

■ Specification

Name	Acoma Anesthesia Apparatus PRO-NEXT+s Acoma Anesthesia Apparatus PRO-NEXT+i	
Medical Device Approval No.	22400BZX00193000 (204-55-30) 22400BZX00194000 (204-55-20)	

[Power Supply Unit]

Rated power Voltage	AC100~240V (as specified)
Power input	80VA +15% (+s type) / 120VA +15% (+i type)
Power frequency	50-60Hz
Type of protection against electric shock	Type : Class I Level : B type equipment
Electromagnetic Compatibility	IEC60601-1-2 ; 2001
Battery	12VDC (about 30min back up operation)

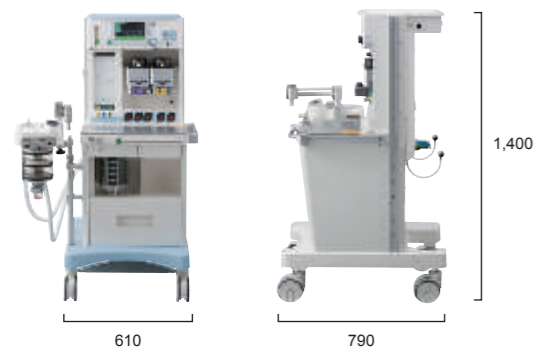
[Gas Control Unit]

Gas supply pressure	O ₂ , N ₂ O, AIR 350 - 500kPa
Flowmeter	O ₂ , N ₂ O, AIR 0 to 10L/min
Pipe line pressure gauge	O ₂ , N ₂ O, AIR 0 to 10x100kPa
O ₂ flush	35 to 75L/min
Aux cylinder pressure gauge	O ₂ , N ₂ O(AIR), 0 to 200x100kPa
Extra flowmeter (option)	O ₂ , 0 to 10L/min
Vaporizer Mount	Acoma Vaporizer MK-5 +s: two units mounting / +i 1 unit mounting
CO ₂ absorber	1,340mL (1,200g)
Aux. cylinder yoke	O ₂ , N ₂ O (AIR option)
Injection Vaporizer (+i type only)	Sevoflurane 0 to 8.0% Isoflurane 0 to 6.0%

[Ventilator Unit]

Ventilation system	Volume preset - time cycling Pressure control - time cycling
Ventilation mode	VCV, PCV (option: PSV)
Drive method	By AIR or O ₂ (Option) * available to drive by aux. cylinder
Tidal volume	30 to 1,300mL (VCV)
Rate	5 to 60bpm (VCV, PCV)
I:E ratio	1:0.5 to 1:5 (VCV, PCV)
Plateau(EIP)	0 to 30% (VCV)
Inspiratory pressure (+PEEP)	5 to 50hPa (PCV, +PEEP max 60hPa)
Flow rate	AUTO, 5 to 70L/min (PCV)
PEEP	OFF, 3 to 20hPa
Support pressure (+PEEP)	0, 5 to 50hPa (PSV, +PEEP max 60hPa)
Trigger	-1 to -5hPa (PSV)

■ Dimension



Professional quality designed for reliability and efficiency

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[Alarm and Safety Devices]

+s/+i type	Power supply backup / Low O ₂ supply pressure alarm / Vaporizer select / Minimum O ₂ concentration / Positive pressure safety valve / Apnea backup ventilation / Power failure alarm / O ₂ concentration lower limit alarm / O ₂ concentration upper limit alarm / O ₂ sensor calibration fail alarm / O ₂ sensor Not connected alarm / Drive gas pressure alarm / Low inspiratory pressure alarm / Excess pressure alarm / Inspiratory pressure alarm / Setting error alarm / Apnea alarm / MV upper limit alarm / MV lower limit alarm / Battery voltage drop alarm /BAG-BENT selector defect alarm / O ₂ sensor communication error alarm / Alarm pause button
+i type only	INJ bottle connection alarm / INJ vaporizer nonusable alarm / Liquid shortage alarm / INJ bottle empty alarm / INJ excessive setting alarm / fresh gas flow excessive alarm / Flow rate ratio alarm / O ₂ flow shortage alarm / Fresh gas pressure too high alarm / Fresh gas flow sensor alarm / O ₂ gas pressure alarm

[Weight and Outer Dimension]

