## Technical Specifications

### BASIC UNIT

#### Dimensions(H*W*D)

1420*912*720mm

#### Weight and load

| | |
|---|---|
| Excluding vaporizers | 110kg |
| Including vaporizers | 130kg |
| Work surface load | 25kg |

#### Caster locking

| | |
|---|---|
| Braking type | 125mm, Central brake system |

#### Power and battery backup

| | |
|---|---|
| Power input | AC 100~240 V, 50/60 Hz |
| Power output | 4 sockets, 1.5A individual |
| Battery and operation time with fully charged | Lead-acid, 90 min |

### ANESTHESIA GAS SUPPLY MODULE

| | | |
|---|---|---|
| Gas supply | $O_2$, $N_2O$, Air; 280~600kPa | |
| Cylinder yokes | Optional | |
| Flowmeter | Electronically controlled mixer | |
| $O_2$ flush | 25~75L/min | |
| Auxiliary common gas outlet (ACGO) | | Standard |
| Anesthetic gas gscavenging system (AGSS) | | Optional |

#### Range of flowmeter

0~18L/min or set each gas independently:

$O_2$, $N_2O$: 0~10L/min; Air: 0~12L/min

#### Vaporizer

| | |
|---|---|
| Agent | Sevoflurane, Halothane, Enflurane, Isoflurane |
| Installation mode | Selectatec with interlock |
| Filling type | Pour-fill, Key-fill, Quik-fil |

#### Breathing system

| | |
|---|---|
| Type | Volume reflector |
| Heating system | 32~40℃ |
| Volume of $CO_2$ absorber | 1.5L for single canister |
| APL range | 0～70 cmH$_2$O |
| $CO_2$ bypass | Optional |

### VENTILATOR OPERATING SPECIFICATIONS

#### Control input ranges

| | |
|---|---|
| Freq | 2~100 bpm |
| I:E | 4:1~1:8 |
| Vt | 10~1500 ml |
| $T_{INSP}$ | 0.2~5.0 s |
| $P_{TARGET}$ | 5~70 cmH$_2$O |
| $P_{MAX}$ | 10~100 cmH$_2$O |
| $T_{SLOPE}$ | 0 -2 s |
| $\Delta P$ | 3~60 cmH$_2$O |
| PEEP | OFF, 3~50 cmH$_2$O |
| Trigger | 0.5~15 L/min / -20~-1 cmH$_2$O |
| Compensation | Compliance and leakage compensation, fresh gas compensation, altitude compensation |
| Ventilator | Pneumatically driven, Electronically controlled |
| Ventilation modes-standard | VCV, PCV, Manual/Spontaneous |
| Ventilation modes-optional | PCV-VG, SIMV-VC, SIMV-PC, SIMV-VG, PS/CPAP, BIVENT, APRV, VSV |

#### Ventilator monitoring & alarm

| | |
|---|---|
| Monitoring | Vt, MV, Freq, Ppeak, Pmean, Pplat, DP, SI, FiO$_2$, FiCO$_2$, EtCO$_2$, PEEP, Battery status display,ect. |
| Screen | 18.5"TFT color touch screen |
| Graph display | Waveforms of P-t, F-t, V-t, EEG, Agent, CO$_2$ ; loops of P-V, V-F, P-F, V-CO$_2$ |
| Alarm | Excessive leakage, Low oxygen source pressure, High air source pressure, High airway pressure, Low oxygen concentration, Excessive output tidal volume, High concentration of N$_2$O inhaled, High concentration of ISO/SEV/ENF/HAL/DES inhaled, Persistent high airway pressure, Bypass mode started( 1 minute), Apnea, etc. |

# AG70
## Anaesthetic Workstation



$C\epsilon$

**18.5 inch smart pad**

The large smart pad can realize 180° horizontal rotation and 30° vertical pitch adjustment achieving different position operation and improving operation experience.
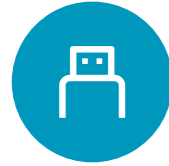
**USB work light**

Touch-adjustable USB light lights up the work space for a clear vision during dim environment.

**Electricity-gas isolation**

Gas and electricity separation builds up a clean and safe OR environment.

**Oversize workbench**

Being tiled 3 sheets of A4 paper gives clinicians enough space to place and operate.

**Double drawer design**

The upper drawer can be used as medication box, no handle design, press to pop out. The lower drawer as a large instrument box.

**Central brake system**

Double pedal design, left pedal lock, right pedal unlock. More labor-saving, more efficient.

# AG70

Focusing on offering more solutions to diverse clinical challenges, inheriting the century-old exquisite manufacturing process of Heyer, AG70 is innovated to a more intelligent future.

## Lung-protective ventilation

Lung-protective ventilation is the current standard of care for mechanical ventilation. The risk of Post Pulmonary Compliance (PPCs) can be effectively reduced through lung-protective ventilation.



### Low tidal volume

With a minimum tidal volume of 10ml in volume control mode, AG70 can meet patients' needs with different body weight and in different health status.

