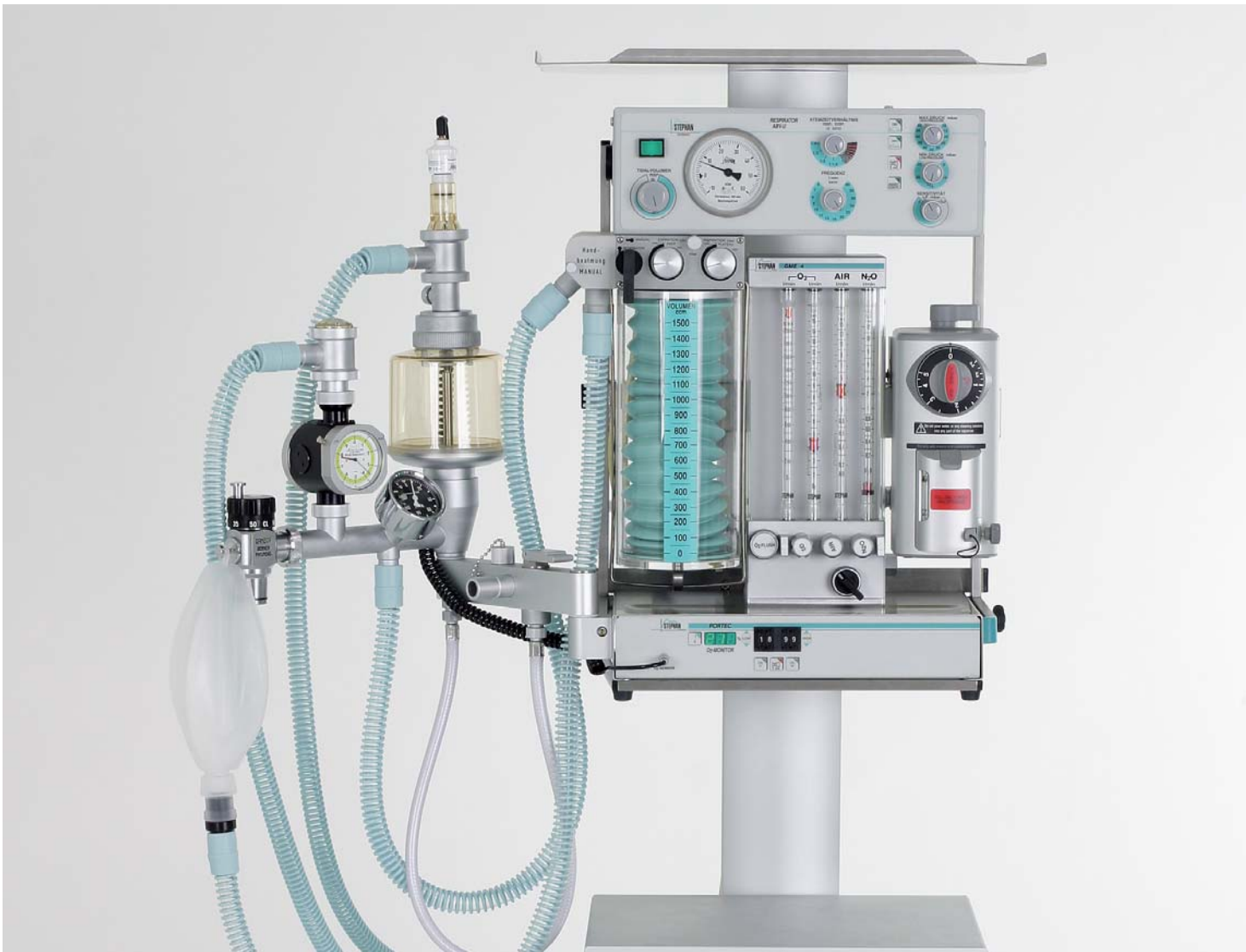




# Portec

The portable, modular  
anesthesia assistant

- + For portable or stationary use
- + Economical, robust and reliable
- + Intuitive operation concept
- + Modular configuration through to stand-alone solution



## Portec The portable, modular anesthesia system

PORTEC by F. Stephan GmbH is a robust portable anesthesia system for practically all tasks which stands out on account of its ergonomic, functional design as well as its unique variability. PORTEC is extremely robust and can be extended by adding further modular elements without any problems. This is a proven concept which when combined with the oxygen generator STAXEL even permits fully autonomous operation, including its own oxygen and compressed air supply. And so the system can be used in regions and crisis/disaster areas with poor infrastructure.



