



Platinum Elite™ Series

Body Plethysmograph



PUTTING PATIENTS FIRST SHOULD NOT MEAN SACRIFICING TIME, SPACE OR ACCURACY. WITH THE PLATINUM ELITE SERIES BODY PLETHYSMOGRAPHS, COMFORT BLENDS SEAMLESSLY WITH SUPERIOR TESTING PERFORMANCE

COMPLETE CAPABILITIES FOR BETTER PATIENT CARE

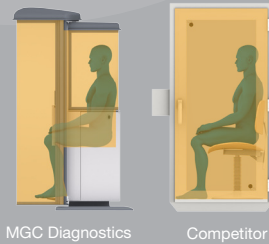
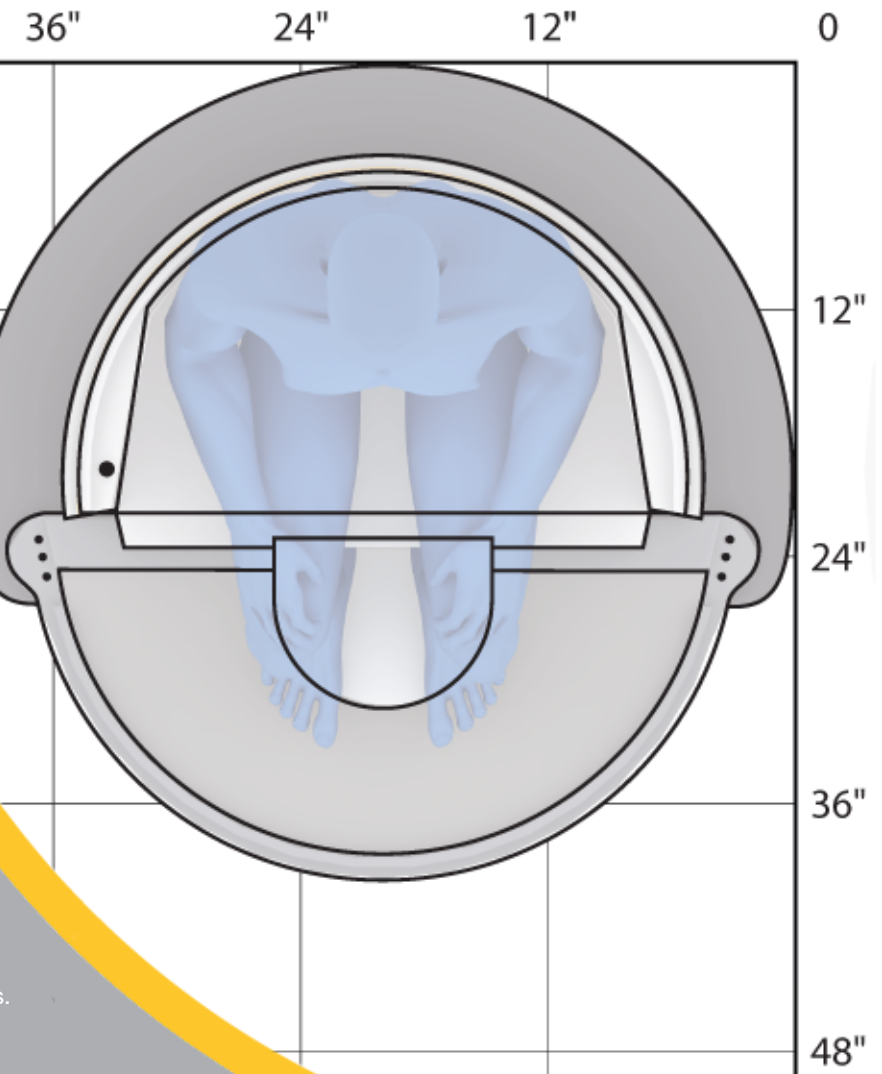
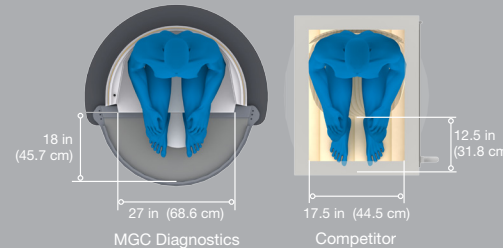
Like many medical devices on the market, there is a tendency to make price the determining factor when making a product selection without taking into account other essential factors. What benefit is a pulmonary product if repeat testing must be done to get a single accurate response? Why not take into consideration patient comfort and testing efficiency?

