MDPRO by MTMC

MDPRO5500

Patient Monitor

The MDPRO5500 is a sleek and modern designed unit to provide comprehensive monitoring capabilities for patients in various healthcare settings. The 5500 features a high-resolution color display that presents clear and detailed information, allowing for easy interpretation of the essential vital signs. With its user-friendly interface, portability, and robust functionality, the MDPro5500 patient monitor is an essential tool in modern healthcare facilities, enhancing patient safety and improving overall clinical outcomes.

1200	240 HR	10 IN	120 S
NIBP Measurement	Trend Review	Screen Size	Frozen Waveform

4204 Jutland Drive, Suite A, San Diego, CA 92110
888.602.7767

Features

- High-precision vital signs monitoring with extensive data storage
- Comprehensive connectivity options for easy data transfer
- Advanced patient monitoring algorithm with alerts and notifications
- Semi-modular design for flexible configuration based on clinical needs
- User-friendly interface for easy operation
- G2 CO2 water traps can be used with generic male luer-lock cannula
- Accessories for all patient types

Standard Parameters: 3/5 lead ECG, HR, RESP, SpO2, NIBP, PR, 2-Temp
Standard Features: Touch screen, WiFi, USB, VGA output, 8GB internal memory, Dual IBP slots
Optional Configurations & Features: 6/12 lead ECG, G2 CO2, Thermal Recorder, Nurse Call (with CMS), Defibrillator Synchronization

10" Touch Screen

Primary Care *ASC* *Dental*

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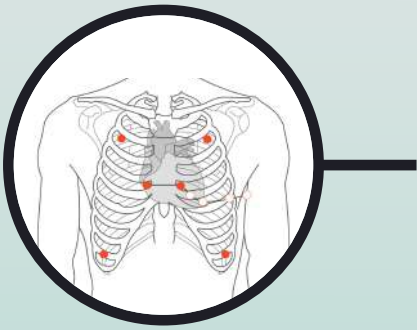
Proprietary Algorithms & Technologies

G2 CO2 (sidestream)

- Superior water trap design for accurate monitoring
- iCARBTM algorithm with Intelligent CO2 pseudo wave identification technology
- Sampling rate as low as 50ml/min



ECG

- 12-lead ST analysis optional with additional internal module upgrade
- Automatic lead type detection
- Industry leading iSEAP™ algorithm with auto-detection of 33 types of arrhythmias
- SEMIP® algorithm with 208 ECG findings over age/ gender diversities

NIBP

- Dual dust filter design means no blockage inside and provides accurate NIBP readings
- Unique cleaning mode for routine maintenance
- iCUFS™ algorithm with smart deflation technology

SpO2

- iMAT algorithm with motion resistance and low perfusion resistance performance
- Reference reading of Perfusion Index (PI) from 0 to 10 according to perfusion changes
- Simultaneous measurements of SpO2 and NIBP of the same limb

Configurations

MDPro5500
Standard Configuration with WiFi & Touch Screen

MDPro5500-G2
Standard Configuration with internal OEM MDPro Sidestream CO2. Uses traditional water traps and generic cannulas

MDPro5500.P
Standard Configuration with WiFi, Touch Screen & Built-in Thermal Printer

MDPro5500-G2.P
Standard Configuration with internal CO2, WiFi, Touch Screen & Built-in Thermal Printer

Optional Accessories

SPO2 SENSORS
- SpO2 Finger Sensor, Adult, 2.5m, reusable — ***SH1.DB9***
- SpO2 Warp Sensor, Neonate, 1m, reusable — ***SH3.DB9***
- SpO2 Silicone Soft-tip Sensor, Adult, 1m, reusable — ***SH4.DB9***
- SpO2 Silicone Soft-tip Sensor, Pediatric, 1m, reusable — ***SH5.DB9***
- SpO2 Ear Clip Sensor, Adult/Pediatric, 1m, reusable — ***SH6.DB9***
- SpO2 7-pin Extension Cable, 2m — ***01.57.471068***
- SpO2 7-pin Extension Cable, 4m — ***01.57.471789***

CUFFS
- NIBP Cuff, Infant, 10-15cm, reusable — ***Cuff.E5***
- NIBP Cuff, Small Child, 13-17cm, reusable — ***Cuff.E6***
- NIBP Cuff, Child, 16-21cm, reusable — ***Cuff.E7***
- NIBP Cuff, Small Adult, 20.5-28cm, reusable — ***Cuff.E8***
- NIBP Cuff, Adult, 27cm-35cm, reusable — ***Cuff.E9***
- NIBP Cuff, Large Adult, 34cm-43cm, reusable — ***Cuff.E10***

