



Enhanced Patient Care

TECHNICAL SPECIFICATIONS DATA SHEET





Product Specifications -

Physical Specifications

Package dimensions		
Volume	1570×975×750 mm³ (H×W×D)	
Gross weight	Approximately 135 Kg	
Net weight	Approximately 80 Kg	
Top shelf		
Area	530×400 mm² (L×W)	
Weight limit	Approximately 34 Kg (75 lb)	
Work surface	Retractable tray, Optional Side flip up tray	
Drawer	Two	
Volume	150×335×310 mm³ (H×W×D)	
Vaporizer station		
Number of stations	Two	
Туре	Selectatec® compatible with Inter lock. Prevents simultaneous activation of more tha one vaporiser at a time.	
Casters		
Diameter	100 mm	
Brakes	Single foot lever locks and unlocks for two front casters	
Material		
The framework is made of metal and ABS, wherein the metal is galvanized A3, and it passes 48h salt spray test.		

Electrical Specifications

Power supply		
Power input	100 to 240 VAC, 50/60 Hz, 6.5A (Max.)	
Power cord	5 meter length	
Fuse	T10AL/250V	
Standard	CE	
Auxillary power outlets		
Number of outlets	Three	
Power output	100 to 240 VAC, 50/60 Hz, 1.5A×3	
Fuse	T2AL/250V	
Standard	CE	
Battery		
Туре	Lithium	
Number of batteries	One piece	
Backup time	Minimum 120 Minutes, Maximum up to 240 minutes with a fully charged battery	
Charging time	Approximately 8 hours	
Communication port		
RS 232, PS2. Optional Ethernet Port		

Pneumatic Specifications

Gas supply		
Pipeline	O ₂ , N ₂ O, AIR. NIST Type	
Pressure	280 to 600 kPa	
Cylinder Yokes	Pin Indexed. For $\rm O_2 \& N_2 O$. With Filter and Check Valve.	
Oxygen flush	25~75L/min	
Auxiliary O ₂ flowmeter (Optional)	Flow rate 0-15 L/min	
Gauges	Total 3 gauges for pipeline & 2 for cylinder	
Auxiliary Common Gas Outlet (ACGO)	Switchable outlet. ISO 22mm OD and 15 mm ID.	

Flowmeters		
Туре	O ₂ , N ₂ O, Air: Electronic flow meters with virtual flow display on screen & total fresh ga flow display on a flow tube. Flow Range: 0.1 - 10 L/min for all Gases	
Hypoxic guard system	Mechanical Gear System. Provide minimum 25% concentration of Oxygen in O_2/N_2O gas mixture	
Absorber		
Volume	385×502×335 mm³ (H×W×D)	
Net Weight	Approximately 6 Kg	
Bellows Volume	1500 ml - Universal Bellows , Latex Free	
Absorber Volume	Manual Mode- <1.2 L Vent Mode- <2.95 L	
APL Valve	2 to 70 cm H ₂ O	
Pressure Manometer	Pneumatic gauge measures breathing circuit pressure with range of -20 to 100 cm H ₂ O	
Absorber leakage	The absorber pressure under 3 kPa, then the leakage is not more than 150 mL/min	
Connection	Inspiratory port: standard outside diameter 22 mm, inner diameter 15 mm, cone-shaped connector; Expiratory port: standard outside diameter 22 mm, inner diameter 15 mm, cone-shaped connector; Manual breathing bag: outside diameter 22 mm.	
Absorber canister	Single, approximately 1.5 L (1.35 Kg) with bypass	
Absorber Heating	Avoids water condensation	

Anaesthesia Ventilator

Ventilator specification		
Driving mode	Pneumatically Driven & Electronically controlled	
Driving gas	Охуgen, Optional (Air)	
Driving gas pressure	0.28 ~ 0.6 Mpa	
Driving gas flow rate	≤120 L/min	
Ventilation mode	VCV, PCV, SIMV+VCV+PS, SIMV+PCV+PS,PSV with Apnea backup ,Spontaneous/ Manual, Standby. Optional PRVC	
Screen Size	10.1 inch (222 x 132mm) glare free color LCD; optional touch screen	
Resolution	1024×600	
Graph	Pressure-time, Flow-time, Volume-time. Optional: CO ₂ -time, SpO ₂ -time	
Compensations	Fresh Gas Compensation, Compliance Compensation, Altitude compensation, Mix gas Compensation	
Spirometry Loops	Pressure-Volume, Flow-Volume, Flow-Pressure	
Ventilator parameter		
Tidal volume range	20 to 1500 mL in VCV, 5-1500 ml in PCV	
Tidal volume	20 to 100 mL (increments of 5 mL)	
incremental settings	100 to 1000 mL (increments of 10 mL)	
	1000 to 1500 mL (increments of 50 mL)	
Frequency range	4 to 100 bpm (increments of 1 bpm)	
Inspiratory/ Expiratory ratio range	4:1 to 1:8 (increments of 0.5)	
Inspiratory time range	0.1 to 10 s (Increments of 0.1 s)	

