

genesis[®] by **HERSILL**



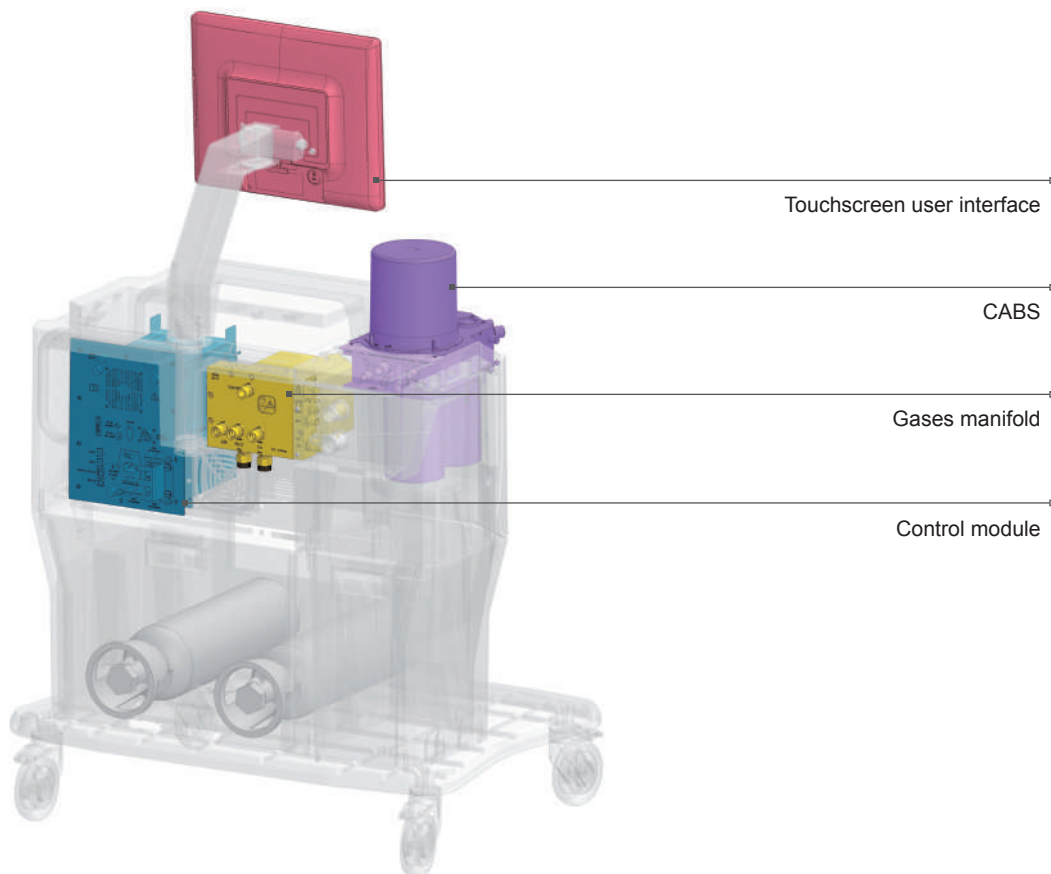
The anaesthesia workstation focused on you

Accuracy and performance

- Equipped with the most advanced ventilation modes.
- Electronic rotameters with precise mass-flow sensors, allowing low and minimal flow anaesthesia.

Cost saving

- A new concept in modularity based on 4 functional kits, independently tested.
- Easy-to-follow procedures for installation, calibration, maintenance and services interchange.

