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AV-CT100 EtcO2 Monitor

Application

AV-CT100 EtCO2 Monitor of the gas measurement module is based on the principle of characteristic absorption of non-dispersive infrared light of specific wavelengths by gas molecules. Using infrared light to project gas in the respiratory airway and use infrared detectors to detect the infrared light absorption of the gas in the airway. Then through specific hardware circuits and algorithms to get the end-breathing gas concentration, inhaled gas concentration, respiration rate and other related parameters. The module uses dual-channel optical acquisition to improve the reliability of the system, and uses a variety of compensation techniques. For example, atmospheric pressure and temperature compensation, etc that it to improve the accuracy of gas concentration measurement.

- Real-time, continuous breathing measurement;
- EtcO2, InscO2, RR and Real-time cO2 waveform;
- Sensor software and hardware working status.
- Support the monitoring of adults, children and infant in ICU, OR and EMS
- Support intubation patient monitoring

Features

- Light weight High precision The system work time up to 40000 hours.
- System response time is less than 1s
- Just plug in and use
- Automatic air pressure, temperature, manual anesthetic gas compensation
- DB9 interface and RS232 Serial interface.

AV-CT100 Airway Adapter

- Adult, Neonate Airway Adapter
- Neonate Airway Adapter: Ineffective cavity less than 1ml
- Adult/Child adapter: Ineffective cavity less than 5ml

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AV-CT100 EtcO2 Monitor

Product Specifications

Principle of Operation	Non-dispersive infrared (NDIR) single beam optics, dual wavelength
Interface	RS232 Serial interface, Baud rate19200bps;
Power	5 VDC±5%;
Rated input power	≤ 1.5W (Stable working condition) ;
Maximum power after power on	≤2.5W (Warm up)
Weight less than 35g	
Dimension	43×32×26mm;
Mechanical strength	Satisty the requirements of shock and vibration during
	transportation ISO80601-2-55;
Working temperature	0C – 50C(32F – 122F);
Storage temperature	-20C – 70C(4F – 158F);
Humidity	15 95 %, non-condensing;
Atmospheric pressure	400-1200hpa;
Respiratory monitoring	Self-adapting threshold, The minimum change of CO2 1vol% can be monitored.
Measurement accuracy	Conform the requirements of ISO21647:2004;
CO2 Measurement Range	0-20 vol%;
CO2 Measurement resolution	1 mmHg;
CO2 Accuracy	0-12 vol%: ± (0.2vol%+2%of reading),
	12-20 vol%: ± (0.2vol%+6%of reading) ;
Respiration Rate Range	0-150 rpm;
Respiration rate resolution	1 rpm;
Respiration Rate Accuracy	±1 rpm;
Rise Time	≤90ms;
The system response time	≤1s;
Compensation	Atmospheric pressure, temperature and anesthetic gas;
Connection	The standard DB9 interface .



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