



## CAPNOGRAPH MAINSTREAM CO<sub>2</sub> SENSOR

ETCO<sub>2</sub> (End-Tidal Carbon Dioxide) technology for mainstream CO<sub>2</sub> monitoring

### It's your choice

As a top provider of the gas analysis equipment, we have been providing innovative and cost effective solutions for OEM customers over 10 years.

The Capnograph sensor is the ideal solution for all your CO<sub>2</sub> monitoring requirements.

Winland medical provides comprehensive technical, clinical, and marketing support to help the growing need of your business.

### PRODUCT FEATURES:

- Response is faster and less chance of erroneous
- Dual wavelength, proprietary sample cell protects internal ndir components from contamination
- Barometer
- No pumping or pneumatic components to replace  
Maintenance requirements and overall cost-of-ownership are minimized.
- No calibration required
- Compatible for Masimo Phase II IRMA/ Philips Respironics CAPNOSTAT 5/CPT
- Private label option TTL/RS232, LEMO 8 pins/DB9
- Unique accessories & supplies for all patients

## Your Choice



Unique accessories & supplies  
for all patients



Airway adapter for children



Airway adapter for adult



Repeatable airway adapter for  
adult

## Technical Specifications

Transducer Type	Mainstream CO <sub>2</sub> Sensor	
Sample Rate	50 mL/min, $\pm 10$ mL/min.	
Principle of Operation	Non-dispersive infrared (NDIR) single beam optics, dual wavelength, no moving parts	
Initialization Time	Capnogram displayed in less than 4 seconds full specifications within 2 minutes	
CO <sub>2</sub> Measure Range	0 - 114 mmHg 0 - 15% 0 - 15.2kPa	
CO <sub>2</sub> Resolution	0.1 mm Hg 0.25 mm Hg	0 to 59 mm Hg 60 to 114 mm Hg
CO <sub>2</sub> Accuracy	0 - 40mm 41 - 76 mmHg 77 - 114 mmHg Above 80 BPM $\pm 12\%$ of reading	$\pm 2$ mmHg $\pm 5\%$ of reading $\pm 8\%$ of reading
CO <sub>2</sub> Stability	Drift over four hours shall not exceed 1 mmHg maximum Accuracy specification will be maintained over a 120-hour period	
Sampling Frequency	100 Hz	
Respiration Rate Range	2 to 150 Breaths Per Minute (BPM)	
Respiration Rate Accuracy	$\pm 1$ breath	
Compensations	Automatic Barometric pressure 400 mmHg to 800 mmHg Operator selectable O <sub>2</sub> , N <sub>2</sub> O, He and agent compensation	
Calibration	No routine user calibration required.	
Voltage Requirements	5.0 VDC $\pm 5\%$	
Power Consumption	Less than 1.2 Watts typical (Steady State) Up to 2 Watts maximum on power up (Warm up)	
Compatible monitor brand	Compatible with many brands of patient monitors and defibrillators such as Philips, Draeger, ZOLL and many more.	
Standards	IEC 60601-1-2:2014; IEC 60601-1-8:2012; IEC 60601-1-4:2000;  ISO-13485:2016; ISO-14971:2012; BS-EN-1789-2007 ;	
Data Interface	RS232, bi-directional, 19200 baud rate, standard N-8-1.	
Data Output	CO <sub>2</sub> gas concentration(mmHg), End-tidal CO <sub>2</sub> , Inspired CO <sub>2</sub> , Respiratory Rate.  Gas and barometric pressure compensated when supplied by host.	
Temperature and Humidity	Operating: 0 to 45°C, 10 to 90% RH, non-condensing Storage: -40 to 70°C, <90% RH, non-condensing	
Water Resistance	IPX4 – Splash-proof (sensor head only)	