Product Specifications

PEEP	OFF, 4-30 cm H_2O (Increments of 1 cm H_2O)	
Inspiratory Pressure Range	5 to 70 cm H_2O (increments of 1 cm H_2O)	
Inspiratory hold percent range	OFF, 5% to 60% (increments of 5%)	
Inspiratory pressure range	5 to 70 cm H ₂ O (increments of 1 cm H ₂ O)	
Inspiratory pressure limit range	PEEP+5 to 70 cm H ₂ O (increments of 1 cm H ₂ O)	
Pressure Support Range	5-60 cm H_2O (Increments of 1 cm H_2O)	
Flow Trigger Range	1-15 L/ min (Increments of 1 L/min)	
Ventilator control		
Self Test	Start up test, Leak test (Manual and Auto), Compliance test, FiO ₂ calibration	
Knob	One knob, it can be turned clockwise/ anti- clockwise and pressed down	
Keys	11 keys: Alarm Silence, Alarm Settings, Ventilation Setting, System Settings, System Log, Start/ Standby and six parameters setting keys.	
Ventilator monitori	ng	
Inspiratory tidal volume range	0 to 2000 mL	
Expiratory tidal volume range	0 to 2000 mL	
Minute volume range	0 to 60 L	
Frequency range	0 to 100 bpm	
Inspiratory/expiratory ratio range	4:1 to 1:8	
Peak pressure range	-12 to 100 cm H ₂ O	
Mean pressure range	0 to 100 cm H ₂ O	
Inspiratory plateau pressure range	0 to 100 cm H ₂ 0	
Inspiratory O₂% range	21% to 100%	
Compliance range	0 to 200 mL/cm H ₂ O	
Resistance range	0 to 200 cm H ₂ O/(L/S)	
Alarm settings		
Tidal volume range	High: 40 to 1500 mL, OFF Low: OFF, 40 to 1500 mL	
Minute volume range	High: 1 to /OI OFF	
Ü	High: 1 to 40 L, OFF Low: OFF, 1 to 40 L	
Frequency range	Low: OFF, 1 to 40 L High: 1 to 100 bpm, OFF Low: 0 to 100 bpm	
Frequency range Inspiratory O ₂ % range	Low: OFF, 1 to 40 L High: 1 to 100 bpm, OFF Low: 0 to 100 bpm High: 21% to 100%, OFF Low: OFF, 21% to 100%	
Frequency range Inspiratory O₂% range Airway pressure range	Low: OFF, 1 to 40 L High: 1 to 100 bpm, OFF Low: 0 to 100 bpm High: 21% to 100%, OFF Low: OFF, 21% to 100% High: 1 to 100 cm H ₂ O Low: 0 to 99 cm H ₂ O	
Frequency range Inspiratory O₂% range Airway pressure	Low: OFF, 1 to 40 L High: 1 to 100 bpm, OFF Low: 0 to 100 bpm High: 21% to 100%, OFF Low: OFF, 21% to 100% High: 1 to 100 cm H,O	
Frequency range Inspiratory O ₂ % range Airway pressure range High continuous	Low: OFF, 1 to 40 L High: 1 to 100 bpm, OFF Low: 0 to 100 bpm High: 21% to 100%, OFF Low: OFF, 21% to 100% High: 1 to 100 cm H ₂ O Low: 0 to 99 cm H ₂ O Alarm when airway pressure	
Frequency range Inspiratory O₂% range Airway pressure range High continuous airway pressure	Low: OFF, 1 to 40 L High: 1 to 100 bpm, OFF Low: 0 to 100 bpm High: 21% to 100%, OFF Low: OFF, 21% to 100% High: 1 to 100 cm H ₂ O Low: 0 to 99 cm H ₂ O Alarm when airway pressure exceeds cm H ₂ O for 15 seconds Alarm when airway pressure	
Frequency range Inspiratory O ₂ % range Airway pressure range High continuous airway pressure Negative pressure	Low: OFF, 1 to 40 L High: 1 to 100 bpm, OFF Low: 0 to 100 bpm High: 21% to 100%, OFF Low: OFF, 21% to 100% High: 1 to 100 cm H ₂ O Low: 0 to 99 cm H ₂ O Alarm when airway pressure exceeds cm H ₂ O for 15 seconds Alarm when airway pressure exceeds -10 cm H ₂ O Alarm when no breath within	
Frequency range Inspiratory O ₂ % range Airway pressure range High continuous airway pressure Negative pressure	Low: OFF, 1 to 40 L High: 1 to 100 bpm, OFF Low: 0 to 100 bpm High: 21% to 100%, OFF Low: OFF, 21% to 100% High: 1 to 100 cm H ₂ O Low: 0 to 99 cm H ₂ O Alarm when airway pressure exceeds cm H ₂ O for 15 seconds Alarm when airway pressure exceeds -10 cm H ₂ O Alarm when no breath within 10 to 40 seconds (adjustable) Alarm when supply pressure of	
Frequency range Inspiratory O ₂ % range Airway pressure range High continuous airway pressure Negative pressure Apnea O ₂ failure	Low: OFF, 1 to 40 L High: 1 to 100 bpm, OFF Low: 0 to 100 bpm High: 21% to 100%, OFF Low: OFF, 21% to 100% High: 1 to 100 cm H ₂ O Low: 0 to 99 cm H ₂ O Alarm when airway pressure exceeds cm H ₂ O for 15 seconds Alarm when airway pressure exceeds -10 cm H ₂ O Alarm when to breath within 10 to 40 seconds (adjustable) Alarm when supply pressure of O ₂ is less than 280 kPa	

