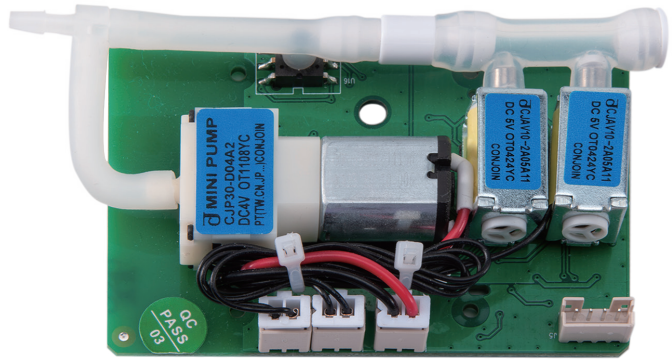# Non-Invasive Blood Pressure Module
MNIBPC

MNIBPC is used to measure related parameters such as systolic blood pressure, diastolic blood pressure, average blood pressure and pulse rate.

Dimension： 1 0 5 m m × 7 2 m m × 3 1 m m

(SYS) (DIA) (MAP) (PR)

Features

> With the monitoring function of parameters such as systolic blood pressure, mean blood pressure, diastolic blood pressure and pulse rate;

> Three measurement modes: manual;

> Three patient measurement modes: adult, child, and newborn;

> Real-time transmission of module working status, including hardware status, software status and sensor status;

> Adopting a unique algorithm, with the ability to resist motion interference and weak signal measurement;

> Pressure calibration function: continuously provide cuff pressure value to calibrate pressure accuracy;

> It has the function of gas leakage detection to detect whether the gas path is leaking;

> With double overvoltage protection (hardware overvoltage protection and software over-voltage protection);

> Double timeout protection (module timeout protection, provide timing trigger port of upper computer).

ZUG
MEDICAL SYSTEMS
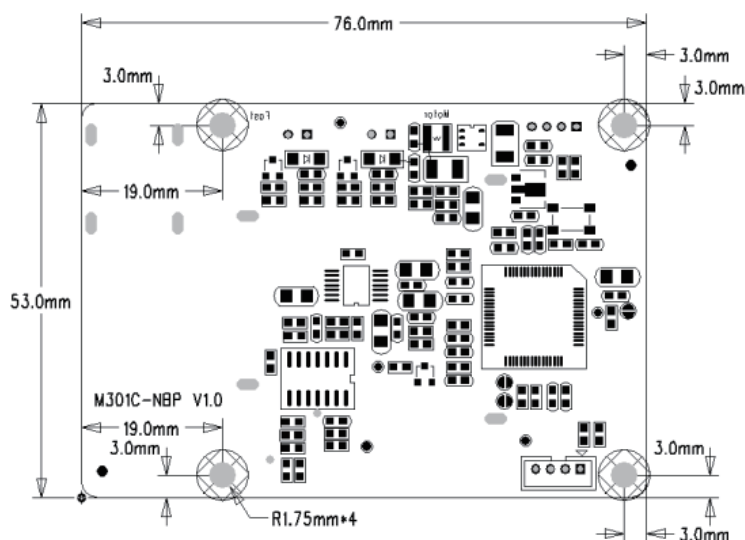
Specifications

SYS

Range: adult: 40~270bpm
Child: 40~235bpm
Newborn: 40~130bpm
Accuracy: Average deviation<±5mmHg
Standard deviation<±8mmHg

DIA

Range: adult: 10~210bpm
Child: 10~200bpm
Newborn: 10~90bpm
Accuracy: Average deviation<±5mmHg
Standard deviation<±8mmHg

MAP

Range: adult: 20~230bpm
Child: 20~225bpm
Newborn: 20~100bpm
Accuracy: Average deviation<±5mmHg
Standard deviation<±8mmHg

PR

Range: adult: 30~240bpm
Child: 30~240bpm
Newborn: 40~240bpm
Accuracy: ±2bpm
Resolution: 1bpm

