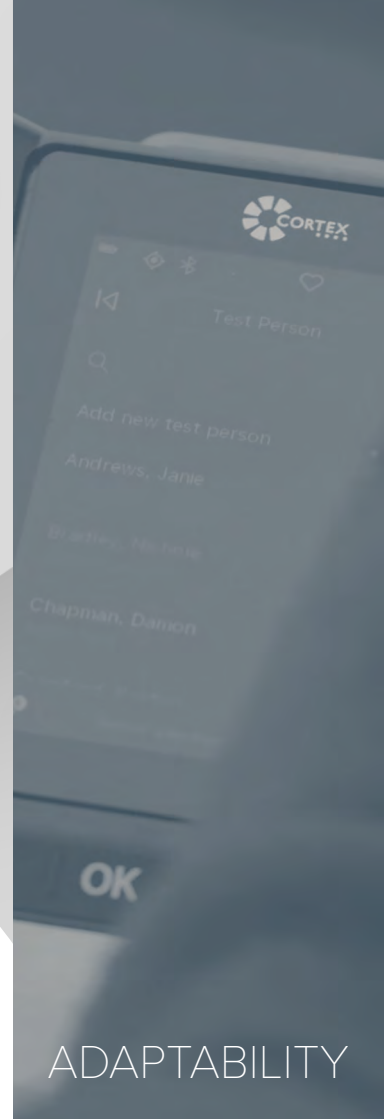
MOBILE INDOOR

T

mobile measurement

in confined indoor spaces

Thanks
to impressive adap-
tability, you receive the best
possible solution for every require-
ment for your spiroergometry measure-
ment through targeted activation.



ADAPTABILITY

COMPLETE FREEDOM

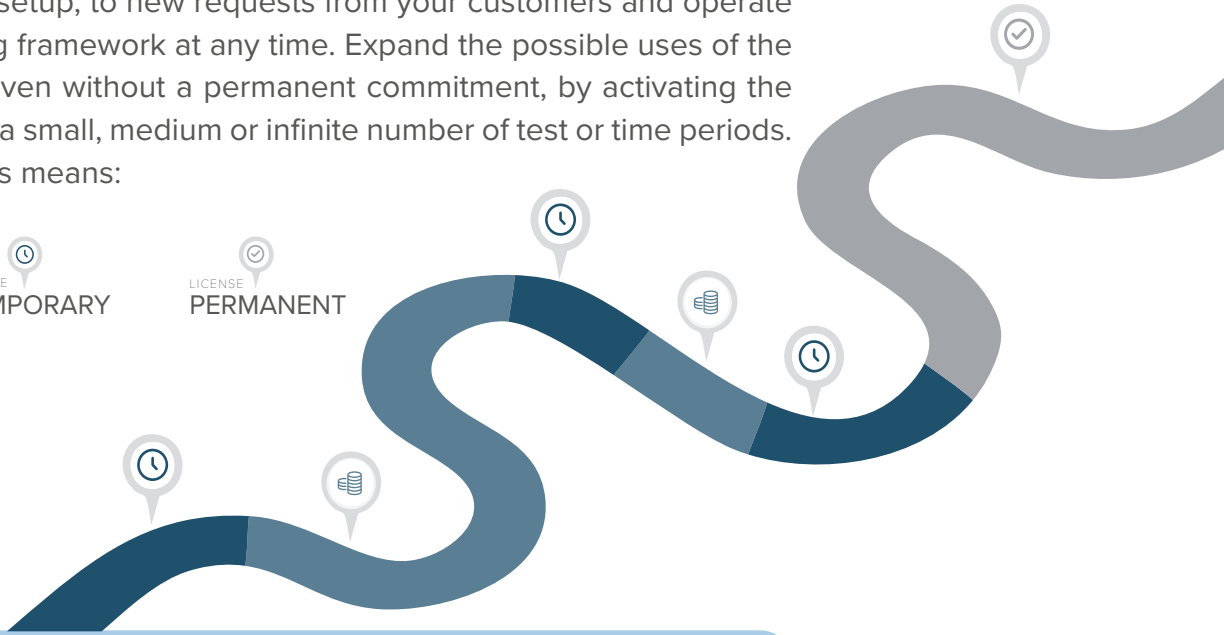
- no matter what happens

The CORTEX21 opens up a world of limitless freedom for you. Respond to changes in your test setup, to new requests from your customers and operate within a new planning framework at any time. Expand the possible uses of the device at any time, even without a permanent commitment, by activating the expansion stages for a small, medium or infinite number of test or time periods. In concrete terms, this means:


LICENSE
PAY-PER-USE


LICENSE
TEMPORARY


LICENSE
PERMANENT



The CORTEX21 always offers you the right license model for your needs.

PAY-PER-USE LICENSE

- ideal for those who want to carry out a test from time to time
- optimal for a long time - few tests
- no time restrictions

available
in different
package sizes



TEMPORARY LICENSE

- optimal for defined time - many tests
- cost efficiency for short-term use
- flexibility for project work/studies

available
in different
periods



PERMANENT LICENSE

- ideal for unlimited use
- long-term cost savings: no ongoing fees
- independence

available
for all solutions
C R T X





red^{dot} winner 2024
medical devices and technology design



CORTEX21

- go beyond the traditional limits of spiroergometry

Take the first step and get in touch with us:

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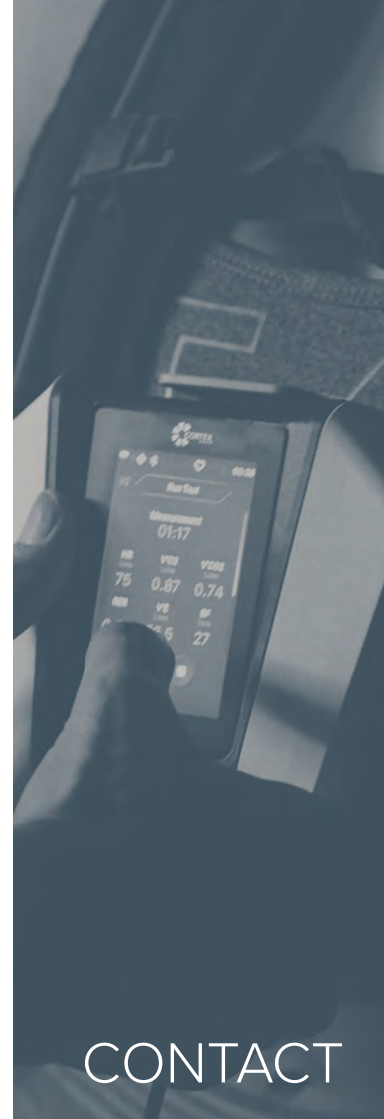
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