Outer dimension	Main unit: 600mm(w) x 755mm(d) x 925mm(h) Canister: 355mm(w) x 400mm(d) x 800mm(h) *Not including protrusion Main unit with stand: 610mm(w) x 790mm(d) x 1,400mm(h)
Monitor shelf	430mm(w) x 355mm(d) *Permissible weight: Max 10kg
Table top	525mm(w) x 290mm(d) x 830mm(h)
Weight	+s type 120kg / +i type 125kg

■ Option

[Vaporizer]

Types	For Sevoflurane / Isoflurane *
Filler types	Standard type, Keyed filler type
Capacity	300mL
Conc. Control range	OFF, 0 to 5vol.% (Sevo 7vol.% as option)
Flow range	0.5 to 10L/min
Outer dimension	Standard: 118mm(w) x 119mm(d) x 210mm(h) Keyed filler: 118mm(w) x 119mm(d) x 215mm(h)

* Halothane type also available soon

Specification and design are subject to change without prior notice.
For further details please contact at :

ACOMA ANESTHESIA APPARATUS
PRO-next+i/+s



Main feature

Multi-function direct access monitor
Simple and compact design
VCV, PCV and PSV mode (Option)

Functional monitor for quick access

- Direct access monitor provides quick parameter setting.



Monitor can provide a maximum of 5 necessary parameters for direct access of each respiratory mode.

- PSV mode (option)



Adding PSV as option, 3 modes (VCV, PCV and PSV) can be selected.

- Electric PEEP
- Alarm OFF function

Usability and convenience

- Improved spirometer measurement precision

The flow sensor accuracy has been substantially improved and minimum VCV volume can be set from 30mL./min..

- Easy access Oxygen flush integrated with handle



- One action BAG/BENT selector cock

Convenient operation of the selector cock located on the canister unit



- GAS OUT Port for quick connection to open circuits



- Fresh gas compensation function

Since tidal volume is unaffected by the fresh gas, instinct ventilator setting is possible.

Safety function for emergency

- Back-up system

Back-up system with built-in battery provides 30 minutes continuous operation during blackout or power failure.

- Alarm history function (Maximum 300 records)

- Low Oxygen Prevention Mechanisms

- AIR and Interlock gear system of N₂O and O₂ of flowmeter ensure quick and accurate control of these three gases as well as safety ensuring the the minimum oxygen concentration never falls below 30%
- Low O₂ pressure alarm: If the O₂ supply pressure drops below 250kPa, O₂ supply pressure alarm is activated with whistle sound.
- N₂O cut off device: If the O₂ supply pressure drops below 200kPa, automatically N₂O supply is stopped.
- Low O₂ concentration alarm: built-in oxygen monitor allows accurate circuit O₂ conc. monitoring and alarming when O₂ conc. drops below preset value (not cancelable below 18%)

Simple and compact design

- Small foot-print, simple design and low center of gravity
- Respiratory circuit incorporates built-in oxygen sensor and flow volume sensor.
- Simple cabling between the machine and Patient

As O₂ sensor cable, spirometer cable etc., are built-in the machine, cabling becomes simple and doesn't cause trouble during operations.



Color variations (option)

- 3 body colors are available



Silk color (white) as standard



Blue (option)



Pink (option)

ACOMA Vaporizer MK-5 (option)

- To control anesthetic gas control With high precision and reliability

For Sevoflurane and Isoflurane*
The capacity has increased to 300ml

*For Halothane type available soon



Optional accessories

- Vapofil for keyed filler type



for Sevoflurane No. 204-11-40
for Isoflurane No. 204-11-50

- Anti-Spill adaptor for Standard type



for Sevoflurane No. 204-11-41
for Isoflurane No. 204-11-51



Consumable and Peripheral Accessories

O₂ sensor OS-B3MT



No.104-47-60
Durability: 12 months after breaking the seal of the tin package.

Filter-guard 1944000



No.385-40-41
Product of Intersurgical Ltd.(UK)
Attached to the apparatus side.No HME function.
Medical Device Approval No.13B1X000880IS008
*Disposable

Spherasorb



1kg:No.385-97-10 / 5L:No.385-87-50
Product of Intersurgical Ltd.(UK)
CO₂-absorbent:homogeneous round granules
effectively absorb CO₂ gas.

