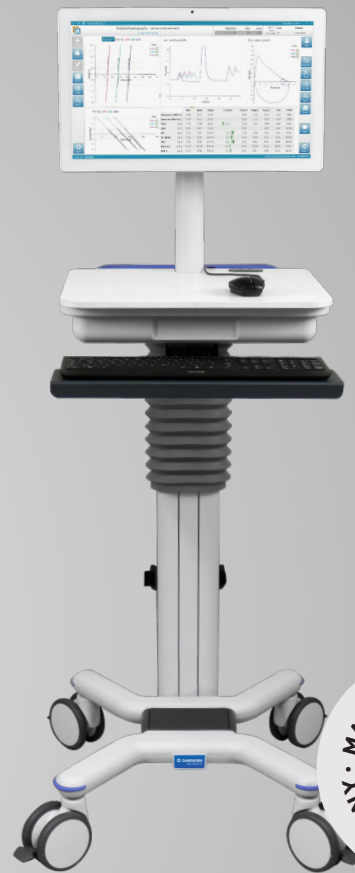


PowerCube Body+

Body Plethysmograph

Versatile. Individual. Robust.
The body box that adapts to your needs.



THE FUTURE OF LUNG DIAGNOSTICS – DESIGNED FOR HUMANS, BUILT FOR RESULTS.

A simple and puristic design that fits perfectly into the medical workflow. The first body plethysmograph based on ultrasound technology — highly individual and robust — designed for measuring most PFT parameters at a single workstation. PowerCube Body+ hardware and Ganshorn.LFX software can be easily configured to meet specific requirements and preferences. With enhanced long-term stability and advanced analysis algorithms, users can instantly identify asthma, COPD, restrictions, or combinations of these conditions with just a quick look at the measurement graph.



