

Mainstream System



Expertise with mainstream CO2 monitoring technology







Transducer type	Mainstream ETCO ₂ System
Working principle	Non-dispersive infrared (NDIR) single beam
	optics, dual wavelength, no moving parts
Initialization time	Capnogram displayed in less than 2 seconds, at
	an ambient temperature of 25°C,full
	specifications within 10 minutes
Measuring range	0 – 150mmHg ; 0 – 20.0% ; 0 – 20 KPa
Resolution	0.1mmHg; 0 – 69mmHg; 0.25mmHg; 70 –
	150mmHg
Rise time	Less than 60ms
Accuracy	0-40mmHg ±2mmHg; 41-70mmHg ±5%
	reading ; 71–100mmHg ±8% reading ; 101-
	150mmhg ±10% reading
Respiratory rate range	0 to 160 Breaths Per Minute (RPM)
Respiratory rate	
accuracy	±1 Breath
Compensations	Automatically 400mmHg to 800mmHg
Compensations	O ₂ Compensation ; N ₂ O Compensation ;
(Hoist supplied)	Anesthetic gas Compensation
· ·	No routine user calibration required, only when
Calibration	replacing the airway adapters
Airway adapter detection	Plug in- Analysis automatically started, green
	light flashing
	Unplug – Analysis stopped, red light flashing
	Single-patient-use or reusable, <5cc dead
Airway adapter	space(adult), <1cc dead space(infant), Adapter
	taper meets ISO5356-1
Voltage	FVDC : F0/
requirements	5VDC±5%
Power rating	Less than 1W
	Operating: 0° to 40°C, 10% to 90%RH, non-
Temperature and	condensing
humidity	Storage : -40° to 70°C , <90%RH , non-
	condensing
Water resistance	IPX-4
Shock impact	IEC TR 60721-4-7
Data interface	RS232
Data output	ETCO ₂ 、FiCO ₂ 、RR、Real-time CO ₂ concentration
Regulatory than can be met	IEC60601-1-2、EN55011 – CISPIR 11 Class B
	(Radiated and Conductive Emissions),
	IEC61000-4-2Electrostatic Discharge Immunity, ,
	IEC61000-4-3Radiated Immunity. Medical
	Electrical Equipment performance requirements
	for the basic safetyand essential performance of
	respiratory gas monitors.





Expertise with sidestream CO2 monitoring technology





Transducer Type	SidestreamETCO ₂ System
Sampling rate	(50±10)ml/min
Working principle	Non-dispersive infrared (NDIR) single beam optics, dual wavelength, no moving parts
Initialization time	Capnogram displayed in less than 2 seconds, at an ambient temperature of 25°C,full specifications within 10 minutes
Measuring range	0 – 150mmHg 0 – 20.0% 0 – 20 KPa
Resolution	0.1mmHg; 0 – 69mmHg; 0.25mmHg; 70 – 150mmHg
Accuracy	0-40mmHg +2mmHg; 41-70mmHg +5% reading; 71-100mmHg +8% reading; 101 -150mmhg +10% reading; Above 80BPM +12% reading
Respiratory rate range	0 to 160 Breaths Per Minute (RPM)
Respiratory rate accuracy	±1 Breath
Compensations	Automatically 400mmHg to 800mmHg
Compensations	O ₂ Compensation ; N ₂ O Compensation ; Anesthetic
(Hoist supplied)	gasCompensation
Calibration	No routine user calibration required
Sample cell/filter	Proprietary single patient use sample cell and inline filter are integrated with the sampleline which eliminates contamination of the internal system
Nasal sampling kits for	Adult and pediatric nasal/oral CO ₂ sampling, nasal/oral CO ₂
non-intubated patients	sampling and O₂ delivery
On-airway adapter	Adult/Pediatric with and without dehumidification tubing
kitsfor intubated patients	Pediatric/Infant, low dead space,conforming to ISO 5356-1 Nasal Cannula < 2 weeks :
Sample kit hours of use	On-Airway Adapter Kits <2 weeks
Sample cell detection	Insertion automatically turns sampling pump on. Removal automatically turns sampling pump off
Scavenging port	Yes
Voltage requirements	5VDC±5%
Power rating	Less than 1.3W
Temperature and	Operating: 0° to 40°C, 10% to 90%RH, non-condensing
humidity	Storage: -40° to 70°C, <90%RH, non-condensing
Water resistance	IPX-4
Shock impact	IEC TR 60721-4-7
Data interface	RS232
Data output	ETCO ₂ 、FiCO ₂ 、RR、Real-time CO ₂ concentration
Requirements that design can meet	IEC60601-1-2 , EN55011 – CISPIR11 Class B (Radiated and Conductive Emissions) , IEC61000-4-2Electrostatic Discharge Immunity, , IEC61000-4-3Radiated Immunity, Medical Electrical Equipment performance requirements for the basic safetyand essential performance of respiratory gas monitors.