

BM1000C
Bluetooth SPO2 Pulse Meter Manual
(Version V1.0)



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www.berry-med.com

www.spo2.com.cn

OEM SpO2 Pulse meter

Main Features

- ✧ Compact size , easy installation, high reliability and accuracy
- ✧ Enhanced signal processing to reduce the effect of random artifacts associated with motion and low perfusion
- ✧ Applicable to adult, pediatric patients
- ✧ Powered by 3V, low power consumption
- ✧ Graph includes plethysmogram, pulse strength bargraph and PR digits
- ✧ Communication protocol compatible with BCI
- ✧ Converting between **Bluetooth**.
- ✧ Enable all the values displayed in the evaluation software on personal computer

Functions

- ✧ Parameters: SpO2%, Pulse rate
- ✧ One channel plethysmogram
- ✧ Sensor status detection

1. Function

1.1 Measurement parameters

SpO2, Pulse rate

1.2 Units

SpO2: %

Pulse Rate: BPM

1.3 Communication

Bluetooth: 115200 Baud Rate

2. Specification

2.1 Measurement Range

SpO2: 35 -100%

Pulse Rate: 25 ~ 250 BPM

2.2 Resolution

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Spo2: 1%

Pulse Rate: 1BPM

2.3 Accuracy

SPO2 Accuracy: $\pm 2\%$ (70-100%)
 No defined (35-70%)

Pulse Rate $\pm 1\%$ (25-250BPM)

Input Voltage: 2*AAA 3V

Input Current: <40mA (not include the bluetooth)

3. Environment

3.1 Temperature

Working: 0 ~ 45°C

Storage: -20~55°C

3.2 Humidity

Working: 30~95%

Storage: 10~100%

4. Standards

EN865 Calibration specification for pulse oximeters

EN60601-1 Safety for medical equipment

EN60601-1-4 General safety standard

5. Host connection

7.1 Serial communication

Communications: BCI protocol

BCI communication settings

- No parity
- 8 data bits
- 1 stop bit
- 115200 baud rate

7.2 BCI communication protocol

Byte	Bit	Description
1	0~3	Signal strength (0~8)
	4	1=no signal, 0=OK
	5	1=probe unplugged, 0=OK

	6	1=pulse beep
	7	Sync bit=1
2	0~6	Pleth
	7	Sync bit=0
3	0~3	Bargraph
	4	Sensor off=1, 0=OK
	5	Pulse research=1, 0=OK
	6	Bit 6 of Byte 3 is bit 7 of the Pulse Rate
	7	Sync bit
4	0~6	Bits 0-6 of Byte 4 are bits 0-6 of the Pulse Rate
	7	Sync=0
5	0~6	SpO2 0-100%
	7	Sync=0
6	0~6	Not use
	7	Syn=0
7	0~6	Not use
	7	Syn=0