SpO, monitoring (Optional)

SpO₂ module includes SpO₂ sensor for monitoring SpO₂ of patient and triggering alarm when measured values exceed the preset alarm values.

SpO₂ monitoring
of to 100%
range

SpO ₂ monitoring range	0 to 100%
PR monitoring range	30 to 250 bpm
SpO_ alarm range	70% to 99%

Gas analyzer (Optional)

Masimo mainstream CO_2 module monitors concentration of CO_2 in inspiratory and expiratory phases

IRMA CO₂ (Mainstream CO₂ Module)

During standard conditions:

Range	Accuracy
CO ₂ 0-15 vol%	± (0.2 vol% + 2 % of reading)

Masimo Gas analyzer measures the concentration of Agents in fresh gas mixture with automatic agent identification

Available Options:

- 1. IRMA AX+ (Mainstream): (CO₂, N₂O, 5 Anesthetic agents with Auto ID)
- 2. ISA AX + (Sidestream): (CO₂, N₂O, 5 Anesthetic agents with Auto ID)
- 3. ISA OR+ (Sidestream): (CO $_2$, O $_2$, N $_2$ O, 5 Anesthetic agents with Auto ID)

During standard conditions:

	Range	Accuracy
CO ₂	0-15 vol%	±(0.2 vol% + 2 % of reading)
N ₂ O	0-100 vol%	±(2 vol% + 2 % of reading)
HAL, ISO, ENF	0-8 vol%	±(0.15 vol% + 5 % of reading)
SEV	0-10 vol%	±(0.15 vol% + 5 % of reading)
DES	0-22 vol%	±(0.15 vol% + 5 % of reading)
02	0-100 vol%	±(1 vol% + 2 % of reading)

Vaporizers (Optional)

Penlon Sigma Delta		
Anesthetic Agent	Sevoflurane, Isoflurane, Halothane, Enflurane	
Filler Type	Key fill, Quick $\operatorname{Fil}^{\circledcirc}$ (Only for Sevoflurane), Pour fill	
Mounting	Selectatec® type, Tool free installation	
Operating flow range	0.2 to 15 Litres/min	
Capacity	MAX: 250 ml Nominal MIN: 35 ±10 ml	
Dial Range	Sevoflurane 0-8%, Isoflurane 0-5%, Halothane 0-5%, Enflurane 0-5% & 0-8%	

Environmental Specifications

Operation system			
Temperature	10°C to 40°C		
Humidity	15% to 95%, non-condensing		
Altitude	70 kPa to 106 kPa		
Storage system			
Temperature	-20°C to 55°C		
Humidity	10% to 95%, non-condensing		
Altitude	0-5000 m/ 54-101 kPa		
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Quality standard

Valid CE Certificate of the offered model can be provided as required.

A Global Medical Technology Company



CERTIFIED ISO 13485: 2016 COMPANY

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