

ADS - 3002

ANESTHESIA DELIVERY SYSTEM



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

- The ADS3002 is an advanced yet easy to use anesthesia workstation that provides accurate, pneumatically driven and electronically controlled ventilation.

The ADS3002 has an ergonomic design that incorporates new technology and provides safe and effective treatment options for the clinician. The ADS3002 includes Adult and Pediatric modes that provide patient-appropriate defaults and ranges.

The ADS3002 has VCV, PCV and SIMV+PS automatic ventilation modes providing flexibility in your choice of ventilation strategy. It is suitable for pediatric and adult operation.

The ADS3002 employs many features for outstanding usability including auxiliary oxygen flow control and multiple auxiliary power outlets.

►► Features:

- Highly accurate tidal volumes with 15 mL capability
- 12 inch Touch Screen TFT LCD
- Electronic Flowmeters (Air, N2O, O2)
- Autoclavable and Heated Absorber
- Ventilation modes of VCV, PCV, SIMV+PS
- Highly mobile space saving design with retractable writing table
- Battery Backup
- AGSS
- Electronic PEEP
- Vital signs, EtCo2, and Agent Monitoring

Ventilator/Gas Delivery

The ADS3002 offers an integrated ventilator with 12 inch color touch screen. Ventilation modes of VCV, PCV, SIMV+VCV+PSV, SIMV+PCV+PS, Manual and Standby are standard. On screen monitoring of spirometry loops, Paw, Peak, Pmean, PEEP are also standard. Airway pressure, flow and optional agents and EtCO2 are shown in graphical waveforms.

The ADS3002 features simplified gas delivery with digital O2, N2O and AIR flowmeters. All ventilation and gas delivery controls are located within 10 cm from one and other to allow for an extremely simplified user interface.



Absorber

The ADS3002 features a 2 liter capacity absorber system with integrated bellows, APL valve and bag/ventilator selection switch. The entire absorber system is autoclavable.



Vaporizers

The ADS3002 provides Standard compatible mounts and holds one or two vaporizers. Sevoflurane, Isoflurane, Desflurane, Enflurane, and Halothane are available.



►► MODERN AND USER-FRIENDLY DESIGN :



Pin Index Cylinder Yokes

The ADS3002 offers optional cylinder yokes for: N₂O, O₂, and AIR.



Wheel Lock

The ADS3002 provides an ergonomic Footbrake System to lock the wheels. High-quality Anti-static Castors make the ADS3002 mobile and easily maneuverable.



Power/Network Panel

The ADS3002 features a universal 110v/220v power panel with 4 - 50/60Hz power outlets. Ethernet, USB, and RS-232 ports are also included to offer a multitude of connectivity options.



Folding Writing Table

The ADS3002 desktop incorporates an expandable writing table with several standard lighting options.

▶▶ **TECHNICAL SPECIFICATIONS :**

SYSTEM

Size Approx. 1420mm(H)×760mm(W)×760mm(D) 56in(H)×30in(W)×30in(D)

Weight Approx.286lbs (130kg)

Top shelf bearing limit Maximum 55lbs (25)kg

CASTER

5in (125mm), one foot braking system

DRAWER

Three drawers have the same size, and all are 5.12in(H)×14.29in(W)×13.90in(D) 130mm(H)×363mm(W)×353mm(D).

ANESTHESIA WORKSTATION DISPLAY

12-inch TFT LCD Touch Screen

PIPELINE PRESSURE GAUGE (air, oxygen, nitrous oxide)

Range: 0-1MPa. Resolution: 0.05MPa

Accuracy: full range ±2.5%

AIRWAY PRESSURE GAUGE RANGE

Range: -10-100cmH₂O. Resolution: 2cmH₂O

Accuracy: full range ±2.5%





PHYSICAL TECHNICAL SPECIFICATION

ENVIRONMENTAL REQUIREMENTS

Temperature Operating 50 -104 ° F (10-40° C)

Storage 14-140° F (-10-60° C)

Transport -4-131° F (-20-55)

Relative

Humidity Operating 15-90%RH (non-condensing)

Storage 15-90%RH (non-condensing)

Transport Not more than 93%, non-condensing.