NIBP TUBING
- NIBP Tube (3m) with connector — ***01.59.036118-11***

Accessories

STANDARD ACCESSORIES
- ECG cable, 3-lead, snap, AHA, 3.4m — ***01.57.471388***
- SpO2 Finger Sensor, Adult, 2.5m, reusable - direct connect 7 pin — ***02.57.225029***
- NIBP Cuff, Adult, 27cm-35cm, reusable — ***Cuff.E9***
- NIBP Tube — ***01.59.473007***
- Adult skin temperature probe — ***01.15.040225***
- Rechargeable Lithium-Ion Battery (10.8V, 2550mAh) — ***01.21.064380***

G2 ACCESSORIES
- Water Trap — ***02.01.210520***
- Disposable CO2 Sampling line with male luer lock — ***01.57.471275***
- Adult Nasal CO2 sampling cannula — ***01.57.471282***

Specifications

PHYSICAL SPECIFICATION
Device Dimension:
261 mm (W)×246 mm (H)×146 mm (D)
Weight: approx. < 2.8 kg

DISPLAY
Color TFT LCD: 10"
Resolution: 800x480
Waveforms Displayed: Up to 13

ECG
Lead Mode: 3 Electrodes: I, II, III
5 Electrodes: I, II, III, aVR, aVL, aVF, V
6 Electrodes: I, II, III, aVR, aVL, aVF, and leads corresponding to Va Vb.
10 Electrodes: I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, V6
Sweep Speed: 6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s
CMRR: Diagnosis: > 95 dB
Diagnosis 1: > 105 dB (when Notch is turned on)
Monitor: > 105 dB
Surgery: > 105 dB
Enhanced: > 105 dB
Customized: > 105 dB (Low-pass Filter < 40 Hz) >95 dB (Low-pass Filter > 40 Hz)
Sampling Frequency: 1000 Hz
Range:
ADU: 15 bpm to 300 bpm
PED/NEO: 15 bpm to 350 bpm
Accuracy: ±1% or 1 bpm, whichever is greater
Resolution: 1 bpm
Sensitivity: ≥ 300 μVPP

SPO2
Measuring Range: 0% to 100%
Resolution: 1%
Data Update Period: 1 s
Accuracy:
Adult /Pediatric 2% (70% to 100% SpO2)
Undefined: (0% to 69% SpO2)
Neonate: 3% (70% to 100% SpO2) Undefined: (0% to 69% SpO2)
Sensor:
Red Light (660+/-3) nm I
Infrared Light (905+/-10) nm
Emitted Light Energy: < 15 mW
PI:
Measuring Range: 0-10, invalid
PI value is 0.
Resolution: 1

RESP
Method:
Impedance between RA-LL, RA-LA
Measurement lead:
Options are lead I and II. The default is Lead II.
Calculation Type: Manual, Automatic
Baseline Impedance Range: 200 Ω to 2500 Ω (with ECG cables of 1 KΩ resistance)
Measuring Sensitivity: Within the baseline impedance range: 0.3 Ω Waveform Band width: 0.2 Hz to 2.5 Hz (-3 dB)
Respiration Excitation Waveform: Sinusoid, 45.6 kHz (10%), < 350 μA RR Measuring Range:
Adult: 0 rpm to 120 rpm
Neo/Ped0 rpm to 150 rpm
Resolution 1 rpm
Accuracy:
Adult: 6 rpm to 120 rpm: 2 rpm 0 rpm to 5 rpm: not specified
Neo/Ped6 rpm to 150 rpm: 2 rpm 0 rpm to 5 rpm: not specified
Gain Selection:0.25, 0.5, 1, 2, 3, 4, 5
Sweep: 6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s
No RR Detected Delay: 10 s, 15 s, 20 s, 25 s, 30 s, 35 s, 40 s;
default value is 20 s.

TEMP
Technique: Thermal resistance
Position: Skin, oral cavity, rectum Measure
Parameter: T1, T2, TD(the absolute value of T2 minus T1)
Channel: 2
Sensor Type: YSI-10K and YSI-2.252K Unit: ºC,ºF
Measuring Range: 0 ºC to 50 ºC (32 ºF to 122 ºF)
Resolution: 0.1 ºC (0.1 ºF)
Accuracy: 0.3 ºC
Refresh Time: Every 1 s to 2 s
Temperature Calibration: At an interval of 5 to 10 mins
Measuring Mode: Direct Mode
Transient Response Time: ≤ 30 s

NIBP
Technique: Oscillometry
Mode: Manual, Auto, Continuous, Sequence
Measuring Interval in AUTO Mode (unit: minutes):1/2/3/4/5/10/15/30 /60/90/120/180/240/360/480 and User Define
Continuous: 5 min, interval is 5 s
Measuring Parameter: SYS, DIA, MAP, PR
Pressure Unit:kPa, mmHg, cmH2O Measur ing Range:
Adult Mode:
SYS: 25 mmHg to 290 mmHg
DIA: 10 mmHg to 250 mmHg
MAP: 15 mmHg to 260 mmHg
Pediatric Mode:
SYS: 25 mmHg to 240 mmHg
DIA: 10 mmHg to 200 mmHg
MAP: 15 mmHg to 215 mmHg
Neonatal Mode:
SYS: 25 mmHg to 140 mmHg
DIA: 10 mmHg to 115 mmHg
MAP: 15 mmHg to 125 mmg
Alarm Type: SYS, DIA, MAP, PR
(NIBP)
Cuff Pressure Measuring Range: 0 mmHg to 300 mmHg
Pressure Resolution: 1 mmHg
Maximum Mean Error: ±5 mmHg
Maximum Standard Deviation: 8 mmHg
Maximum Measuring Period:
Adult/Pediatric: 120 s
Neonate: 90 s
Typical Measuring Period: 20 s to 35 s (depend on HR/motion disturbance)