Solid and durable system construction



Versatile, fast and compatible LFX software platform



Lowest costs per measurement



Spare part free



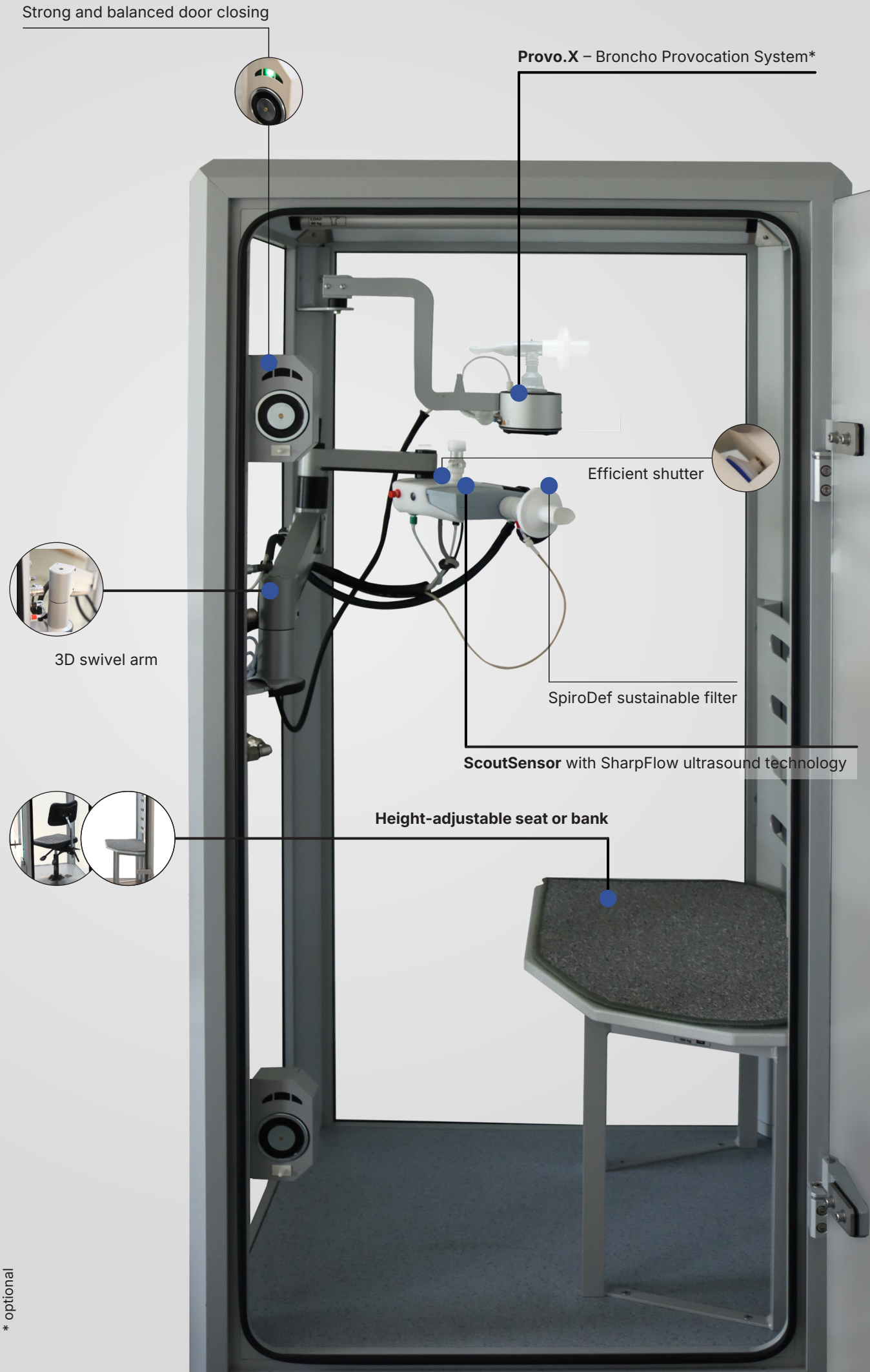
Maximum device configurability



Highly accurate and precise

Future-Proof your lab with the PowerCube Body+

The GANSHORN PowerCube Body+ sets a new focus on first-class quality and the highest precision down to the smallest detail. Thanks to the fully barrier-free wheelchair version, it offers improved patient comfort and increased safety, while hygiene measures are made significantly easier and faster thanks to the well-thought-out design. Equipped with an innovative, calibration-free and waterproof SharpFlow ultrasound sensor, the device delivers fast, reliable and precise results. The clear design of the GANSHORN PowerCube Body+ combines elegance with functionality and is not only a visual highlight in your laboratory, but also makes everyday work easier thanks to optimized hygiene.