### Extensive basic features

The compact, space-saving basic module is ideal for starting the anesthetic, for practical use in hospitals or in the recovery room. Its intuitive user guidance guarantees both safe and uncomplicated handling. PORTEC is equipped with excellent features including the anesthesia unit GME 3 (O<sub>2</sub>/N<sub>2</sub>O), an integrated N<sub>2</sub>O cut off device, oxygen flush, oxygen deficiency signal and a ventilation system with CO<sub>2</sub> absorber already in the basic version.

### Flexible and mobile

In the extended version, PORTEC is equipped with the gas mixing unit GME 4 with additional AIR measuring tube and integrated changeover switch for O<sub>2</sub>/N<sub>2</sub>O and O<sub>2</sub>/AIR operation. As an optional feature, the device can be fitted with the Ratio system which safeguards a minimum concentration of 25% oxygen and rules out any toxic gas mixtures. A trolley with anti-static rollers, which can be supplemented optionally by a writing panel and a block with three full extendable drawers, makes PORTEC ready for mobile use.

# Anesthesia



## Customized configuration

The modular structure of the anesthesia system permits exact customized configuration. And so PORTEC can be adapted perfectly to all possible tasks. The PORTEC anesthesia system can be ideally supplemented by adding the ABV-U ventilator with a large number of ventilation possibilities and safe monitoring of stenosis, disconnection and power failure. The NGM 1000 anesthetic gas monitor and an O<sub>2</sub> monitor with adjustable alarm limits are other practically indispensable components for optimum patient care.

## Complete anesthesia system with decentral oxygen generator

At the customer's request, PORTEC can be combined with the oxygen generator STAXEL, which supplies oxygen and compressed air for anesthesia and ventilation, resulting in an absolutely reliable, compact and economic stand-alone solution for all applications. The anesthesia system can also be supplemented by a connection block for reserve bottles (O<sub>2</sub>/N<sub>2</sub>O) and a pressure reducer (O<sub>2</sub>/N<sub>2</sub>O) for central gas supply.



Clinical Experience  
Technical Competence

# Portec

General specifications	
MPG <sup>1</sup> class	II b
Dimensions	430 x 520 x 270 mm (WxHxD)
Weight	13 kg
Gas supply	
AIR	3-6 bar + 0,5 bar
O <sub>2</sub>	3-6 bar + 0,5 bar
Optional	
N <sub>2</sub> O	3-6 bar + 0,5 bar
AIR	1,5 bar + 0,5 bar
O <sub>2</sub>	1,5 bar + 0,5 bar
Ventilation system	
Dimensions	400 x 500 x 130 mm (WxHxD)
Weight	4,5 kg (without soda lime)
Absorber volume	0,9 l
APL valve	0 ... 70 cmH <sub>2</sub> O
Operating modes	
Manual	Hand ventilation
Closed	Closed system
Semi-closed	Semi-closed system
Optional	
FG out	Fresh gas outlet
Ventilator ABV-U optional	
Pressure	Time controlled
Volume	Time controlled, constant volume
Pressure limited	
Ventilation forms ventilator ABV-U optional	
CMV	
S-CMV	
PCV	
S-PCV	
IPPV	
IMV	
SV/CPAP, manual	

## Technical Specifications

Parameters	
Measuring gauges	
AIR	0 ... 15 l/min
O <sub>2</sub>	Fine: 0 ... 2 l/min Coarse: 2 ... 15 l/min
N <sub>2</sub> O	1 ... 10 l/min
O <sub>2</sub> -Flush	Approx. 50 l/min (at 5 bar)
Ventilator ABV-U optional	
Tidal volume	100 ... 1500 ml
Optional	
Tidal volume	50 ... 400 ml
Respiration frequency	6 ... 60/min
I:E ratio	2:1 ... 1:4
Pmax	15 ... 60 cmH <sub>2</sub> O
PEEP	0 ... 10 cmH <sub>2</sub> O
Monitoring	
Ventilation pressure	Pressure gauge
Volume	"Haloscale" volumeter
Optional	
FiO <sub>2</sub>	Visual, acoustic
Monitoring	
Alarms	Visual, acoustic
Pressure	Pmax
Optional	
FiO <sub>2</sub>	
Sensors	
FiO <sub>2</sub>	El.chem. oxygen cell

<sup>1</sup>MPG = German abbreviation for Medical Devices Law