The Platinum Elite Series™ body plethysmographs have been designed to obtain the highest quality measurement with unparalleled ease, speed and comfort for both the technologist and the patient. Testing more patients with increased accuracy in less time changes the perspective. *More patients tested equals added value.*

UNIQUE COMPACT DESIGN

Many pulmonary and respiratory labs are restricted in the size of equipment their space will allow. With body plethysmograph systems being standard equipment for these labs, efficient design is essential.

- With an Interior volume of just 726 L, the Platinum Elite Series body plethysmographs have the smallest footprint of any “body box” on the market while also being able to hold the most weight - ideal for small or crowded labs.
- Patented zero-clearance door provides better use of available space.
- Fits through a standard door in the hospital or office during installation.



MAXIMUM USABLE VOLUME

The challenge of body plethysmograph system design is to design a system which is comfortable and spacious for a patient, but uses that space as efficiently as possible. The interior volume and the pressure of a body plethysmograph system work together to determine a patient's volume of thoracic gas. This works better when the interior volume is smaller. If the space directly under a patient's legs and chair is open, it is a waste of open space that does not facilitate getting good noise-free data. The space that is valuable to a patient, however, is the space directly in front of him/her because we all know that patients breathe relaxed when they are in a comfortable, pleasant testing environment.



PREVENT® FLOW SENSOR FOR SIMPLICITY AND ACCURACY

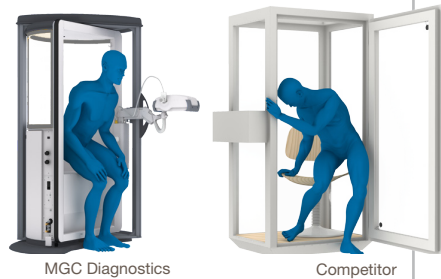
Our proprietary flow sensors save time between patients and provides maximum infection control while meeting or exceeding ATS/ERS standards and specifications.

- Eliminates warm-up, flow recalibration and changing flow sensors.
- Simple snap-in setup contains no moving parts or electronics for cost-effective testing.
- Options to use with a filter (PFT), sterilize or discard.

PATIENT COMFORT AND CONVENIENCE

For the Platinum Elite, space efficiency never comes at the expense of interior comfort.

- Sturdy metal seat with no weight capacity.
- More knee and foot room to accommodate larger and tall patients.
- Safe and simple “turn and sit” entry to the box with no need to “step-up.”
- Molded elbow rests.
- Patient always faces technologist to help with communication and understanding.



TESTING OUTSIDE THE BOX

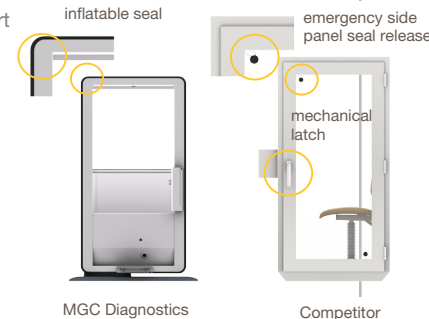
All pulmonary tests can be performed outside the box (except TGV and RAW) for patients those with mobility challenges as the testing arm is able to easily swing for out of box tests.

- Test wheelchair patients outside of box.
- Wheelchair patients can be very easily transferred into the box.

QUIET, INFLATABLE DOOR SEAL

The auto door seal inflates quickly for patient comfort

- No mechanical latches for simplicity of operation.
- With no latches present, the patient can easily open cabin with the push of a button. No emergency line to remove box side panel is required.
- Patients requiring an IV pump can be easily tested as the IV line can pass through the door seal without crimping.



TRUE BI-DIRECTIONAL COMMUNICATION

Communication between the patient and the technician can make the difference between obtaining an accurate test or not. Systems with only one way communication require pushing a button and holding it to communicate. The Platinum Elite's two way communication system contains a volume control for both the technologist and the patient while the large open windows allow the technologist and patient to easily see each other.

