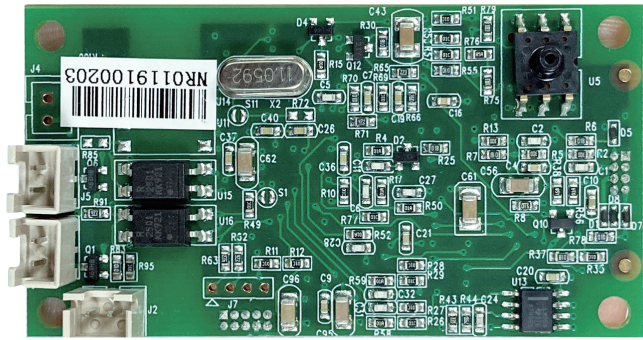


Blood Oxygen/ Blood Pressure **Module MSPO2BP**

MSPO2BP two-in-one parameter measurement module can measure blood pressure and blood oxygen. Parameters such as pulse rate.



Dimension : 71 mm × 38.4 mm × 15 mm

SPO2

PR

PI

NIBP

Features

- > Real-time measurement of pulse oxygen saturation, pulse rate, and perfusion index.
- > With monitoring function of systolic blood pressure, mean blood pressure, diastolic blood pressure and pulse rate parameters
- > Real-time transmission of pulse wave signals based on infrared spectrum absorption.
- > Real-time transmission of the module's working status, hardware status, software status and sensor status.
- > Provides two patient modes: adult and child mode.
- > It has the function of setting the average time of blood oxygen calculation parameters to obtain different response time of blood oxygen calculation parameters.
- > Capable of anti-motion interference and weak signal measurement.
- > Pressure calibration function: Continuously provide cuff pressure value to calibrate pressure accuracy.
- > Leak detection function: detect whether the gas path is leaking.
- > Excellent reliability

Specifications

SPO2		PR	
Range	0~100%	Range	25~300bpm
Accuracy	±2%(70%~100%) Undefined(0~69%)	Accuracy	±3bpm
Resolution	1%	Resolution	1bpm
NIBP		PI	
Pressure Range	0-300mmHg	Range	0~20%
Pressure Accuracy	±2mmHg or ±1% (Whichever is greater)	Accuracy	Undefined
Resolution	1mmHg	Resolution	0.001%
Systolic Range	Adult : 40~270mmHg Pediatric : 40~235mmHg Neonate : 40~130mmHg		
Distolic Range	Adult : 10~210mmHg Pediatric:10~200mmHg Neonate:10~90mmHg		
Mean Range	Adult : 20~230mmHg Pediatric : 20~225mmHg Neonate : 20~100mmHg		
Accuracy	The mean deviation<±5mmHg The standard deviation<8mmHg		

Electical Specification

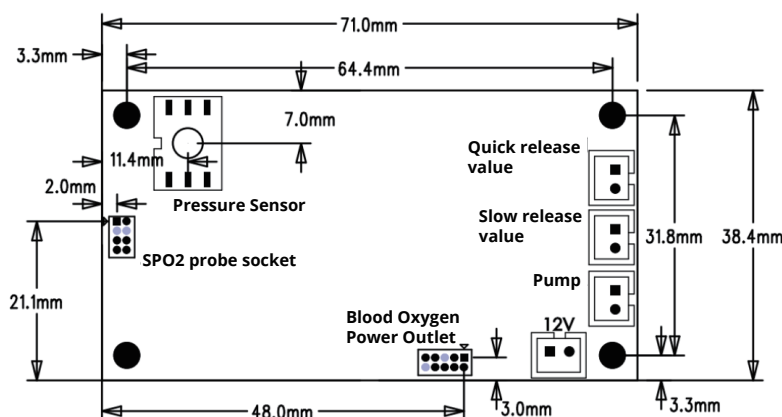
Power supply	DC.12V±10%	DC.5V±5%
Power consumption	DC.12V: ≤5W	DC.5V: ≤1W
Communication	TTL,USART	
Temperature	Operating 0°C~ 70°C	Storage -40°C~ 70°C

Compliance

Standard	IEC 80601-2-30: 2018	ISO 80601-2-61: 2017	IEC 60601-1-2:2014
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Dimensions

The board dimensions are given in millimeters.



Note 1: Sockets for pressure sensor, 12V power supply, pump, valve are on the back.

Note 2: The SpO2 probe socket and SpO2 power socket are on the front.

Note 3: In actual installation, the two-in-one parameter board needs to be turned over, and the blood oxygen probe socket and blood oxygen power socket are installed downward on the bottom plate.

