



ICU/CCU

PATIENT MONITOR
touching for life



mTouch 9

Features:

15" TFT full touch screen with ultra view

Slim design ensuring performance with style

External 4-channel wide-size printer, stand by any time

Bulk-capacity SD card and USB Flash Disk to ensure unlimited data storage

High-end parameters for option: 12-lead ECG, Maximo SpO2, AG, CO etc.

Wire or wireless networking available



SINOHERO

Size and Weight

- Size: 360(W)×324(H)×120(D)mm
- Weight(Standard Configuration) Net: 4.7kg

Display

- 15" color TFT Full Touch Screen
- Resolution: 1024×768

Multi displays

- Standard display
- Large-font display
- Short Trend display
- OxyCRG display

Indicator

- Power indicator light
- Battery indicator light

Interface

- Parameter cable interface
- AC Power input socket
- Ground wire interface
- Network interface
- Alternate Display
- USB interface
- SD memory card interface

Battery

- Li-ion battery /Rechargeable
- 5 hours for charging; 4 hours for continuous working

Trend Graph

- Reviewable Parameters: HR,ST,SpO2,PR,NIBP,RR,TEMP
- Resolution: 1s, 5s, 5min, 10min

Trend Table

- Reviewable Parameters: HR,ST,SpO2,PR,NIBP,RR,T1,T2,TD
- Resolution: 1, 5, 10, 30,60min
- Trend Data: 256 Hours trend data for all parameters
- NIBP measurement: 400 Groups

Alarm

- Categories: Physical alarms and Technical alarms
- Priority: High, Medium and Low
- Alarm sound levels: 0,1,2,3,4
- Notification: Visual and Audible

Networking

- Connected to central monitoring system

Recorder

- Type: Thermal dot array
- Number of waveform channels: 3 (standard), 4(optional)
- Paper width: 112mm
- Paper length: 20m
- Print speed: 25mm/s other speeds can be defined (optional)

Operation Environment

- Temperature: 0 C-40 C
- Relative humidity: ≤85% (noncondensing)
- Atmospheric pressure: 860hpa-1060hpa
- Patient Range: Adult, Pediatric, Neonate

ECG

- Lead Mode: 3-lead, 5-lead
- Lead selection: I,II, III / I,II,III,V,AVR,AVL,AVF
- Gain: ×0.25,×0.5,×1,×2,Auto
- Sweep speed: 12.5mm/s, 25mm/s, 50mm/s
- Multi-lead display: 6 waveforms
- Alarms: User-selectable upper and lower heart rate limits

HR

- Heart Rate for Adult: 15-300bpm
- Heart Rate for Neonate/Pediatric: 15-350bpm
- Heart Rate Accuracy: ±1bpm or ±1%, whichever is greater
- Heart Rate Resolution: 1bpm
- Notch: 50Hz, 60Hz

ST Segment

- ST segment range: -2.0mv to 2.0mv
- ST alarm range: -2.0mv to 2.0mv
- ST segment accuracy: -0.8mv to 0.8mv
- ST segment error: ±0.02mv
- Arrhythmia type: 13 types

SpO2

- Measurement range: 1%~100%
- Resolution: 1%
- Accuracy: ±2%(70%-100%); unspecified(0-69%)
- Alarm range: 0~100%

Pulse Rate

- Measurement range: 20bpm ~ 254bpm
- Resolution: 1bpm
- Accuracy: ±3bpm
- Alarm range: 0~254bpm

NIBP

- Measurement technique: Oscillometric
- Measurement types: Systolic, Diastolic, Mean
- Work mode: Manual, Auto, STAT

- Auto measurement time: 0-4 hours
- Measurement unit: mmHg / Kpa selectable
- Measurement range:

Mode	Parameter	Range
Adult Mode:	Systolic pressure	40~270mmHg
	Diastolic pressure	10~215mmHg
	Mean pressure	20~235mmHg
Pediatric Mode:	Systolic pressure	40~200mmHg
	Diastolic pressure	10~150mmHg
	Mean pressure	20~165mmHg
Neonatal Mode:	Systolic pressure	40~135mmHg
	Diastolic pressure	10~100mmHg
	Mean pressure	20~110mmHg