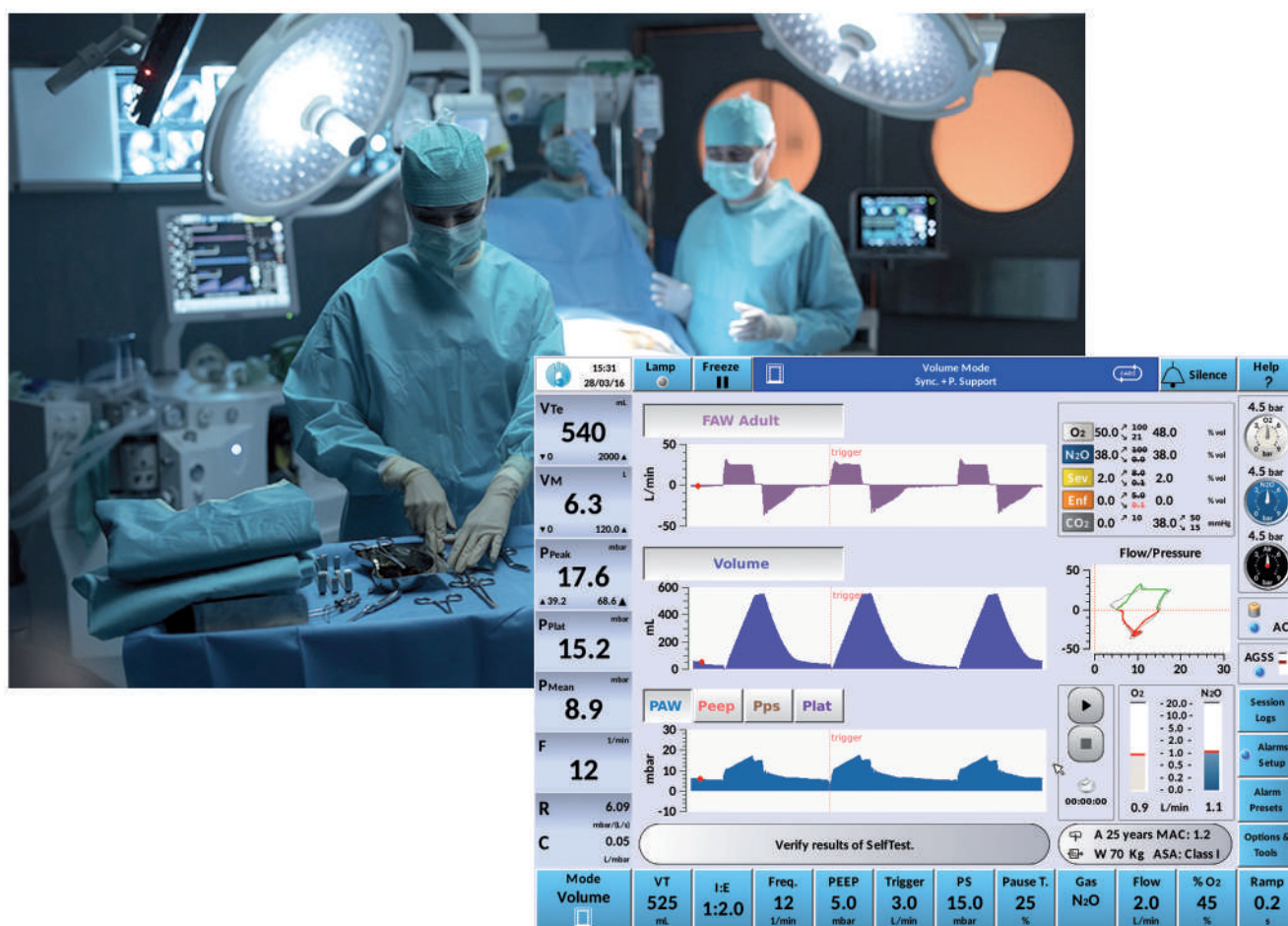


Safety comes first

- The patient gases are confined in the entirely autoclavable Compact Anaesthesia Breathing System (CABS). Autoclavable at 134 °C.
- The performance of the hospital Anaesthetic Gas Scavenging System (AGSS) is displayed in the touchscreen, notifying on possible contamination in the operation room.

Design and ergonomics

- Complete and intuitive interface with settings, ventilation monitoring, anaesthetic gases monitoring, graphics, trends, AGSS performance, alarms with troubleshooting guide, medication, events management, and all that the most updated anaesthesia interface can provide.
- All the auxiliary devices currently demanded, are embedded in the work-station.
- 17" touchscreen, anti-glare, supported on a 360° rotating and 2 axis tilting arm, including a LED lighting bar to illuminate the worksurface, controlled from the user interface.