Interfaces

SpO2 probe socket

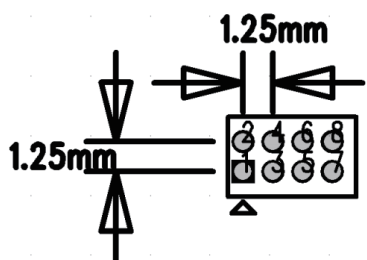
SpO2 probe socket pins are defined as follows:

Pin No	Signal	Description
1	SpO2-	Photodetection Negative Electrode Input
2	SpO2+	Photodetection positive electrode input
3	GND	Ground
4	GND	Ground
5	NC	not connected (reserved)
6	PROBE	Sensor identification
7	IR	Infrared driven positive electrode
8	RED	Red light drives the positive electrode

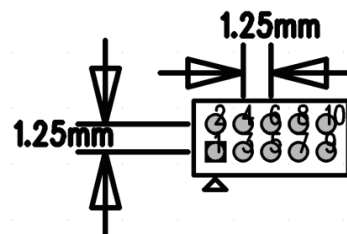
Blood Oxygen Power Outlet

SpO2 probe socket pins are defined as follows:

Pin No	Signal	Description
1	NC	Not connected (reserved)
2	NC	Not connected (reserved)
3	TXD1	Communication side (outgoing)
4	RXD1	Communication side (accept)
5	GND	Ground
6	NC	Not connected (reserved)
7	NC	Not connected (reserved)
8	AVCC	5V power input
9	NC	Not connected (reserved)
10	GND	Ground

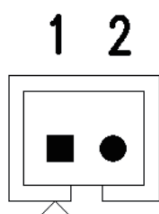


Note 1: TXD is the data sent by the LowPulseStr blood oxygen module to the host, in TTL level mode.



12V power connector J2

The 12VDC power interface pins are defined as follows:

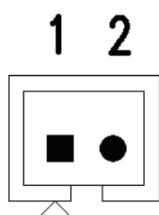


Note: The socket pin pitch is 2.54mm

Pin No	Signal	Description
1	+12VDC	12V DC power input
2	GND	GND ground input

Air pump interface J6

The pin definitions of the air pump interface socket are as follows:

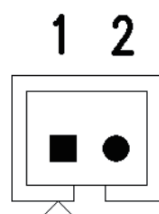


Note: The socket pin pitch is 2.54mm

Pin No	Signal	Description
1	Air pump positive phase	12V Air pump positive phase
2	Air pump negative phase	Air pump negative phase

Air valve interface (J5/J4)

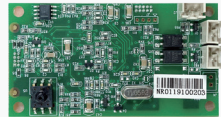
The pin definition of the air valve interface socket is as follows (J5/J4)

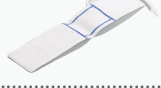


Note: The socket pin pitch is 2.54mm

Pin No	Signal	Description
1	Air valve terminal	Air valve terminal
2	Air valve terminal	Air valve terminal

Purchase Guider

Code	Name	Quantity	Description	Image
022-130201-00	MSPO2BP board	x1		
024-130101-00	Internal Pipe	10cm	Connect with metal blood pressure connector and Nibp external tube	
025-030106-00	Metal blood pressure connector	Optional	female type connector Male type Connector	
041-007002-00	NIBP External tube Reusable NIBP hose	x1	Connect with pressure sensor and cuff	
041-001024-01	Thigh Cuff Arm Range : 46-66cm	Optional	Connect with pressure sensor or NIBP external tube	
041-001025-01	Large Adult Cuff Arm Range : 33-47cm	Optional	Connect with pressure sensor or NIBP external tube	
041-001026-01	Adult Cuff Arm Range : 25-35cm	Optional	Connect with pressure sensor or NIBP external tube	
041-001027-01	Adult Cuff Arm Range : 20-28cm	Optional	Connect with pressure sensor or NIBP external tube	
041-001028-01	Child Cuff Arm Range : 18-26cm	Optional	Connect with pressure sensor or NIBP external tube	
041-001029-01	Infant Cuff Arm Range : 10-19cm	Optional	Connect with pressure sensor or NIBP external tube	
041-001032-01	Neonate Cuff Arm Range : 6-11cm	Optional	Connect with pressure sensor or NIBP external tube	
041-001050-01	Neonate 1size (disposable) Arm Range : 3-6cm	Optional	Connect with pressure sensor or NIBP external tube	
041-001049-01	Neonate 2 size (disposable) Arm Range : 4-8cm	Optional	Connect with pressure sensor or NIBP external tube	

041-001048-01	Neonate 3 size (disposable) Arm Range : 6-11cm	Optional	Connect with pressure sensor or NIBP external tube	
041-001047-01	Neonate 4 size (disposable) Arm Range : 7-13cm	Optional	Connect with pressure sensor or NIBP external tube	
041-001046-01	Neonate 5 size (disposable) Arm Range : 8-15cm	Optional	Connect with pressure sensor or NIBP external tube	
009-030108-00	Internal Cable with ODU connector	Optional	Connect to SpO2 probe socket	
041-009001-00	External Cable ODU	Optional	Connect to ODU connector	
041-002004-01	SPO2 probe finger adult Applicable to adult	Optional	Connect with SPO2 cable	
041-002005-01	SPO2 probe finger child Applicable to Child	Optional	Connect with SPO2 cable	
041-002009-00	SPO2 probe wrap Applicable to adult /Pediatric/Infant	Optional	Connect with SPO2 cable	
041-002027-01	SPO2 soft probe finger adult Applicable to adult	Optional	Connect with SPO2 cable	
041-002028-01	SPO2 soft probe finger child Applicable to Child	Optional	Connect with SPO2 cable	
041-002030-00	Disposable SPO2 cable Non-adhesive	Optional	Connect with SPO2 cable	
041-002006-01	Disposable SPO2 cable Adhesive foam	Optional	Connect with SPO2 cable	
041-002005-01	Disposable SPO2 cable Adhesion	Optional	Connect with SPO2 cable	
/	Adapter driver board	Optional	Connect to NR01 Module	

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