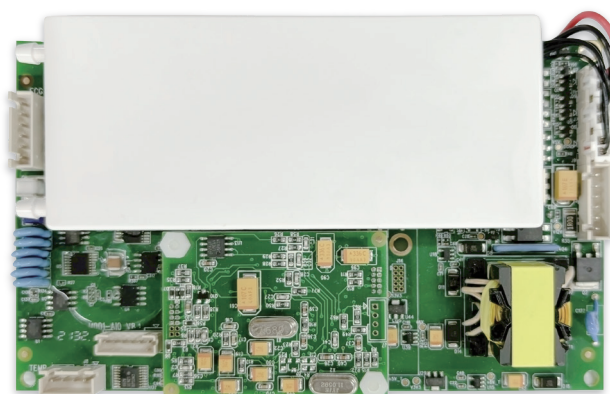


# Multi-parameter **Module MMP3D**

It is used to monitor the patient's blood oxygen, blood pressure, electrocardiogram, respiration, body temperature, heart rate, and pulse



Dimension : 140 mm × 85 mm × 25 mm

3/5 lead  
ECG

SPO2

NIBP

HR

RR

PR

2×TEMP

## Features

- > With pulse oxygen, pulse rate monitoring function.
- > With monitoring function of systolic blood pressure, diastolic blood pressure and mean pressure.
- > With 3/5 lead ECG, 1 breathing, 2 body temperature monitoring functions.
- > Provide three patient modes: adult, child and newborn mode.
- > Module thickness is only 25mm, exquisite and compact.
- > Integrated blood pressure gas circuit system design.
- > The working status of the real-time transmission module: hardware status, software status and sensor status, the upper computer can alarm in time according to the information.
- > When the perfusion index is as low as 0.075%, the blood oxygen monitoring is accurate and reliable, meeting the application of surgery and ICU.
- > Both blood oxygen and blood pressure adopt advanced algorithms, with anti-motion interference and weak signal measurement performance.
- > Blood pressure measurement has three modes: manual, automatic and continuous mode.
- > Blood pressure measurement has hardware and software dual overvoltage protection functions.
- > Double timeout protection for blood pressure measurement (module timeout protection, provide timing trigger port of host computer).
- > The measurement results of the ECG measurement part include heart rate, body temperature, respiration, ST segment offset values of I, II, and V1 channels, and arrhythmia results.
- > ECG measurement has diagnosis, monitoring, HARDEST and surgery modes.
- > Has 26 arrhythmia analysis functions.



# Specifications

ECG		RR	
Range	0.15mV-5.5mV	Range	0~120rpm
Accuracy	Undefined	Accuracy	15-120rpm: $\pm 2$ rpm or $\pm 2\%$ ; Undefined(<15rpm)
Resolution	2.36uV/LSB	Base resistance	500-2000 $\Omega$
lead type	3 Lead:I or II or III 5Lead:I ,II,III,AVR,AVL,AVF,V1	Variable resistance	0.2-3.0 $\Omega$

HR		SPO2	
Range	adult: 15~300bpm Child/Newborn: 15~350bpm	Range	0~100%
Accuracy	$\pm 1$ bpm	Accuracy	$\pm 2\%$ (70%~100%)Undefined(0~69%)
Resolution	1bpm	Resolution	1%

NIBP		PR	
Pressure Range	0-300mmHg	Range	25~300bpm
Pressure Accuracy	$\pm 2$ mmHg or $\pm 1\%$ (Whichever is greater)	Accuracy	$\pm 3$ bpm
Resolution	1mmHg	Resolution	1bpm
Systolic Range	Adult : 40~270mmHg Pediatric : 40~235mmHg Neonate : 40~130mmHg	<b>PI</b>	
Distolic Range	Adult : 10~210mmHg Pediatric:10~200mmHg Neonate:10~90mmHg	Range	0~20%
Mean Range	Adult : 20~230mmHg Pediatric : 20~225mmHg Neonate : 20~100mmHg	Accuracy	Undefined
Accuracy	The mean deviation $<\pm 5$ mmHg The standard deviation $<8$ mmHg	Resolution	0.001%
		<b>TEMP</b>	
		Range	0-50°C
		Accuracy	$\pm 0.1^\circ\text{C}$
		Resolution	0.1°C

## Electical Specification

Power supply	DC.12V $\pm 5\%$	
Power consumption	$\leq 6$ W	
Communication	TTL,USART	
Temperature	Operating 0°C~ 70°C	Storage -40°C~ 70°C

## Compliance

Standard	IEC 60601-2-27: 2011	IEC 80601-2-30: 2018	DIN EN ISO 81060-1: 2012
	BS EN 1060-3:1997 +A2: 2009	ISO 80601-2-61: 2017	AAMI EC57:2012/(R)2020

\* The data is subject to change without notice. Please refer to the manual for the contraindications and precautions