

Specification: AX500-V



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Anesthesia Machine

AX500-V



Technical Specification

Physical Characteristics

Size 773.5mm×1380mm×598mm

Weight 90kg

Entire Machine

Maximum Bearing

Weight 160kg

Screen Size: 10.4" TFT touch screen

Resolution 800 × 600

Handrail Length 412mm

Caster wheel 4 wheels 5" brakes;

Operation Environment

Working Temp 10~40°C

Humidity ≤93%

Power Supply 100-240V~, 50/60Hz±1Hz

Battery Type Rechargeable Lithium-ion battery

Battery Capacity 4400mAh, 11.1VDC

Battery Recharging 4 hours for charging

Time

Battery backup 2 hours for continuous working

Trace Waveforms: Pressure-time; Flow rate-time; Capacity-time
Optional: Pressure-volume Loops; Flow-volume Loops; Pressure- flow Loops

Top Plate

Maximum supporting capacity 50kg

Operational

dimensions 535mm×235mm

Dimensions with

Additional Accessory 508mm×313mm×380mm

Workbench

Maximum

supporting capacity 20kg

Operational

dimensions 465mm×275mm

Dimensions with

Additional Accessory 472mm×248mm×380mm

Interface:

USB port

RJ45

3 auxiliary power output

AC power interface

Equal-potential grounding terminal

DB9 interface

Features

Drawers: Size: 416mm×395mm×170mm

Bearing Weight: 1Kg

Gas-bag Sway Brace: Length: 320mm; Height: 240mm

Anesthesia process Open, semi closed, closed circuit

Pet types Small, Large

Mode Manual, Mechanical, Standby

Compliance Compliance Correction

Configuration Possibility of configuration observation

Optional Bypass; Heating; Oxygen sensor; ACGO; AGSS;

Ventilator Specification

Ventilation Modes

VCV/VC Volume-Controlled Ventilation with tidal volume compensation

Others Manual and automatic ventilation

Optional PCV/VPC, SIMV-VC, PSV/ CPAP, SIMV-PC, PRVC

Ventilation principle Chronometric, volumetric and barometric

Ventilation	Electronically controlled & pneumatically driven
Driven gas	O ₂ (air: optional)
Breathing circuit volume	1000 ml + bag
Ventilator Setting ranges	
Monitoring parameter	Tidal volume, Inspiratory, expiratory flow, minute volume, frequency, pressure (P _{mean} , P _{plat} , P _{peak} , PEEP), Oxygen, concentration, Pressure, oxygen numerical values, compliance and pets' resistance
Tidal volume range	15 ~1500 mL (VCV) 5~1500 ml (PCV)
MV (Per-minute ventilation amount)	0~100 L/min
Pressure range (limit)	10~100 cmH ₂ O
Pressure range (support)	3~60cmH ₂ O
Respiratory rate	4~100bpm
Inspiratory /Expiratory ratio (I: E) range	4:1~1:10
Apnea I: E	4:1~1:8
Apnea time	10~30s
Apnea pressure	3~60cmH ₂ O
Freq. Min. (Min. frequency for apnea-ventilation)	2-60 bpm
Inspiratory pause	OFF, 5~60% of inspiratory time
Inspiratory time	0.2~5s
Inspiratory pressure	5~70cmH ₂ O
PEEP	OFF, 3~30cmH ₂ O
Trigger pressure	-20~-1cmH ₂ O
Trigger window	5~90%
Trigger flow	0.2~15 L/ min
Flush oxygen	25~75 L/ min
Inspiratory stop level	5~80%
Pressure slope	0~2.0s

Ventilator Monitoring Ranges

TV (Inspiratory tidal volume)	0~3000 mL
TV (Expiratory tidal volume)	0~3000 mL

MV (Per-minute ventilation amount)	0~100 L/min
FiO ₂ (Oxygen concentration)	18~100%
Airway pressure	-20~120cmH ₂ O
PEEP	0~70cmH ₂ O
P _{peak} (Airway pressure)	-20~120 cmH ₂ O
P _{mean} (Mean pressure)	-20~120cmH ₂ O
P _{plat} (Platform pressure)	0~120cmH ₂ O
I: E (Inspiratory-expiratory ratio)	4:1~1:12
Freq (Respiratory rate)	0~120 bpm
Compl (Compliance)	0~300 mL/cmH ₂ O
Resistance	0~600 cmH ₂ O/(s/L)