Versatility

- Beyond the new standard Compact Anaesthesia Breathing System (CABS), **genesis**® is ready to operate with any re-breathing, semi-closed and non-re-breathing circuit.
- The integration of Masimo® capnography and multigas anaesthesia main-stream and side-stream options, and real time oxygen paramagnetic (in the side stream model) allows a complete ventilatory monitoring.
- Any ICU hemodynamic monitor and any infusion pump configuration can be added in 2 auxiliary arm stands.

□ Touchscreen user interface

□ 360° rotating arm, 2 axis tilting and workplace illumination

□ Compact anaesthesia Breathing System (CABS)

□ Auxiliary arm stands (2), for hemodynamic monitor and infusion pumps

□ Flow and Pressure patient monitoring

□ Galvanic O₂ sensor

□ Multigas anaesthesia monitor *main-stream or side-stream*

□ Fresh-gas control (CABS or front)

□ O₂ flow meter for oxygen therapy

□ Vacuum controller for suction

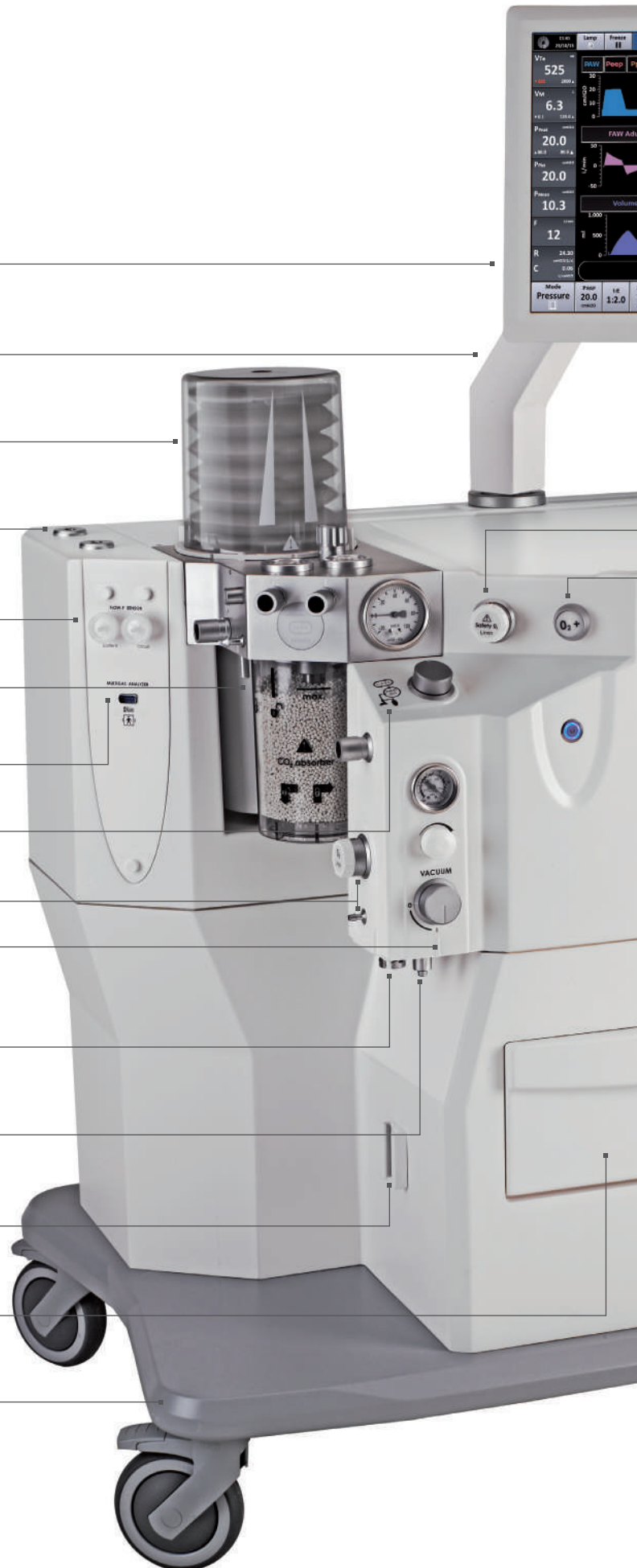
□ Auxiliary O₂ supply valve

□ Suction port

□ Collection jar holder
EN ISO 9001:2015

□ Drawer

□ Compact frame and trolley



Configurations and accessories

MAIN-STREAM MULTIGAS MONITORING UNIT IRMA™



CO₂, N₂O and
5 agents
(HAL, ENF, ISO,
SEV, DES) with
Auto Agent ID



SIDE-STREAM MULTIGAS MONITORING KIT ISA™



CO₂, N₂O, 5 agents
(HAL, ENF, ISO, SEV, DES)
with Auto Agent ID
and paramagnetic O₂