### Auto Induction Process Management (AIPM)

Before starting induction, clinicians need to set the patient's age, weight and other information firstly. Induction mode is divided into three stages: nitrogen removed, drug induced and intubation. According to the prompt information of each stage, carry out induction operation.



### Individualized PEEP titration tool

BEP helps with individualized PEEP titration. Through the guidance of the PV Loop tool, the appropriate PEEP value and tidal volume are realized.



### Auto Waking up Process Management (AWPM)

It includes oxygen infusion, sputum suction and lung expansion, mechanical and autonomic ventilation. The AWPM mode is used for patients with difficult airways. The machine provides oxygen infusion when starting the mode, recruits lung automatically after suction, and judges whether extuba-tion is suitable according to the patient's state, which improves the resuscitation efficiency.



### Minimized impact recruitment maneuver

Two types recruitment maneuver are available: stepwise PEEP or sustained inflation. Automate repetitive tasks used during lung ventilation procedures.



### EEG waveform

Anesthesia depth monitoring helps anesthesiologists to observe whether the anesthesia depth is suitable for current stage and to keep patients in a stable and safe situation.
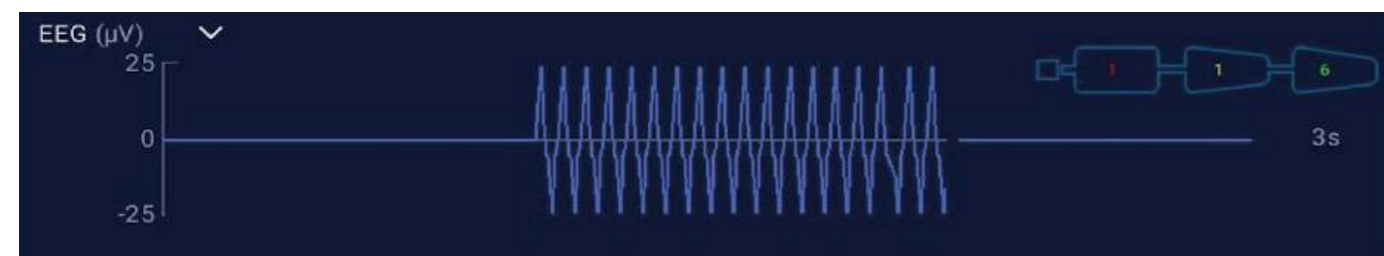


### Cardiopulmonary Bypass (CPB)

Three cardiopulmonary bypass tools are available: VCV based, PS/CPAP based, and Flow Pause. Choose according to needs.

## All-round monitoring parameters

More than 30 parameters including paw, volume, gas, BIS etc. are monitored on AG70, giving clinicians all-round outcomes to operate and take care patients.

Innovated parameter boxes can be made as individualized combination according to the surgery needs and clinicians' operation experiences by sliding and splitting. Maximum 16 parameters can be chosen to show simultaneously.

## Digital flowmeter and pressure gauge

Digital gas mixture, adjustment and display, precise gas controlling ensures the accurate flow rate and benefit for green planet.
Two adjustment methods for option:
(1) Single tube adjustment for each gas
(2) Total flow and $O_2$ concentration adjustment
With Eco-optimizer to tip if the flow is appropriate, ensuring patient's safety and reduce gas waste.

## Modern adjustment methods

Adjustment methods which are of sense of technology achieve coarse and fine adjustment more convenient.Intelligent reference icons and waveforms tip clinicians the ideal and realistic situation of the patient for a better judgement.
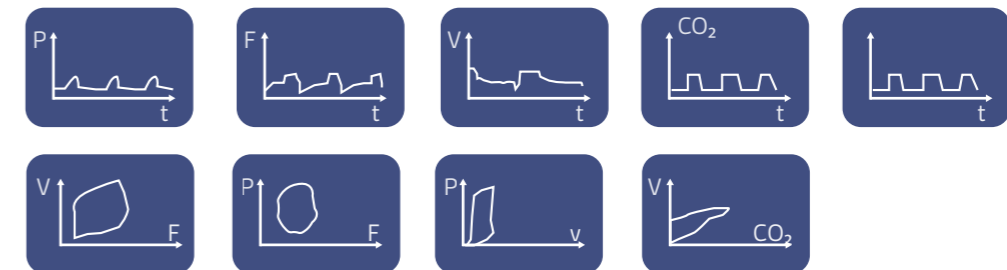
Alarm setting          Reference waveform for ventilation mode          Parameter setting

## AA waveform

AA waveform gives clinicians an intuitive observation on the whole stage of anesthetic gas concentration change.

Comprehensive ventilator-level ventilation modes satisfy various patient types, dealing with complicated patient's conditions with lung protective ventilation.

| VCV | PCV | PCV-VG | SIMV-VC | SIMV-PC |
| SIMV-VG | PS/CPAP | BIVENT | APRV | VSV |