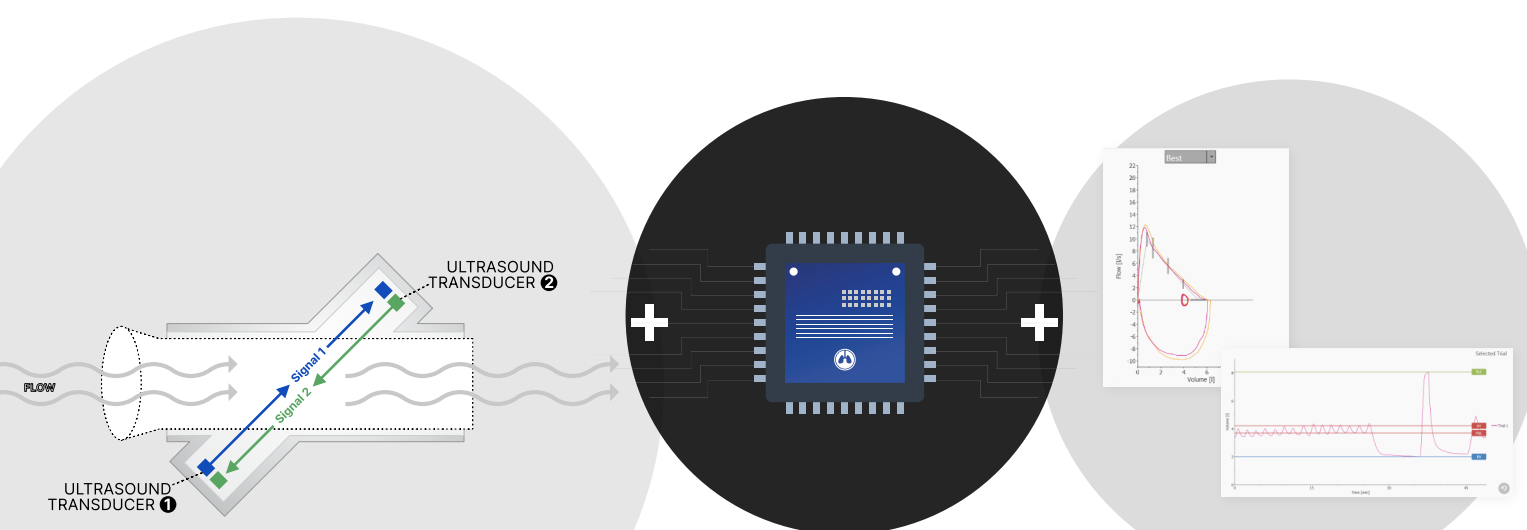


SharpFlow

The GANSHORN ultrasound technology

Two diagonally opposed ultrasonic transducers alternately transmit and receive ultrasonic waves. Without airflow in the breathing tube, the travel time of the ultrasonic waves is the same in both directions. An airflow in the tube accelerates the waves in one direction and slows them down in the other. The flow rate can be calculated from the difference in the travel times of

the ultrasonic waves. The measured travel times are used to calculate flow rate and gas density, allowing changes in the concentration of exhaled gases to be determined directly and simultaneously with the breathing volume. All other factors, such as gas properties, humidity, and temperature, are the same in both directions and cancel each other out.



1 Double ultrasound signal capturing

The ultrasound measuring system captures the signal with two sensors, in both directions simultaneously, for spatially precise recording

2 Measurement hardware acceleration

Devices based on SharpFlow measurement technology use sophisticated and proven hardware.

3 High-resolution diagram rendering

Based on the multi-layered recorded values, the measurement software LFX is able to render particularly precise and sharp graphics.

Precision + Resolution

The right sampling resolution, which corresponds to the interpretation, is a prerequisite for reliable flow determination.

No detours

No substitute parameters for flow necessary (e.g. Differential pressure)
Direct flow measurement based on digital measurement technology

Room climate-independent

Not affected by changing ambient conditions like temperature or humidity of breathing air

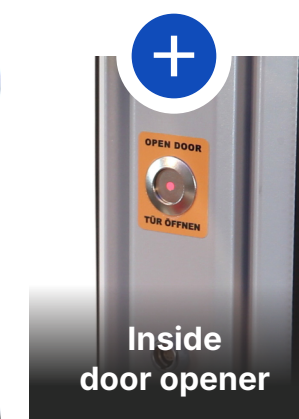


Difficult to measure? Simply turn toward the patient.

- ✓ The flexible 3D-Arm of the PowerCube Body+ can be extended outside of the cabin up to a reach of **67 cm** (with SpiroDef filter: 72,5 cm). Benefit from flexible adaptability inside and out.



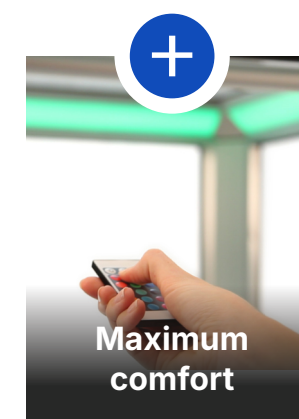
Door lock indicator
Balanced strong magnets ensure a smooth closing



Inside door opener
Door can be opened manually from the inside at any time



Patient speaker and microphone
This allows direct communication to continue

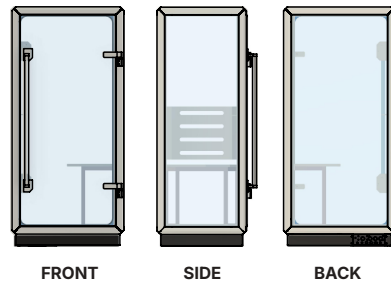


Maximum comfort
Panorama view to outside and LED lights

Cabin variants

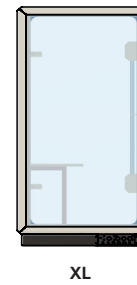
Standard cabin

This setup is exclusively equipped with spirometry and body plethysmography measurement capabilities and is ideal for upgrading existing infrastructure.