COLLECTION JAR



AUXILIARY ARM

Available kits for main
hemodynamic monitor
manufacturers



ANAESTHETIC AGENT VAPORIZERS

- ▶ Halotane ▶ Isoflurane ▶ Enflurane
- ▶ Desflurane ▶ Sevoflurane

HEMODYNAMIC MONITOR

Availability of supply from all the main manufacturers
Please consult us about all the options available

Ceiling pendant genesis®

With a simple framing square,
the Ceiling Pendant genesis® model
can be hung from any ceiling system



"The image of the ceiling system is only a simulation.
It does not correspond to any accessory available".



Technical specs

Operating data			
Weight		105 kg	
Dimensions		92 cm Wide x 68 cm Deep x 139 cm High (93 cm to the table surface)	
Packaging Dimensions		105 cm Wide x 75 cm Deep x 160 cm High	
Operating voltage supply		110 to 240 V~, 47 to 63 Hz (12 to 6 A)	
Power input		120 W typically (max. 1.2 kW with auxiliary outlets used)	
Battery autonomy		90 min typically	
Auxiliary sockets outlets		2 x 2 A (with double, phase and neutral, 2.5 A independent fuses)	
O ₂ , N ₂ O and Air supply		2.7 to 6.9 bar (39.1 to 100 psi)	
Screen		17" TFT resistive touch-screen	
Protection class		Class I, gas analyzer type BF defibrillation proof	
Classification		Class II b	
Storage		One front drawer with self-brake system and two back cabinets with door	
Lighting		LED bar below the screen controlled from a touchpad	
Latex free			
Ambient conditions			
Operation / Storage Temperature		10 to 35 °C (50 to 95 °F) / -20 to 60 °C (-4 to 140 °F)	
Operation / Storage Atmospheric pressure		700 to 1060 mbar (10 to 15.3 psi) / 500 to 1100 mbar (7.2 to 15.9 psi) ~ 4000 m height	
Operation / Storage Relative humidity		25 to 85 % (no condensation) / 5 to 98 % (no condensation)	
Fresh gases (O ₂ , N ₂ O and Air, electronically controlled)			
Fresh gas flow		0 and 0.1 to 18 L/min O ₂ / N ₂ O / Air	
Accuracy		0.1 to 0.5 L/min = ±0.05 L/min; 0.5 to 18 L/min = ±10 %	
O ₂ concentration		21 to 100% vol. with Air, 25 to 100% with N ₂ O (minimum 200 ml/min O ₂)	
O ₂ Safety fresh gas (backup)		0 – 0.2 – 0.4 – 0.7 – 1 – 1.5 – 2 – 3 – 4 – 6 – 8 – 10 – 12 – 15 L/min O ₂	
O ₂ flush (+O ₂)		35 L/min	
Breathing system (CABS)			
Autoclavable	134 °C	Vacuum safety valve	-0.3 hPa
Weight of breathing system	9.8 kg	Exp. resistance at 60L/min	5.80 hPa
CO ₂ absorber volume	1.5 L	Insp. resistance at 60L/min	2.90 hPa
Leakage	< 150 ml/min (at 30 hPa)	Exp. resistance at 30L/min	3.55 hPa
Pressure limiting valve APL	0 to 70 hPa	Insp. resistance at 30L/min	0.89 hPa
Pressure relief valve	125 hPa	Internal Compliance at 30 hPa	15 ml
External fresh gas with non-re-breathing systems (software controlled)			
Connection		conical 22 mm male / 15 mm female	
Pressure relief valve		125 hPa	
Vacuum safety valve		-0.3 hPa	
Auxiliary integrated systems		Auxiliary O ₂ flow meter (0-15 L/min), Auxiliary O ₂ supply valve (NF standard) and Suction device	
Auxiliary integrated systems		1 x RS-232, 1 x USB 2.0, 2 x USB 3.0, 2 x LAN Ethernet	
Auxiliary integrated systems		ISO 13485, ISO 80601-2-13, IEC 60601-1, IEC 60601-1-2, IEC 60601-1-8, IEC 60601-1-6, IEC 62304 y IEC 62366	

