



Technical Specifications

Product	Description	REF		
Q-Box	Standalone Body Plethysmography Laboratory	C09068-01-99		
Standard packaging	Q-box (Cabin+Quark PFT body), X9 PNT (2 pcs.), Smart Valve (2 pcs.), 3L Calibration syringe, compensation box, OMNIA PC Software, cables, probes, fuses and user manual			
Standard Measurements				
Spirometry	Forced Vital Capacity (FVC) Pre/Post, Slow Vital Capacity (SVC) Pre/Post, Maximum Voluntary Ventilation (MVV), Bronchoprovocation test			
Body Plethysmography	Lung Volumes (TGV, TLC, FRC), Airway Resistance (RAW, sRAW, GAW, sGAW), Pre/Post			
Respiratory Mechanics	Maximum Inspiratory/Expiratory Pressure (MIP/MEP), Respiratory Drive (P0.1)			
Optional Measurements				
	Description	REF		
Integrated Dosimeter	Broncho challenge with integrated nebulizer	C03250-01-11		
Lung Diffusing Capacity	Lung diffusing capacity (DLCO single-breath, DLCO intra-breath and DLCO membrane diffusion)	C03240-01-11		
Airways Resistance (Roccc)	Occlusion Resistance measurement (Pre and Post BD)	C02700-01-11		
Forced Oscillations	Respiratory mechanics (Impedance Zrs, Resistance R & Reactance X)	C05090-01-11		
Flowmeter				
	X9 PNT	Turbine 2000 (optional)		
Type	Lilly multiuse pneumotach	Bidirectional digital turbine		
Flow range	0-14 L/s	0.08-20 L/s		
Flow accuracy	±2% or 20 mL/s (flow)	± 2% or 20 mL/s		
Ventilation range	--	0.08-300 L/min		
Ventilation accuracy	--	± 2% or 100 mL/min		
Resistance	<1cmH ₂ O/L/s @ 14 L/s	<0.6 cmH ₂ O /L/s @ 14L/s		
Gas Analyzers				
	CO	CH ₄		
Tests	DLCO	DLCO		
Type	NDIR	NDIR		
Range	0-0.35%	0-0.35%		
Accuracy	± 0.003 % Vol.	± 0.003 % Vol.		
Pressure Sensors				
	Cabin Pressure	Mouth pressure	MIP/MEP	Pneumotach
Type	Piezoresistive	Piezoresistive	Piezoresistive	Differential pressure
Range	±1.02 cmH2O	±71.38 cmH2O	±255 cmH2O	±1.27 cmH2O
Accuracy	±0.05 cmH2O f.s.	3.57 cmH2O f.s.	12.75 cmH2O f.s.	0.06 cmH2O f.s.
Resolution	0.00015 cmH2O	0.11 cmH2O	0.035 cmH2O	0.0001 cmH2O
Calibration	Integrated 30 mL pump	Automatic Zero	Automatic Zero	Automatic with 3L syringe
Hardware				
Dimensions & Weight	93x85x172 cm / 130 Kg (Box only)			
Internal Volume	873 L			
Ports	USB A-B, RS-232, HR-TTL, SpO2			
Electrical requirements	100-240V ± 10%, 50/60 Hz			
Environmental conditions	Temperature 0-50 °C; Barometric pressure 400-800 mmHg; Humidity 0-100%			
Software				
	OMNIA			
Available languages	English, Chinese (Traditional & Simplified), Czech, Dutch, French, German, Greek, Hebrew (interpretation only), Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, Turkish			
PC Requirements	Windows 7 SP1 (32/64 bit) or Windows 8.x (32/64 bit) or Windows 10 (32/64bit), CPU ≥ 2GHz, RAM ≥ 4GB, HD ≥ 10GB for full installation, Monitor resolution ≥ 1366x768 pixel, ≥2 USB port			



Accessories	Description	REF
Medical Grade Cart	1 cylinder holder (120V or 240V)	C03550-0X-04
	3 cylinder holder with drawer (120V or 240V)	C02900-0X-04
Articulated arm	Articulated arm for Medical Cart	C05160-01-11
Gas for box calibration	Gas cylinder 16% O ₂ , 5% CO ₂ , N ₂ bal	A-860-000-004
Pressure regulator	Pressure regulator for gas cylinder for box calibration	A-870-150-005
Gas for DLCO tests	Gas cylinder 0.3% CO, 0.3% CH ₄ , 21% O ₂ , N ₂ bal	A-860-000-005
Pressure regulator	Pressure regulator for DLCO gas cylinder	A-870-150-011
Consumables	Description	REF
Sampling line	Reusable gas samplig line	C02210-02-08
Antibacterial/Antiviral filters	Single use with round mouthpiece (50 pcs.)	A-182-300-004
Rubber mouthpiece	Single use (200 pcs.)	C00568-01-98
Mouthpiece w/saliva trap	Reusable	A-800-500-001
Nose clip	Single use (25 pcs.)	A-662-100-001
Safety & Quality Standards		
MDD (93/42 EEC); FDA 510(k); EN 60601-1 (safety) / EN 60601-1-2 (EMC)		



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