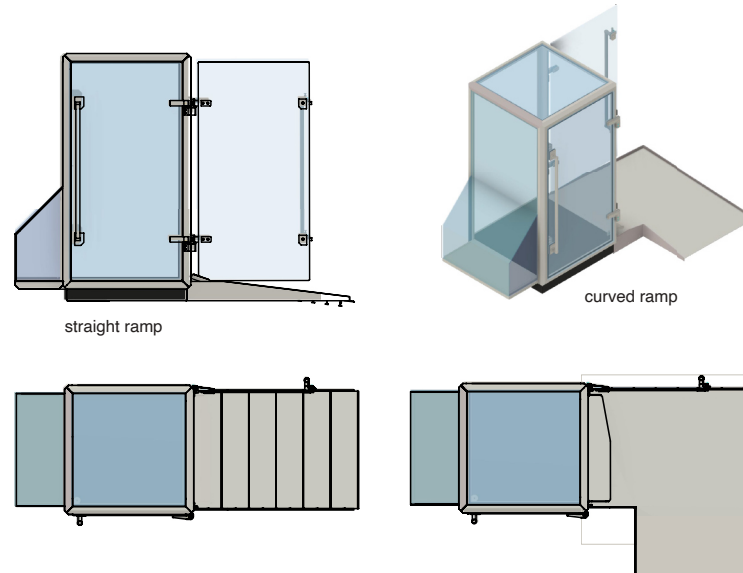
XL cabin

GANSHORN also offers a larger cabin to suit your needs. Please contact our sales department for more information.



Wheelchair cabin

For the PowerCube Body+, you can order the cabin in a truly barrier-free version. This is the only way to measure the **real** values of TLC, resistance and volume without having to interpolate them. Available as PowerCube Body+ Cabin with curved or straight ramp, standard or XL dimension.



Standard workstations

Height-adjustable
medical trolley

Seated
workplace

SpiroDef filter concept

For this system, we recommend using our **SpiroDef** filter series, which is designed for precise compatibility. This comes with several advantages:

- ✓ Optimal hygiene for the patient
- ✓ ERS/ATS compliant
- ✓ Prevents room contamination
- ✓ Sustainable filter solution



