



HYVAN ANAESTHESIA

HYVAN

Compact Anaesthesia Machine



www.hyvan.co.nz

**WINNER
NZ Innovator
of the year**

**WINNER
WFSA
Innovation Award**

The Hyvan is a versatile anaesthesia machine that's built to last

Suitable for modern operating theatres and challenging environments
These challenging environments include office surgeries, natural disasters, military, air ambulance, developing countries and remote locations.
It is ideal when electricity is unreliable and where portability is a requirement.



Reliable – Hyvan is powered by a rechargeable 12 v internal battery. This will run the electronics for 35 hours. In the event of a mains electricity failure, the self-inflating bag allows for prolonged hand bagged anaesthesia.

Easy-to-use – Operation and maintenance are easy.

Portable - Can be carried by one person.

Circle based anaesthesia – A variety of reusable or disposable soda lime canisters can be used with the Hyvan. The selectatec back bar is height adjustable to fit any plenum vaporiser. Oxygen and air flow meters are fitted.

Gas Supply – The Hyvan can be connected to high pressure pipeline gas cylinders, compressor or oxygen concentrator. An oxygen flow of one litre / minute is the minimum requirement



HYVAN 9A Multifunction Anaesthesia Monitor

- 12.1" TFT LCD. high resolution (1024 x 768)
- Backlight button, easy to operate at night
- Lithium Battery, long work time (Max 4 hours)
- Dual alarm light, Independent parameter alarm light
- Power-off storage (72 hours trend and 1 ECG waveform)

Standard Configuration:

ECG, SpO2, NIBP, 2-Temp, Lithium battery

Options:

12 lead ECG, 2-IBP, EtCO2 (SS or MS),
SD memory card, Volatile agent analysis.

Hyvan Aluminium Transport Box

This rugged box provides excellent protection for the Hyvan. The box and machine weigh 20 kg (not including vaporiser)



Selectatec vaporisers available from Hyvan Anaesthesia Limited



Hyvan Air Compressor / Oxygen Concentrator

This custom made oxygen concentrator has a powerful compressor and air reservoir.

The compressed air will run the ventilator (50 psi) and an oxygen flow is also provided (10 lpm of 95% oxygen).

This combination allows the Hyvan to be fully operational providing a mains electricity supply is available.

Should the electricity fail, the Hyvan can be hand bagged and the battery will maintain the electronics.

Of course a supply of oxygen of at least one lpm is always necessary.

The output from the concentrator can be compressed into an oxygen cylinder for emergency stand-by use.



SPECIFICATIONS

PHYSICAL SPECIFICATIONS

UNIT DIMENSIONS: Height 44cm / Width 36cm / Length 58cm

UNIT WEIGHT: 8.5kg Excluding soda lime canister and vapouriser

16.5kg Including soda lime canister and vapouriser

ENVIRONMENTAL REQUIREMENTS OPERATION

Temperature: 0 - 40 degrees C

Humidity: 15-95% relative (Non-condensing)

Altitude: 500 to 800mmHg (-440 to 3565 meters)

ELECTROMAGNETIC COMPATIBILITY

Immunity: Complies with EN60601-1-2 Emissions:

Complies to CISPR11 CE (pending) UL60601

IEC62133

CARBON DIOXIDE ABSORBENT CANISTER

Capacity: 500-1000g.

Reusable or disposable type

PORTS AND CONNECTIONS

Exhalation: 22mm OD ISO 15mm ID Taper (RED)

Inspiration: 22mm OD ISO 15mm ID Taper (GREEN) Self inflating Bag: 22mm OD

PATIENT PRESSURE GAUGE

Scale Range: -20 to 80cm H₂O (-2 to 7.85kPa)

ANAESTHETIC GAS SCAVENGING

30mm OD ISO 15mm ID Taper

BREATHING SYSTEM SPECIFICATIONS

Breathing system is Circle Mode Only

GAS SUPPLY

Options: Oxygen - Pipeline, cylinder or oxygen concentrator Air - Pipeline, cylinder, air compressor

Pipeline: 280 to 600kPa (41-87psi)

Connections: DISS-male, DISS-female, ISO 5359, AS4059, FS90-116

Cylinder Input: Pin Index preferred, DIN

PRESSURE GAUGE

Oxygen: 0-600kPa (0-87psi) Air: 0-600kPa (0-87psi)

FLOWMETERS

Oxygen: 0-8L/min Air: 0-8L/min O₂ flush: 35-75L/min

VAPOURISER CONNECTION

Type: selectatec back bar. Plenum. Variable height adjustment

ELECTRICAL SPECIFICATIONS

Power Input: External 12v DC 2A. Internal: 14.4v 2.2Ah Sealed Lead Acid battery

CONTROL INTERFACE SPECIFICATION

Battery Charge status – 4 LED

I:E ratio 1:1, 1:2, 1:3, 1:4

Breaths / minute 0 – 25

Tidal Volume - 50 – 1200 ml

ALARM SETTINGS

HIGH PRESSURE OXYGEN.

Pressure range activation : <50% initial pressure (within preset limit)

PATIENT AIRWAY PRESSURE: High > 50cm H₂O, Low < 5cm H₂O above PEEP

ALARM MUTE: Single press: 30 seconds. Press and hold for 2 secs: 90 seconds

HYVAN ANAESTHESIA LIMITED

71 Bealey Avenue, Christchurch,
New Zealand 8013

Website: www.hyvan.co.nz

Email: j.hyndman@xtra.co.nz

Phone: (+64) 3 327 8090

Mobile: (+64) 27 464 0107