Single Channel ECG
Module MECG1

The MECG1 single Channel ECG measurement module can measure ECG and is used in patient monitoring.

Dimension： 77mm×53mm×17mm

Features

> With 3-lead ECG monitoring function

> Patient model: adult, pediatric and newborn

> 26 arrhythmia analysis functions, verified by MIT and AHA databases, and passed EC57 standardized tests

> Provides four measurement modes: diagnosis, monitoring, HARDEST and surgery mode

Diagnosis mode: filter range is 0.05hz~130hz

Monitoring mode: filter range is 0.5hz~40hz

HARDEST mode: the filtering range is 5hz~20hz

Surgery mode: filter range is 1hz~25hz

> ECG calibration: input 1mv standard voltage to record the waveform amplitude

> Gain setting: adjust the amplitude of the ECG waveform

> Notch mode: 50Hz, 60Hz, 50/60Hz and close notch mode commands can be selected

Specifications

ECG		HR	
Range	0.15Mv-5.5mV	Range	15~300bpm
Accuracy	Undefined	Accuracy	±1bpm
Resolution	2.36uV/LSB	Resolution	1bpm
lead type	3 Lead:I or II or III		

Electrical Specifications

Power supply	DC 5V±5%
Power consumption	≤3W
Communication	TTL,USART
Temperature	Operating 10°C~ 40°C (50°F ~ 104°F) Storage -20°C~ 70°C (4°F ~ 158°F)

Compliance

Standard	AAMI EC57-2012
	IEC60601-2-25-2011

ECG algorithm

Database	Sensitivity of QRS wave detection/ Q Se	Positive predictive degree of QRS complex detection/Q +P	Sensitivity of room early detection/ V Se	Early detection accuracy rate /V +P	False positive rate of early detection /V FPR
MIT	99.60%	99.72%	92.0%	92.5%	0.52%
AHA	99.66%	99.91%	90.0%	89.31%	0.638%