IBP
Complies with IEC 60601-2-34: 2011.
Technique Direct invasive measurement
Channel 2 channels
IBP
Measure
Measuring Range
Art (0 to +300) mmHg
PA/PAWP (-6 to +120) mmHg
CVP/RAP/LAP/ICP (-10 to +40) mmHg
P1/P2 (-50 to +300) mmHg
Resolution 1 mmHg
Accuracy (not including sensor) ± 2 % or ±1 mmHg, whichever is greater
ICP:
0 mmHg to 40 mmHg: ± 2 % or ±1 mmHg, whichever is greater;
-10 mmHg to -1 mmHg: undefined
Pressure Unit kPa, mmHg, cmH2O
Pressure sensor Sensitivity 5 μV/V/mmHg
Impedance
Range 300 Ω to 3000 Ω
Filter DC~ 12.5 Hz; DC~ 40 Hz
Zero Range: ± 200 mmHg
Pressure Calibration Range
IBP (excluding ICP) 80 mmHg to 300 mmHg
ICP 10 mmHg to 40 mmHg
Volume Displacement 7.4 x 104 mm3 / 100 mmHg

CO2
Complies with ISO 80601-2-55: 2011.
Intended Patient Adult, pediatric, neonatal
Measure Parameters EtCO2, FiCO2, AwRR
Unit mmHg, %, kPa Measuring Range
EtCO2 0 mmHg to 150 mmHg (0 % to 20%)
FiCO2 0 mmHg to 50 mmHg
AwRR 2 rpm to 150 rpm
Resolution
EtCO2 1 mmHg
FiCO2 1 mmHg
AwRR 1 rpm
Accuracy EtCO2
± 2 mmHg, 0 mmHg to 40 mmHg Typical conditions:
Ambient temperature: (25 ± 3) °C
Barometric pressure: (760 ± 10) mmHg
Balance gas: N2
Sample gas flowrate: 100 ml/min
± 5% of reading, 41 mmHg to 70 mmHg
± 8% of reading, 71 mmHg to 100 mmHg
± 10% of reading, 101 mmHg to 150 mmHg
± 12% of reading or ± 4 mmHg, whichever is greater all conditions
AwRR ± 1 rpm
Drift of Measure Accuracy
Meets the requirements of the measure accuracy
Sample Gas Flowrate 70 ml/min or 100 ml/min (default), accuracy: ±15 ml/min
Warm-upTime Display reading within 20 s; reach to the designed accuracy within 2 minutes.
Rise Time < 400 ms (with 2 m gas sampling tube, sample gas flowrate: 100 ml/min) < 500 ms (with 2 m gas sampling tube, sample gas flowrate: 70 ml/min)
Response Time < 4 s (with 2 m gas sampling tube, sample gas flowrate: 100 ml/min/70 ml/min)
Work Mode Standby (default), measure
O2
Compensation
Range: 0% to 100%
Resolution: 1%
Default: 16%
N2O
Compensation
Range: 0% to 100%
Resolution: 1%
Default: 0%
AG
Compensation
Range: 0% to 20%
Resolution: 0.1%
Default: 0%
Humidity Compensation Method ATPD (default), BTPS
Barometric Pressure
Compensation
Automatic (The change of barometric pressure will not add additional errors to the measurement values.)
Zero Calibration Support: Calibration Support (It is recommend to be operated by trained personal.)
Alarm EtCO2, FiCO2, AwRR
No RR
Detected Delay
10 s, 15 s, 20 s, 25 s, 30 s, 35 s, 40 s; default value is 20 s.
Data Sample Rate
100 Hz
EtCO2
Change1
AwRR ≤ 80 rpm, meet the accuracy mentioned above;
AwRR > 80 rpm, EtCO2 descends 8%;
AwRR > 120 rpm, EtCO2 descends 10%;
with 2 m gas sampling tube, sample gas flowrate: 100 ml/min)
AwRR ≤ 60 rpm, meet the accuracy mentioned above;
AwRR > 60 rpm, EtCO2 descends 8%;
AwRR > 90 rpm, EtCO2 descends 10%;
AwRR > 120 rpm, EtCO2 descends 15%;
with 2 m gas sampling tube, sample gas flowrate: 70 ml/min