- Accuracy: 5%
- Resolution: 1mmHg
- Alarms : Selectable upper and lower limits for systolic, diastolic and mean pressure
- Over-pressure protection: Double safety protection

IBP

- Channels: 1 or 2, 4 selectable
- Measurement Mode: Pressure Transducer
- Measurement Range: -10mmHg ~ 300mmHg
- Accuracy: ±1mmHg or ±2%, whichever is greater(without sensor)
- Pressure name: ART, PA, CVP, RAP, LAP, ICP, P1, P2
- Alarm range: -10~300mmHg

TEMP

- Measurement unit: °Celsius(C) or °Fahrenheit(F)
- Measurement range: 0-50 C
- Channel: T1, T2, TD (Temperature Difference)
- Resolution: 0.1 C
- Accuracy: ±0.1 C
- Probe type: YSI type

RESP

- Measurement technique: RA-LL Impedance variation detection
- Range: Adult: 7~120rpm
Pediatric/Neonate: 7~150rpm
- Apnea alarm: 10s,15s,20s,25s,30s,35s,40s selectable
- Sweep speed: 6.25mm/s, 12.5mm/s, 25mm/s
- Gain: 0.25, 0.5, 1, 2, 4

EtCO2

Mainstream CO2

- Measurement Range: 0 -150 mm Hg
- Accuracy: ± 2 mm Hg (0 – 40 mm Hg)
± 5% of reading (41 – 70 mm Hg)
± 8% of reading (71 –100 mm Hg)
± 10% of reading (101 –150 mm Hg)
- RR range: 0 to 150rpm
- Accuracy: 1rpm
- Response time: <60ms

Sidestream CO2

- Measurement range: 0 -150 mm Hg
- Accuracy: ± 2 mm Hg (0 – 40 mm Hg)
± 5% of reading (41 – 70 mm Hg)
± 8% of reading (71 –100 mm Hg)
± 10% of reading (101 –150 mm Hg)
- Sample flow rate: 50ml/min
- Accuracy: ±15% or 15ml/min,whichever is greater
- Warm-up time: <1min,enter the iso accuracy mode
After 1 min,enter the full accuracy mode
- RR range: 0-120rpm
- RR accuracy: ±2 rpm

Multi Gas

- Measure method: Infrared spectrum
- Fi and ET values: CO2 ,N2O ,O2 ,AG(HAL,ISO,NEF,SEV,DES)
- Resolution:1%
- Unit:%
- Calibration: Room air calibration automatically when changing airway Adapter (<5 sec)
- Warm-up time:<10S,full accuracy within 1min
- Measurement and alarm range of AG
- Gas Range Accuracy
- CO2 0-10% ±(0.3% ABS+4%REL)
- N2O 0-100% ±(2% ABS+8%REL)
- O2 10-100% ±(2% ABS+2%REL)
- HAL,ISO,ENF 0-5% ±(0.15% ABS+10%REL)
- SEV 0-8% ±(0.15% ABS+10%REL)
- DES 0-18% ±(0.15% ABS+10%REL)
- awRR measurement range: 0 ~ 150rpm
- awRR measurement Accuracy: ± 1rpm
- Rise time(flowing speed 10l/min)CO2 ≅ 90ms
O2 ≅ 300ms
N2O ≅ 300ms
Hal,Iso,Enf,Sev,Des ≅ 300ms
- Total system response time :<1seconds

Standard Configuration of mTouch 9

- 15" TFT-LCD Full Touch Screen, 3/5 Lead ECG, PR/HR, RESP, SpO2, NIBP, TEMP, Li-ion Battery

Optional configuration of mTouch 9

- Masimo SpO2, 2-IBP, EtCO2 (Sidestream, Mainstream),12-Lead ECG Multigas,VGA,C.O,Printer

Specification subject to be changed without prior notice.