Anaesthesia Workstation

CE

Most Effective And Efficient Patient Care

Meditec England Galaxy is an advanced Anaesthesia Workstation that combines efficient patient care with simplicity of operation.The modular workstation among its host of features, provides a choice between integrated electronic flowmeter and the traditional rotameters.Its advanced ventilation and monitoring capabilites provide a controlled and precise workflow during all stages of anaesthesia delivery making it suitable for all ages of patients from neonates to adults.
The ergonomically designed workstation provides a clean and uncluttered work environment by completely integrating the ventilator, breathing system, vaporiser, suction and scavenging system.

Special Features

- Fully integrated, compact & ergonomic design
- Anti Hypoxic Device
- Fail-proof audio/visual oxygen failure alarm
- Automatic cut-off of N_2O in case of O_2 failure
- Dual/Triple manifold mounting of vaporisers
- Auxiliary Oxygen Flowmeter(Optional)
- Plug In Upgrade Modules
- Dual flow sensing capability at inhalation and exhalation ports
- Backup O_2 control independent of electrical failure
- Set and User defined priority alarms
- ACGO allows use with semi open circuits
- Top light and Backlight Illumination
- Trolley mounted with lockable castors
- Oxygen Flush 35-75l /min
- Air/N_2O Interlock Switch

Active Gas scavenging System(Optional)

O2 Auxiliary Flowmeter

Display Screen

Plug In Upgrade Modules

Vaporisers

Meditec England provides a choice of advanced vaporisers that set the standard for both quality and performance by combining ergonomic design with consistent accuracy.These vaporisers deliver accurate concentrations under varying conditions of flow, pressure and temperature. The vaporisers are colour coded with clear agent level indications and tamper proof labeling.

- Ergonomic design, single hand operation
- Calibration range : 0 to 5% and 0 to 8% using a Laser refractometer
- Easy to turn dials for Safety Lock to prevent accidental turn on
- Agent specific vaporisers designed to provide constant output
- Available Screw fill, Keyfill or Quik fill
- Interlock mechanism to lock in series with other Vaporisers
- Individually calibrated for each Specific Anaesthetic Drug
- Agent Capacity: 250 +/- 25ml
- Available for Halothane, Isoflurane, Sevoflurane and Enflurane

Ventilation Features

- The large 15" color LCD touch screen displays all ventilator setting data, measurement information, loops and numeric/graphic trends
- Different screen layouts such as Standard, loops, Large Font etc
- Besides Volume and Pressure controlled ventilation, there are SIMV, Pressure Support (PSV) modes which can assist in patient weaning once the operation has ended
- Minimum TV down to 20ml suitable for patients of any age, from infant to adult, by only one bellow
- Tidal Volume compensation and electronic PEEP automatically compensates for fresh gas flow, system leak and the compliance change in the circuit
- The ascending bellows can provide immediate visual information on the adequacy of fresh gas flow and gives indication if there is any system leak
- Cardiac By-pass mode
- Integrated pressure, volume and oxygen monitoring
- Fresh gas & compliance compensation
- Suitable for patients ranging from pediatric to adults

  Various ventilation modes: VCV, PCV, SIMV+VCV+PSV, SIMV+PCV+PSV, Manual, Standby
- Compressor for driving the ventilator electrically (Optional)

Sophisticated monitoring

- Respiratory parameter monitoring;
  - Resistance (R), compliance(C), PEEP, I:E
  - Optional: SpO_2, PR
  - Optional: CO_2, N_2O, Anaesthetic agent
- Waveform: pressure-time, flow-time, volume-time,
  - Optional: SpO_2-time, CO_2-time
- Loop: volume-pressure, flow-volume, flow-pressure
  - Optional: VT-CO_2

Circle Absorber Breathing System

- Fully autoclavable at 134°C and latex free
- Automatic absorber heating technology to avoid water condensation (optional)
- Absorber By-pass switch to change soda lime during surgery
- Quick release canister
- Choice of single/dual canister system
- Integrated bag/vent switch for automatic changeover from manual to mechanical ventilation
- Integrated pressure manometer calibrated APL valve, O_2 sensor port