LFX Software platform

Preliminary patient overview

Quick patient access

Big zoomable trial chart area

Alternate chart view

Quick measurement access

Customizable parameter list



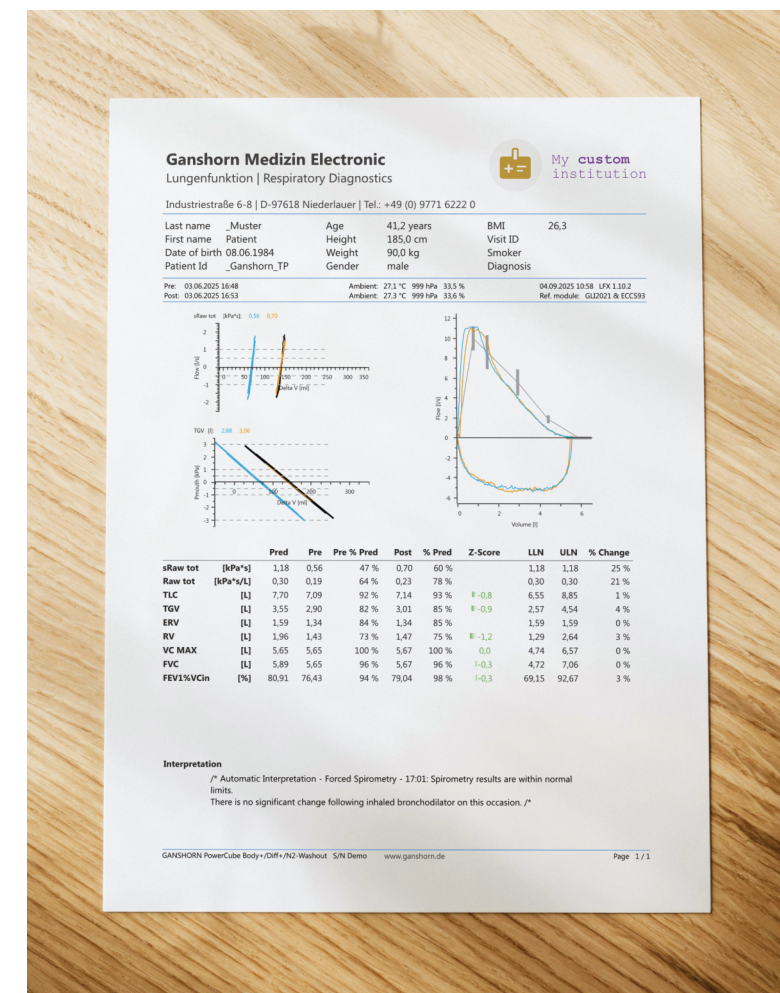
Body plethysmography measurement review

ATS/ERS measurement check

One software system

Diagrams with flexible, large display sizes and various customization options enable quick and accurate evaluation of measurements and breathing maneuvers at a glance. The use of modern Windows tools such as .NET enables platform- and language-independent communication. A modern database concept that leverages both Microsoft SQL and MySQL offers the perfect approach – both for private physicians and large hospital networks. This enables optimal integration and performance.

- ✓ HIS/EMR integration
- ✓ DICOM/HL7
- ✓ GDT communication
- ✓ Full network compatibility
- ✓ SQL Database system
- ✓ Export of PDF and raw data files
- ✓ Running on Microsoft® Windows®



Fully customizable report with automatic comments

The gold standard for PFT measurements

The GANSHORN PowerCube Body+ offers an exceptional range of testing options, enabling comprehensive assessment of lung function – from basic breathing tests to advanced measurements like lung volumes, airway resistance, and bronchial provocation.

Parameter Testing example capabilities

Static lung volumes	Absolute lung volumes: TLC, FRCpleth, RV, RV/TLC and others Static Lung Volumes: VC MAX, IC, ERV and others
Specific Airway Resistance	sReff, sRtot, sRO.5, sRmid as well as Reff, Rtot, RO.5, Rmid & others
Dynamic Lung Volumes	FVC, FEV1, FEV1/FVC, FEF 25-75, FEF 75, FEF 50, FEF 25, PEF, MVV and more

Cabin options

MIP/MEP	Maximum Inspiratory and Expiratory Pressures
SB Diffusion	Realtime with determination of DLCO, KCO, VA, TLC, FRC, RV and more. Intra-breath without breathhold and trapped gas evaluation.
Rocc	Single occlusion resistance measurement
PO.1	Easily measured respiratory drive of tidal breathing
Intra-Breath Diffusion	For patients unable to hold their breath for long -measurement without breath hold.
N₂ washout	Removal of nitrogen from the lungs by breathing 100% oxygen.
Rhino-manometry	Measures nasal airflow and resistance during breathing.
SNIP	Measures inspiratory muscle strength via nasal pressure during a sniff.
Bronchial Challenge Testing	With the GANSHORN Provo.X – individually configured provocation testing

Why GANSHORN?

GANSHORN has been a leader in pulmonary diagnostics since 1982, offering advanced systems for spirometry, body plethysmography, diffusion, and more. All key components are made in Germany, with devices developed and produced in Bavaria. Today, GANSHORN operates globally, with strong markets across Europe, Asia, the Americas and Australia.



PowerCube Body+

Body Plethysmography



Altitrainer

Hypoxic challenge testing, hypoxia training



Vivatmo pro

FeNO monitoring



SpiroScout

Spirometry



tremoflo

Airwave Oscillometry



i20

Blood gas analysis



PowerCube Diffusion+

Diffusion measurement



EucapSys

Eucapnic Voluntary Hyperpnea (EVH)



PowerCube Ergo

Cardiopulmonary exercise testing (CPET)

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The model shown may also include optional equipment which is not within the standard scope of supply. Design, equipment, and contents are subject to change without notice, as are misprints and errors.

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