Atmospheric

Pressure

Operating 530 -1060hPa (53-106kPa)

Storage 500 -1060hPa (50-106kPa)

Transport 700 -1060hPa (70-106kPa)

Power Supply AC100-240V, 50Hz/60Hz

TECHNICAL SPECIFICATIONS OF RESPIRATORY SYSTEM

Fresh gas compensation Flow compensation range: 1-10L/min

Gas composition: O₂, N₂O, air and anesthetic agent

CO₂ Absorbent Single absorber canister volume: 1500mL

Connection Common gas outlet: ISO5356 connector (standard 22mm outer diameter or 15mm inner diameter, tapered friction connector)

Breathing System Leakage Pressure: 3kPa, leakage flow ≤150mL/min.

Respiratory System

Resistance Flow rate: 60L/min, expiratory resistance ≤5.5 cmH₂O;
inspiratory resistance ≤5.5 cmH₂O

APL valve resistance Flow rate: 3L/min, flow resistance: 0.05 3kPa

Flow rate: 30L/min, flow resistance: 0.1 0.5kPa

Connector leakage Under 30cmH₂O and APL valve fully closed the leakage rate ≤50mL/min

One-way valve resistance Under dry state: ≤ 0.15kPa

Pressure produced by wet

one-way valve <0.14kPa

Pressure of opening wet

one-way valve <0.1kPa

System Compliance <150mL/30cmH₂O, standard pipeline

Internal capacity

(contains canister) about 7.6L

Oxygen Flush	25-75L/min
O2 supply failure alarm	<29 psi (200kPa)
O2 Concentration	Not less than 19%
Safety Valve	Open pressure is 85 cmH ₂ O, at a flow is 5L/min.

ANESTHESIA WORKSTATION PERFORMANCE

Maximal inspiratory pressure	(85±10)cmH ₂ O
Complete machine noise	Normal work (excluding alarm), not greater than 60dB (A)
Warm-up time	Less than 1 minute
Minute volume	0-30L/min
Inspiratory flow	Maximum 75L/min
Pressure transmission range	5-80cmH ₂ O

►► Ventilation Modes

- Volume Control - Intermittent Positive Pressure Ventilation (IPPV)
- Pressure Control Ventilation (PCV)
- Synchronized Intermittent Mandatory Ventilation with Pressure Support (SIMV+ PS)
- Pressure Support with Apnea backup (PS)
- Manual

►► Parameters and Ranges

- Pressure target: 5 - 70 cmH₂O
- Pressure support (delta P): 3 - 50 cmH₂O
- Tidal Volume: 20- 1500mL
- Breathing Freq.: 4-100 bpm
2-60 bpm in PS, SIMV
- T_{INSP}: 0.2-5.0s
- PEEP: OFF, 3-30cmH₂O
- Freqau: 2- 60 bpm
- T pause: OFF, 5%-60%
- Trigger: 1 - 15 L/min
- I:E Rat 10: 4:1-1:8
- T_{SLOPE}: 0-2s
- Vaporizers: Sevoflurane, Des flurane, Isoflurane, Halothane, Enflurane

▶▶ Alarms

- Apnea
- Apnea CO₂
- Adjustable alarm limits for Inspiratory O₂ concentration (FiO₂)
- Adjustable alarm limits for Minute Volume (MV)
- Adjustable alarm limits for Airway pressure (PAW)
- Adjustable alarm limits for EtCO₂ and agents
- Continuous Pressure
- O₂ Supply Fail
- Negative Pressure
- High Breath Rate (PS)
- High PEEP
- Mixed Agents
- Low Battery
- AC Power Fail
- Technical alarms

▶▶ Monitoring

Continuous monitoring of inspiratory O₂ concentration, breathing frequency, airway pressure (Paw, Peak, Pmean, PEEP), minute volume and tidal volume. The measured parameters are displayed as large, easy to read digital values. Airway pressure, flow and CO₂ (optional) are shown in graphical waveforms.

Optional Gas Monitoring for CO₂ and 5 Anesthetic Agents with Agent Identification

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HPLC Servicing :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

Trainings :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

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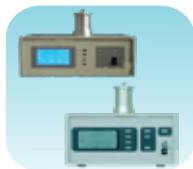
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Liquid Partical
Counter



Optical Emission
Spectrophotometer



DSC/TGA



Semi Auto Bio
Chemistry Analyzer



HEMA 2062
Hematology
Analyzer



Micro Plate
Reader/Washer



URINOVA 2800
Urine Analyzer



Total Organic
Carbon 3800



Fully Automated
CLIA



NOVA-2100
Chemistry Analyzer



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RTPCR



TOC
Analyzer



Laser Particle
Size Analyzer



Ion Chromatograph



Water purification
system

Regulatory compliances



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Analytical Foundation

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2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds,souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

Reach us @



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