Ventilator Performance

Pressure range at inlet	0.28~0.6 MPa
Peak gas flow	>100 L/min
Flow valve range	1~100 L/min
Flow compensation range	200 mL/min to 18 L/min
Inspiratory flow	Maximum inspiratory flow shall not be smaller than 120L/min when gas supply pressure is 280KPa.
Range of flow valve	3~100 L/min
Pressure limitation	Controlled by the electronic relief valve fitted inside the ventilator;
Controlling means for ventilator	Controlled by the mechanical relief valve fitted inside the ventilator.

Ventilator accuracy

Control accuracy

TV	15~60 ml: ±10ml; 60~210 ml: ±15ml; 210~1500 ml: ±7% of set value.
PCV	Inspiratory pressure: ±2.5cmH ₂ O or ±7% of set value, whichever the greater. Limiting pressure: ±2.5cmH ₂ O or ±7% of set value, whichever the greater.



Inspired oxygen	Low: 0 ~98L/min High: 20~105%
Ppeak	Low: 18 ~ 103% High: 2 ~100cmH2O
Apnea alarm	Low: 0 ~98cmH2O Two (2) triggering conditions are satisfied simultaneously: 1. Airway pressure is continuously lower than (PEEP +3) cmH2O for more than 30 seconds. 2. Expiratory tidal volume is continuously lower than 10ml for more than 30 seconds. Increase the set values of tidal volume and respiratory frequency, or set it to Manual/spontaneous mode.
Alarm	Audible and visual alarm;
Alarm access	Easy access by shortcut
Flow meters	
Type	Mechanical flow meter
Gas Supply	
Pipeline gasses	O2
Optional	O2, Air; O2, N2O; O2, N2O, Air
Backup gas-cylinder gasses	O2, N2O, Air
Pipeline gas connection	NIST
Backup cylinder connection	YOKE-CGA
Pressure range at inlet	280~600 kPa
Filter	60-80um
Features	Switch easily to the other gas without interrupting the ventilation
Auxiliary gas supply	O2(optional)

Breathing Circuit Specification

System Pressure Gauge

Range	-20~100 cmH2O
Accuracy	± (4% of full scales reading + 4% of reading)

Adjustable Pressure Limiting (APL)valve

Range	1~75 cmH2O
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Tactile knob indication at	>30 cmH2O
Accuracy:	±1.0 cmH2O
Minimum opening pressure	0.3 cmH2O (dry), 0.5 cmH2O (humid)

Breathing Circuit Parameters

Compliance	≤4mL/100Pa Automatically compensates for compression loss with in the breathing circuit in mechanical mode
Volume of CO2 canister	2000ml
Water Trap Feature	7mL, easy to be disassembled Heated at 134 degree, removable, easy to dismantle and sterilize

Active AGSS

Feature	High flow, low vacuum
Size	535mm×120mm×155mm
Weight	2.2kg
Applies	ISO 80601-2-13 and YY 0635-2
Pressure relief device	Atmospheric pressure compensation port
Connector	ISO9170-2 or BS6834 standard connector
Flow of suction	50-80L/min
Resistance	0.75KPa ,75L/min
Filter	Stainless steel mesh, with pore size of 60~100µm

ACGO

Connector	Taper coaxial fitting of 22mm (outside) and 15 (inside)
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Back pressure generated at the rear end of anesthesia vaporizer and the front-end of ACGO during quick oxygen charging	≤2kPa
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Flush O2

100% fast oxygen

Vaporizer

Brand	Drager and Penlon available
Locking	Vaporizer with interlocking system (Optional: Two vaporizers)

Automatic recognition Anesthesia machine able to automatic recognize halogenated gases

Power (No isolation transformer)

External AC power supply

Input voltage 100~240 V~/ 100~120V~
Input current 3.5~8.5 A/8.5 A

Input frequency 50/60 Hz

Leakage current < 500 μ A

Auxiliary output supply

Output voltage 100~240 V~/ 100~120V~

Output frequency 50/60 Hz

Shipment (Freight)

Package size 1230*930*1610 mm

Gross Weight 181.5 kg

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