

# Kingst<sup>®</sup> Sidestream Multigas Analyzer AneSure<sup>®</sup>-S



Galvanic Oxygen Sensor (Optional)



Paramagnetic oxygen sensor (Optional)



AneSure<sup>®</sup>-S Sidestream Multigas Analyzer

## Features

- A. Employs sidestream method to provide CO<sub>2</sub> waveforms, EtCO<sub>2</sub>, Respiratory rate , as well as the waveforms, inspiration and expiration concentration values of nitrous oxide and one of the five anesthetic gas agents (Halothane, Enflurane, Isoflurane, Sevoflurane or Desflurane) selected manually by the user.**
- B. PLUG AND PLAY.** The host only needs a standard Remo socket and Internal serial port without interior space and circuit.
- C. HIGH ACCURACY.** Meticulously chosen narrow band optical filter, infrared source and delicately designed hardware electrical circuit and software algorithm ensure to realize high SNR (signal to noise ratio) gas concentration measurement and ensure the measurement accuracy in the range of -5-50°C of temperature and within 0-20% of concentration.
- D. AUTOMATIC PRESSURE COMPENSATION.** Within very wide pressure range of 400-860mmHg, it maintains measurement accuracy by Built-in barometric sensor
- E. LONG LIFE PUMP REDUCES PERIODIC MAINTENANCE**
- F. IMMEDIATELY TO ACTIVATE.** Power on in 4 seconds, to get accurate data.
- G. ADULT/PAEDIATRIC, OR NEONATE AIRWAY ADAPTER** can continuously work in long time and be used repeatedly, reducing customer's usage cost.
- H. ENHANCE OXYGEN MEASUREMENT FUNCTIONALITY.** OPTIONAL paramagnetic oxygen sensors or galvanic oxygen sensors.
- I. COMPREHENSIVE OEM SOLUTION OF CO<sub>2</sub> AND MUTIGAS.** Multiple communication protocols. Moreover, our long-term and accumulated technology and experience easily help you to realize upgrading technology and performance.



Performance of the module

Technique: Non-dispersive infrared gas analysis, Multi-channel infrared detector, Infrared resource, no moving parts

Storage: -40 to 70°C, <90% RH, non-condensing

Operation: -5 to 50°C, 10 to 90% RH, non-condensing

Circumstance pressure: 55-115kP

Power demand: 5 V±5% (max ripple 200 mVp-p)

Power consumption: <180mA

Interface: RS-232/ Standard E-8-1,38.4 kBaud,10ms data interval(KM) or customized communication protocol.

CO2 measurement range:0-19.7%, 0-150mmHg, or 0-20kPa measurement accuracy:

- 0 - 40 mmHg ± 2 mmHg
- 41 - 70 mmHg ± 5% of reading
- 71 - 100 mmHg ± 8% of reading
- 101 - 150 mmHg ± 10% of reading

N2O measurement range:0-100% measurement accuracy: ±(2 vol% + 2% of reading)

HAL,ENF,ISO measurement range:0-12% measurement accuracy:

- 0-8%: ±(0.15 vol% + 5% of reading)
- 8-12%: unspecified

SEV measurement range:0-15% measurement accuracy:

- 0-10%: ±(0.15 vol% + 5% of reading)
- 10-15%: unspecified

DES measurement range:0-25% measurement accuracy:

- 0-18%: ±(0.15 vol% + 5% of reading)
- 18-25%: unspecified

Respiration rate measurement range: 3-150 bpm measurement accuracy: 1% ±1bpm

Water filter Detection: Insertion automatically turns sampling pump on. Removal automatically turns sampling pump off

Flow set: 50-150ml/min selectable

Exhaust Port: Yes

O2 Compensation: HOST supplied

Barometric Pressure compensation: 400 to 860mmHg automatic

Warm-up time: To reach designed accuracy 97% within 8s, to reach designed accuracy within 20s

Stability: Shortly drifting less than 1mmHg,after 4 hours' power on. Longly drifting does not influence nominal accuracy after continuous 140 hours' power on.

Calibration: No routine user calibration required

Zero: Very few zero only when needed

EtCO2 calcualtion: every breath,10 or 20s averagely

Water Resistance: IPX4-Splash-proof(when water filter inserted)

Shock Impact: IEC TR 60721-4-7 Class 7M3, EN60068-2-27

Shock,EN60068-2-64 Random vibration

Regulatory Designed to meet the following standards:

IEC 60601-1-2, EN55011 – CISPIR 11 Class B

IEC 61000-4-2 Electrostatic Discharge Immunity,

IEC 61000-4-3 Radiated Immunity,

Designed to comply with 93/42/EEC (MDD CE Marking), FDA Standards, Minimum Performance and Safety Requirements for Capnometers ISO80601-2-55

Configurations of the accessories

Water Filter



T4F Filter 664522

Luer Connector	Filter membrance	Moisture transparent membrance	Storage space	Term duration	Patient type	Recover time	Unit packaging
Female	●		1.3ml	Long	Adult Pediatric Infant	24hours	25

Sample line



Sample line 662503



CO2 Nasal tube 660423



CO2 Nasal tube 660424



CO2/O2 Nasal tube 660425

CO2/O2 Nasal tube 660426

Luer Connector	Length	Patient	O2 tubing	Adult	Pediatric	Infant	Unit packaging
Male	2.4m	Intubated		●	●		10
Male	2.4m	Unintubated		●	●		10
Male	1.5m	Unintubated				●	10
Male	2.0m	Unintubated	●	●	●		5
Male	2.0m	Unintubated	●			●	5

Airway Adapter



T Airway Adapter 662531 10pcs/Box