Choice of single or dual canister system

Powerful Extended Function (optional)

- Plug-in anaesthetic agent modules (mainstream/ sidestream); 5 anaesthetic agent + CO_2 + N_2O automatic agent curve
- Anaesthetic agent, para-magnetic oxygen monitoring module could be chosen for highly accurate monitoring
- Plug-in CO_2 module (mainstream/sidestream) for inspiratory and expiratory monitoring
- Neuromuscular Monitoring Module
- Plug-in SpO_2 module

Ventilator Screen

Main Display Screen

Self Test Screen

Ventilation Setting Screen to Set the Mode & Parameters of ventilation

Startup Screen to show and set patient category Patient weight can also be entered to calculate Tidal Volume

Monitored Value Screen to Display various Monitored Values of different parameters

Alarm Setting Screen for user to define various Low & High limits for alarms

System Setting Screen for Setting current date, time, waveform, configuration, calibration

Technical Specifications

Ventilation mode	VCV, PCV, SIMV+PSV, SIMV+PCV+PSV, SIGH, SPONT, MANUAL
Tidal Volume (VT)	20~1500 mL
Frequency (f)	1~100 bpm
I:E	4:1~1:10 (increment: 0.5)
Inspiratory time	0.1~10s (increment: 0.1 s)
Inspiratory Pause (Tip:Ti)	OFF, 5%~50%
PEEP	Integrated electronic PEEP OFF, 4~30cmH_2O
Flow Trigger (F_{TRIG})	1~15 L/min
Pressure Control	5~70 cmH_2O
Pressure Support	5~60 cmH_2O
Pressure Limit	(PEEP+5)~70 cmH_2O
Peak Flow	> 120 L/min
Vaporiser Mounting	2 positions, selectatec mounting system, optional 3rd position
Gas Supply	Pipeline: O_2, N_2O, Air. Cylinder : O_2-1 and/or N_2O-1
Pressure Gauge	3 pipeline pressure gauges and 2 cylinder pressure gauges
Flow Meter	Choice of Electronic Flow meter or traditional rotameters with built-in N_2O cutoff and anti-hypoxic system
APL Valve	2~70 cmH_2O
CO_2 Canister Volume	2 Kg / 1.5 Kg
By-pass	Automatic; change soda lime during operation
Bag/Vent switch	Switch for manual ventilation and mechanical ventilation
ACGO connector	22 / 15mm
Monitoring Modules (optional)	
Anaesthetic agent monitoring (Optional)	5 Anaesthetic agents+N_2O+CO_2 automatic identification and concentration monitoring (main-stream or side-stream)
FiO_2	Standard chemical oxygen sensor; optional para-magnetic oxygen sensor
CO_2 (Optional)	CO_2 modules (main-stream or side-stream)
AIMS (Optional)	Anaesthesia Information Management System with 17" Screen & Software
SpO_2 module (optional)	Plug-in SpO_2 module
Waveform	Pressure-time, Flow-time, Volume-time;
	Optional: SpO_2-time, CO_2-time, FiO_2-time, Anaesthetic agent-time
Loop	Pressure-volume, Flow-volume, Flow-pressure
	Optional: volume-CO_2
Trend	P_{peak}-t, f-t, FiO_2-t, MV-t, PEEP-t, VT-t
Monitored Parameter	C, R, V_{TE}, V_{TI}, MV, MV_{spn}, F, F_{spn}, I:E, P_{peak}, P_{mean}, P_{plat}
Physical Dimension	1570 x 880 x 1000 mm3 (H x W x D)
Storage	2 spacious drawers
Net weight	108 kg
Power	100 to 240 VAC, 50/60 Hz, 6.5A (Max.)
Battery	120 minutes
Communication connector	VGA, RS232, RJ45, debugging interface