Multi purpose table top

No.204-55-57



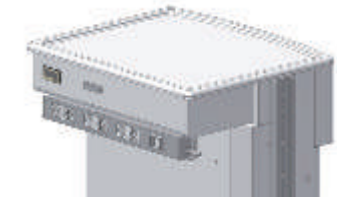
Data output (RS-232C)

No.204-55-64



Aux. power receptacle attachment

No.204-50-73
Aux. power receptacle
204-50-74



Flex corrugated tube set



No.385-27-01 A120, 120cm type
No.385-27-02 A200, 200cm type
Product of Intersurgical Ltd.(UK)
Medical Device Approval No. 223AFBZX00106000
*Disposable

Jackson Rees circuit set



Variable completion of mask and bag size.
Medical Device Approval No. 21900BZX01092000
*Reusable

Suction pump for surplus anesthetic gas removal



104-10-10
Efficiently removes surplus anesthetic gas from equipment without leakage for elimination from the operation theater.

Cylinder stand

No.204-55-56



Foldable side table

No.204-55-74



Syringe pump stand

No.204-50-77



PRO-NEXT+ Optional configurations

Many kinds of options are available for greater security and convenience in building the ideal operation system

Extra O₂ flowmeter

No.204-55-52



Table light

No.204-55-53



Side rail (vertical type)

No.204-55-76



Drawer (upper) Drawer (lower)

No.204-55-60 No.204-55-61



Drawer (large)

No.204-55-62



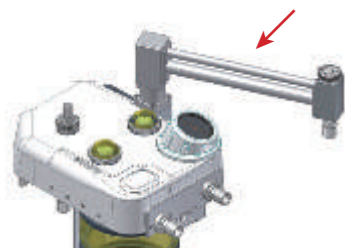
Tray

No.204-55-79



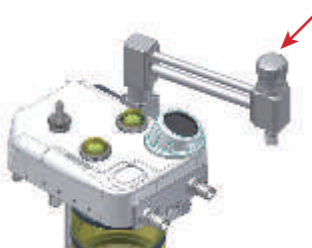
Extended air pipe(+50cm)

No.204-50-68



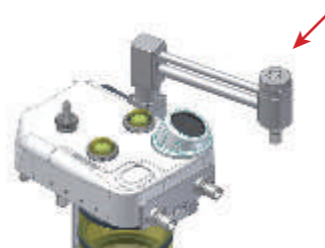
APL Valve AC Type

No.204-55-65



APL Valve large type

No.204-55-64



Joint arm

No.204-50-55



Multi purpose hock

No.204-50-73



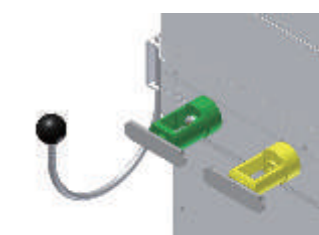
Multi purpose pole

No.204-50-58



Aux. AIR cylinder

No.204-55-64



PRO-next^s Standard type

Functional Next-generation Anesthesia apparatus

PRO-NEXT+s is simple to use yet offers a wide range of functions and modes .

Low-flow rate compatible flowmeter

This flowmeter with enlarged graduation visibility in the low-flow(0~1L/min.) range, provides for extra clear monitoring for delicate flow control of low-flow anesthesia.

Backlight flowmeter aids in quick readability, especially convenient during, for example endoscopic surgery.

2 vaporizer mountable

Safety block to prevent anesthetic mixing is incorporated to ensure greater safety.

Center lock system for transportability

Use of 'Double caster and Center lock' system offers fast, safe and stable mobility of the unit.



Blue color & right side rail, extra flowmeter and vaporizer: option

PRO-nextⁱ Injection type

PRO-NEXT+i allows for more precise control with simple operation.

Injection Vaporizer

Electrical anesthesia gas delivery system for more precise control from 0 by 0.1%

Sevoflurane 0 to 8.0%
Isoflurane 0 to 6.0%

Anesthesia bottle can be set directly using the bottle adaptor.



Electrical flowmeter

Fresh gas flow is displayed directly in 10ml increments. AIR and N₂O gas selection can be done simply with one switch.

Also Equipped with variable area flowmeter. With backlight easy to read even when using an endoscope.

Gas consumption account function

Accumulated gas consumption of AIR, O₂ and N₂O is displayed. Also, accumulated anesthesia consumption (Sevoflurane and Isoflurane) can be displayed. Elapsed time display function from any point in time.

All data can be transferred to information terminal (option)



Right side rail, extra flowmeter and vaporizer: option