ADVANCED ENGINEERING/DIGITAL ELECTRONICS

- Self-monitoring, self-diagnostic and self-adjusting circuitry simplifies system operation.
- Enhanced reliability and serviceability.
- On-board “indicator lights” provide quick check of system performance.
- Central control modules are mounted in slide-out trays for easy service access.
- Optional internet based remote diagnostics for faster service.
- To ensure rapid temperature equilibration, the body box is made out of aluminum.
- DLco and N₂ washout are calibrated through entire patient circuit.



All Platinum Elite body plethysmograph systems are manufactured in St. Paul, Minnesota U.S.A.

Each system is tested for ATS waveforms and goes through Hans Rudolph validator DLco testing before shipping.

The Platinum Elite System's new digital technology and enhanced features represent the Platinum Standard. Its ease of operation will meet pulmonary function testing needs for years to come.

SUPERIOR PATIENT INTERFACE WITH THE PREVENT® FLOW SENSOR

- Simple snap-in design— no warm-up or recalibration required between patients
- No moving parts or electronics—for maximum durability
- Can be sterilized, used with a filter or discarded, making it extremely versatile and cost effective



COMPLETE CAPABILITIES FOR BETTER PATIENT CARE

- Faster, more accurate testing
- Comprehensive diagnostics, including airways resistance and thoracic gas volumes
- Compliant with ATS/ERS and HIPAA standards
- Open-architecture database with flexible system software
- Multiple networking and interfacing options

SPECIFICATIONS

TYPES OF TESTS	D	DL	DX
Spirometry (FVC, SVC, MVV)	✓	✓	✓
Bronchial provocation	○	○	○
Thoracic gas volumes (TGV)	✓	✓	✓
Airways resistance (Raw)	✓	✓	✓
Respiratory mechanics (MIP/MEP)	✓	✓	✓
P100	○	○	○
Static & dynamic compliance	○	○	○
DL _{CO}		✓	✓
N ₂ washout			✓
SBN ₂			✓

✓ = Standard ○ = Optional

PLATINUM ELITE MODULE

- Height: 69.5 in (176.5 cm)
- Circumference: 113 in (287 cm)
- Diameter (door closed) 37 in (94 cm)
- System weight: 350 lbs (158 kgs)
- Internal volume: 726 L
- Construction: Aluminum/acrylic
- Arm adjustments
 - Vertical extension: 20 in (51 cm)
 - Horizontal extension: 14 in (35.5 cm)

PREVENT FLOW SENSOR SPECS

- Bidirectional Pitot tube flow sensor
- Range: ±18 L/s
- Accuracy: ±3% or 50 mL, whichever is greater (meets or exceeds ATS/ERS clinical performance standards)
- Resistance: <1.5 cm H₂O @ 14 L/s
- Dead space: 39 mL

POWER REQUIREMENTS

- 100-240 V/50-60 Hz

O₂ ANALYSIS (MODEL DX)

- Type: Galvanic
- Range: 0-100%

DIFFUSION ANALYSIS: RTD MULTIGAS TECHNOLOGY (MODELS DL, DX)

- Analysis time: <1 sec
- Range for CO and CH₄: 0-0.35%
- Accuracy for CO and CH₄: 0.003%
- Linearity: <1% full scale
- Resolution for CO and CH₄: ± 0.0005%

GAS CHROMATOGRAPHY (MODELS DL, DX)

- Analysis time: <120 sec
- Range: Ne, 0-0.5%; CO, 0-0.3%
- Accuracy: 0.03 units full scale or 0.03%
- Linearity: 0.5% full scale

GAS SAMPLE

- Proprietary gas-drying sample circuit

GAS REQUIREMENTS

MODELS WITH RTD™ MULTIGAS TECHNOLOGY

- Calibration gas (6-8 psi): 5% CO₂, 12% O₂, bal N₂
- DL_{CO} mix (135 psi): 0.3% CO, 0.3% CH₄, 21% O₂, bal N₂
- 100% O₂ (135 psi) - *DX model only*

MODELS WITH GAS CHROMATOGRAPHY

- DL_{CO} mix (135 psi): 0.3% CO, 0.5% Ne, 21% O₂, bal N₂
- 100% He (10-28 psi)
- 100% O₂ (135 psi) - *DX model only*

ALL MODELS REQUIRE GAS TO SEAL THE DOOR

- Air (30-135 psi)
- or
- DL_{CO} mix (135 psi)

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