

COMMERCIAL OFFER
Morpheus ND Hybrid Anesthesia
System



Manufacturer: Siare Engineering
International Group S.p.A. (Italy)



**MEDICAL GASES ARE NO LONGER
REQUIRED**

Ventilation Anywhere

Morpheus ND Hybrid is a premium-class anesthesia machine that is reliable, safe, and highly functional. It is the only fully autonomous system on the market with a built-in oxygen concentrator, requiring no external medical gas supply. It is designed for long-term operation and fully complies with all safety standards for both patient and operator.

**IDEAL FOR FIELD HOSPITALS AND
CLINICS WITHOUT GAS
INFRASTRUCTURE**

The hybrid system is currently the only patented technology that enables turbine-driven operation of the primary breathing system. Thanks to this innovation, the Morpheus ND Hybrid operates without the need for medical gases.

The PROTOCOLOCK® safety system verifies correct gas connections to the device, alerts the operator in case of incorrect connection, and prevents potentially fatal incidents for the patient.

THE DEVICE IS EQUIPPED WITH:

- Pneumatic supply with dual motorization: thanks to the presence of two main motors, in the event of failure of one motor, the device continues to operate via the pneumatic system.
- Built-in turbine system, which ensures zero oxygen consumption for system operation.
- Dual control system: touchscreen and encoder.
- Fully autoclavable and heated breathing circuit.
- Universal flow sensor suitable for all patient categories.

INVESTMENT EFFICIENCY

The Morpheus ND Hybrid is a highly cost-effective investment. Its full cost is amortized within just a few years of operation.

All maintenance costs are fully compensated thanks to system reliability, significant oxygen savings, the absence of load on a central gas supply, and the ability to operate using the built-in oxygen concentrator.



TECHNICAL SPECIFICATIONS

- Dimensions of Morpheus ND Hybrid: 55 × 51 × 42.5 cm (W × D × H)
- Trolley dimensions: 75.5 × 73.5 × 92.5 cm (W × D × H)
- Weight: Morpheus ND Hybrid with trolley – 62 kg (without accessories)

Trolley Features

- Swivel antistatic wheels, diameter 100 mm (2 with brakes)
- 1 pull-out drawer
- Working surface: 60 × 34 cm
- 2 vertical mounts for gas cylinders (up to 5 L) on the rear panel
- Rubber supports

Power Supply

- Mains power supply: 100–240 Vac / 50–60 Hz
- Power consumption: 150 VA
- External power supply (low voltage): 12 V
- Internal battery: NiMH 4.2 Ah, 12 Vdc
- Battery operating time: 1 hour 30 minutes (±15%)
- Battery charging time: Approximately 10 hours



External Electrical Connections

- RJ connector for oxygen cell
- RJ connector for EXP flow sensor
- RS232 for gas analyzer connection
- USB 0 (for processor programming)
- USB 1 (for data/image transfer)

Additional External Connection

- LAN

Shelf Lighting

- 12 V DC, LED lighting

Patient Connection

- Conical connectors 22 mm (according to EN ISO 5356-1:2015)

Patient Circuit Resistance

- **Adult circuit (internal diameter 22 mm, flow 60 L/min):**

- Inspiration: 0.13 cm H₂O / 60 L/min
- Expiration: 0.13 cm H₂O / 60 L/min

- **Patient Circuit Compliance**

- **Adult circuit (internal diameter 22 mm): 3.85 ml/cm H₂O**

Additional Flowmeter

- Calibrated, with illumination

Vaporizer Mounting Option

- Horizontal SIARETEK mounting rail for quick connection, compatible with Selectatec for 2 vaporizers

Morpheus ND Anesthesia–Ventilation System



- Hybrid anesthesia machine Morpheus ND for adults, children, and newborns
- (with 3 gases, digital flowmeters, and a 15-inch color touchscreen graphic monitor)
- Trolley for Morpheus ND
- Breathing system with descending bellows for Morpheus ND
- Anesthetic gas monitoring module
- Paramagnetic O₂ sensor
- Vaporizer with locking system and filling device

Patient Monitor E15

Basic configuration:

SpO₂ / ECG / PR / HR / RESP / NIBP / 2× Temp



Standard accessories:

- 1× User manual
- 1× Adult finger SpO₂ sensor
- 1× SpO₂ extension cable
- 1× 5-lead ECG cable
- 1× NIBP extension hose
- 1× Adult NIBP cuff (22–35 cm)
- 2× Contact temperature probes
- 1× Power cable
- 12-inch display diagonal



Wall Mounting Bracket

Wall mounting kit for securing the anesthesia/ventilation unit for convenient placement.

- **Delivery time:** Within 21 working days across the entire territory of Ukraine from the date of contract signing.
- **Installation & commissioning:** Installation, start-up, and calibration are performed by the company's engineers.
- **Staff training:** Training on system operation is provided at the installation site.
- **Warranty period:** 12 months from the date of commissioning.
- **Documentation:** The system undergoes full state certification; the operating manual is also provided.