Ventilator (electronically controlled, pneumatically driven bellows ventilator)

Operation / Ventilation modes

- ▶ Volume controlled (VC) modes:
 - Volume Controlled Ventilation (VCV)
 - VC Synchronized Intermittent Mandatory Ventilation (VC-SIMV)
 - VC-SIMV with Pressure Support (VC-SIMV-PS) *
- ▶ Pressure controlled (PC) modes:
 - Pressure Controlled Ventilation (PCV)
 - PC Synchronized Intermittent Mandatory (PC-SIMV)
 - PC-SIMV with Pressure Support (PC-SIMV-PS) *
- ▶ Adaptive Pressure with Volume Guaranteed (APVG) modes (other commercial names: Autoflow, PCVR, PRVC, AVAPS, VC+)
 - Adaptive Pressure with Volume Guaranteed (APVG) *
 - APVG Synchronized Intermittent Mandatory (APVG-SIMV) *
 - APVG -SIMV with Pressure Support (APVG-SIMV-PS) *
- ▶ Pressure Support Ventilation (PSV) * (other commercial names: PS, ASB, SPS, IPS)

* Optional advanced ventilation modes.

Non-mechanical Operation / Ventilation modes

- ▶ Manual ventilation through the CABS system (Auto/Manual software controlled)
- ▶ Spontaneous ventilation either through the bellows (auto mode) or the bag (manual mode)
- ▶ Manual ventilation through the external fresh gas outlet for non-rebreathing systems (Bain, Mapleson, ...)

Application field: neonates, children, adults

Tidal volume	5 to 1500 mL	Inspiratory flow	max. 120 L/min
Inspiratory pressure	0 to 68 hPa	PEEP	0 to 30 hPa
Ventilation frequency	3 to 120/min	Flow trigger	0.2 to 15 L/min
Inspiratory time	0.05 to 16.6 s	Pressure support	5 to 50 hPa
I:E ratio	5:1 to 1:8	Ramp time	0.1 to 2 s
Inspiratory pause	0 to 60 %	Maximum pressure	0 to 68 hPa

Monitoring

- 17" (43 cm) resistive anti-glare touchscreen, supported on a 360° rotating and 2 axis tilting arm.
- Measurements displayed: Peak pressure; Plateau pressure; Mean pressure; Expiratory minute ventilation; Expiratory tidal volume; Inspiratory tidal volume; Expiratory volumeter; Breathing rate; Compliance and Resistance (in VC modes); Patient info (age, weight, MAC, Class ASA); Connected sensors; Battery status; Power supply status; Gases supply pressure for O₂, N₂O and Air; Inspiratory and expiratory concentration of O₂, N₂O, CO₂ and Anaesthetic gas*.
- Parametres charted as curves (up to 3 simultaneously): Airway pressure; Expiratory flow; Inspiratory flow; Volume; Fresh gases (Rotstyle); Concentration of O₂, N₂O, CO₂ and Anaesthetic gas*; Trends: Minute volume, MAC and gases (O₂, N₂O, CO₂ and Anaesthetic gas).
- Display for the performance of the hospital Anaesthetic Gas Scavenging System (AGSS).
- Configurable interface: bright / dark, multi-language.
- Loops (up to 2 simultaneously): Volume-Pressure, Flow-Volume, Pressure-Flow.
- Fresh-gas virtual rotameters for O₂, N₂O, Air.

* CO₂, N₂O and Anaesthetic gases monitoring with the accessory multigas analyzer main-stream or side-stream; O₂ real-time monitoring via paramagnetic sensor with the accessory multigas analyzer side-stream (galvanic sensor monitoring is shown when paramagnetic sensor is not installed or disconnected).

Manufacturing medical devices
since 1973



HERSILL
Medical Devices

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