

ADS II™

ANESTHESIA DELIVERY SYSTEM



Advancing care is...

OUR VISION

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

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

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



ADVANCED TECHNOLOGY SIMPLIFIED

The Infinium ADS II anesthesia systems offer pure simplicity in patient ventilation and anesthetic delivery.

The ADSII 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



Modern And User-Friendly Design

WITH EXTREMELY SIMPLIFIED USER INTERFACE.

Ventilator/Gas Delivery

The **ADSII** 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 **ADSII** 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 **ADSII** 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 **ADSII** provides Standard Selectatec™-compatible mounts and holds one or two vaporizers. Sevoflurane, Isoflurane, Desflurane, Enflurane, and Halothane are available.



MODERN AND USER-FRIENDLY DESIGN



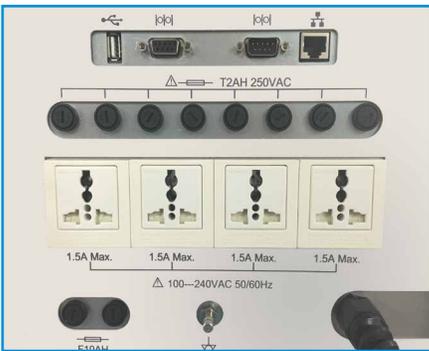
Pin Index Cylinder Yokes

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



Wheel Lock

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



Power/Network Panel

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

ADS II - ANESTHESIA DELIVERY SYSTEM 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 , Battery Backup: 1 hour

TECHNICAL SPECIFICATIONS OF RESPIRATORY SYSTEM

Fresh gas compensation	Flow compensation range:	1-10L/min
	Gas composition:	O ₂ , N ₂ O, air and anesthetic agent
CO ₂ 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 cmH ₂ O; inspiratory resistance ≤ 5.5 cmH ₂ O
	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 30cmH ₂ O 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/30cmH ₂ O, standard pipeline	
Internal capacity (contains canister)	about 7.6L	
Oxygen Flush	25-75L/min	
O ₂ supply failure alarm	<29 psi (200kPa)	
O ₂ 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 – 1500 mL
- Breathing Freq.: 4-100 bpm
2-60 bpm in PS, SIMV
- T_{INSP}: 0.2-5.0s
- PEEP: OFF, 3 - 30 cmH₂O
- Freq_{MIN}: 2 - 60 bpm
- T_{pause}: OFF, 5%-60%
- Trigger: 1 – 15 L/min
- I:E Ratio: 4:1-1:8
- T_{SLOPE}: 0 – 2 s
- Vaporizers: Sevoflurane, Desflurane, 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 Omni III Gas Monitoring for CO₂ and 5 Anesthetic Agents with Agent Identification

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