Cuff Pressure

Range: 0~300mmHg
Accuracy: ±2mmHg or ±1% of reading (whichever is greater)
Resolution: 1mmHg

Electical Specification

Power supply	DC 5 V
Power consumption	≤5W
Communication	TTL,USART
Temperature	Operating 0℃~ 70℃ Storage -40℃~ 70℃

Compliance

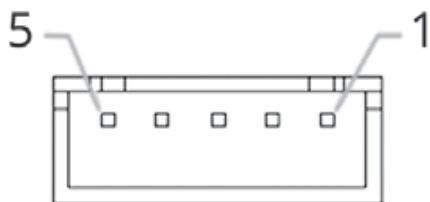|		
Standard	IEC 80601-2-30: 2018	IEC 60601-1-2:2014

Note: The dimensions in the figure with the unit of 20mm.

Interfaces

Power and Communication Interface

The connector J5 shown below is used for the purpose
of communication and power supply. The pin 1 is actually indicated by an arrow on the PCB.

The table shows the pin assignment of this connector.
Note 1: TXD pin is used for the data sent from the MNIBP/M301 module to the host.
Note 2: M_RST pin is a triggering pin for external reset. A high level will reset the module. M_RST is TTL level.

Pin No	Signal	Description
1	M_RST	External reset
2	TXD	UART Sending data from module to host
3	RXD	UART Receiving data from host to the module
4	+5V	Power Supply input 5V DC
5	GND	Ground

Blood Fressure Cuffs Reauire Ments

For evaluation purpose, a reusable adult cuff is provided with the module. However once modules are purchased to be integrated in equipment, the customer
can also choose cuffs, which have been qualified as reliable and in conformance with the local regulation where the final product will be used.

Gas Fath Interfa CE

You can choose to use dual air connection to get better anti-interference effect. A single gas path mode can also be selected for a more compact design and easy connection in use.

Purchase Guider

Code	Name	Quantity	Description	Image
042--050102-00	**MNIBPC board**	x1		
024-130101-00	**Internal Pipe**	10cm	Connect with Tee joint and cuff	
023-050103-00	**Tee joint**	x1	Connect with M301 board and Internal Pipe	
025-030106-00	**Metal blood pressure connector**	x1	female type connector Male type Connector	
041-007002-00	**Nibp external tube**	x1	Connect with cuff	
041-001024-01	**Thigh Cuff** Arm Range : 46-66cm	Optional	Connect with NIBP external tube	
041-001025-01	**Large Adult Cuff** Arm Range : 33-47cm	Optional	Connect with NIBP external tube	
041-001026-01	**Adult Cuff** Arm Range : 25-35cm	Optional	Connect with NIBP external tube	
041-001027-01	**Adult Cuff** Arm Range : 20-28cm	Optional	Connect with NIBP external tube	
041-001028-01	**Child Cuff** Arm Range : 18-26cm	Optional	Connect with NIBP external tube	

041-001029-01	**Infant Cuff** Arm Range : 10-19cm	Optional	Connect with NIBP external tube	
041-001032-01	**Neonate Cuff** Arm Range : 6-11cm	Optional	Connect with NIBP external tube	
041-001050-01	**Neonate 1size (disposable)** Arm Range : 3-6cm	Optional	Connect with NIBP external tube	
041-001049-01	**Neonate 2 size (disposable)** Arm Range : 4-8cm	Optional	Connect with NIBP external tube	
041-001048-01	**Neonate 3 size (disposable)** Arm Range : 6-11cm	Optional	Connect with NIBP external tube	
041-001047-01	**Neonate 4 size (disposable)** Arm Range : 7-13cm	Optional	Connect with NIBP external tube	
041-001046-01	**Neonate 5 size (disposable)** Arm Range : 8-15cm	Optional	Connect with NIBP external tube	

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