DRE Waveline Touch
Touch-Screen Patient Monitor

Equipment for the way *you* operate

User-friendly touch-screen patient monitor

Measures ECG, SpO_2, NIBP, heart rate, temperature and respiration — Now with Masimo SET® Pulse Oximetry!

Also available with Anesthetic Agent Monitoring, Automatic Agent I.D., Dual IBP, and $EtCO_2$

Upgrade for O.R. use with optional Anesthesia Gas Module

- **NEW** - Masimo SET® Pulse Oximetry!
- Optional Plug-In Anesthesia Gas Module expands measurement capabilities — Anesthesia Gas Module
- Bigger time stamp in upper right corner
- Standby button
- Revised SpO2 pitch tone is still audible when SpO2 rate decreases.
- Volume and Sounds are adjustable and now can be turned off completely
- Option to print Numerical Data Only
- Color of the waveforms can be changed
- EtCO2 Option allows compliance with ASA
- Available with optional dual invasive blood pressures, EtCO2, a battery and a built-in recorder.
- 12.1" color TFT display with a touch-screen interface
- Multi-lead ECG monitoring
- Built-in battery (optional)
- NIBP list display
- OxyCRG dynamic view display
- Built-in thermal recorder
- Networkable with a central monitoring system via a wireless or wired network
- S-T Segment and 72 hours trend data analysis
- Compact design convenient for mobile monitoring
- Drug dose calculations
- Multi-lingual settings

Intuitive touch-screen displays large fonts and up to eight crisp waveforms

1800 Williamson Ct. • Louisville, Kentucky 40223 USA
800-477-2006 • 502-244-4444 • FAX: 502-244-0369

www.dremed.com

DRE

DRE Waveline Touch
Touch-Screen Patient Monitor

Equipment for the way *you* operate

Technical Specifications

Physical Dimensions & Weight
Main Unit

Dim.	11" H x 12.6"W x 6.2" D
Weight	Approx. 11 lbs (5kg)

Application
Neonatal, pediatric and adult patients

Operation Environment
Power

Source	External AC power or internal battery
AC Power	100-240VAC, 50/60Hz, <150VA
Battery	Rechargeable Lead-Acid;
• Operating time under normal conditions	1 hour
• Operating time after 1st low battery alarm	10 min.

Temperature

Working	5° – 40° C
Storage	-20° – 65° C

Relative Humidity

Working	30 – 75%
Storage	≤80%

Altitude

Operating Altitude	Up to 5,000 meters
Hyperbaric Pressure	Up to 405.3 kPa

Performance Specifications

Display	12.1" color TFT, Touch Screen
Resolution	800 x 600 pixels
Trace	4, 6, 8 or 9 waveforms
	ECG (I, II, III, aVR, aVL, aVF, V1-V6), PLETH, RESP, IBPx2, $ETCO_2$
Indicator	Alarm indicator; Power indicator
	QRS beep and alarm sound
Trend Time	72 hours
Recorder	Built-in, thermal array, 2 channels
• Record Width	48 mm
• Recorder Paper	50 mm
• Record Speed	25 mm/s, 50 mm/s
OxyCRG	Combines HR, SpO_2, and resp. trends into a single graph

ECG

Input	5-lead ECG cable and standard AAMI line for connection
Lead Choice	I, II, III, aVR, aVF, aVL, V
Gain Choice	x0.125, x0.25, x0.5, x1.0, x2.0
Filter	
• Diagnostic mode	0.05 – 100Hz
• Monitoring mode	0.05 – 75Hz
• Surgical mode	1 – 20Hz

Performance Specifications
ECG continued

ECG Waveforms	7 channels
Penetration Voltage	4000VAC 50/60Hz
Sweep Speed	12.5, 25 and 50 mm/s
HR Display Range	15 – 300bpm
Accuracy	±1% or ±1bpm, whichever is greater
• S-7 Segment Detection	7 channels
• Measurement Range	-2.0mv – +2.0mv
• Arrhythmia Analysis	13 types
Alarm Limit Range Setting	
• Upper limit	80 – 400bpm
• Lower limit	20 – 150bpm

RESP

Measure Method	RA-LL impedance
Range	0 – 120 rpm
Accuracy	±3 rpm
Alarm Upper-lower Limit Setting:	
• Upper limit	6 – 120 rpm,
• Lower limit	3 – 120 rpm
Sweep Speed	12.5 and 25 mm/s

NIBP

Measuring Technology	Automatic oscillating measurement
Cuff Inflating	<30s (0 – 300mmHg, standard adult cuff)
Measuring Period	AVE<40s
Mode	Manual, Auto, STAT
Measuring Interval in AUTO Mode	2 min – 4 hrs
Pulse Rate Range	30 – 250 (bpm)
Measuring Range	
• Adult/Pediatric Mode	
SYS	40 – 250 (mmHg)
DIA	15 – 200 (mmHg)
• Neonatal Mode	
SYS	40 – 135 (mmHg)
DIA	15 – 100 (mmHg)
Resolution	1mmHg
Accuracy: Pressure	
• Maximum Mean error	±5mmHg
• Max. Standard deviation	8mmHg
Overpressure Protection	
• Adult Mode	280(mmHg)
• Neonatal Mode	150 (mmHg)
Alarm Limit Setting	
• SYS	50 – 240 mmHg
• DIA	15 – 180 mmHg

TEMP

Range	0 – 50˚C (32 – 122˚F)
Accuracy	Without sensor
Display Resolution	0.1° C
Alarm Upper-lower Limit Setting:	
• Upper limit	0-50° C
• Lower limit	0-50° C
Channel	2 channels, provide T1, T2, ΔT

Performance Specifications
SPO_2

$ASpO_2$	Anti-motion SpO_2
SpO_2% Range	0 – 100%
SpO_2 Accuracy	
• ±2% 70 – 100%, non-motion	
• ±3% 70 – 100%, motion	
Pulse Rate Range	30 – 250 bpm
Pulse Rate Accuracy	
• ±2 bpm (non-motion)	
• ±3 bpm (motion)	
Alarm Upper-lower Limit Setting:	
• Upper limit	70 – 100%
• Lower limit	70 – 100%
SpO_2 Probe	
• Red Light LED Wavelength	660nm±5nm
• Infrared Light LED Wavelength	905nm±10nm

IBP (Option)

Measurement Range	-50 – 300mmHg
Channel	2 channels
Pressure Transducer	Sensitivity, 5μV/V/mmHg
Impedance Range	300 – 3000Ω
Transducer Sites	ART, PA, CVP, RAP, LAP, ICP
Resolution	1mmHg
Accuracy	±1mmHg or ±2%, whichever is greater
Alarm range	-50 – 300mmHg

$EtCO_2$ (Option)

Mode of Sampling	Sidestream
Principle of Operation	Non-dispersive infrared (NDIR) single beam optics, dual wavelength, no moving parts
CO_2 Measurement Range	0 to 150 mmHg (0 to 19.7%, 0 to 20 kPa)
CO_2 Calculation Method	BTPS (Body Temperature Pressure Saturated)
CO_2 Resolution	0.1mmHg (0 – 69mmHg); 0.25mmHg (70 – 150mmHg)
CO_2 Accuracy	0 – 40 mmHg ± 2 mmHg; 41 – 70 mmHg ± 5% of reading; 71 – 100 mmHg ± 8% of reading; 101 – 150 mmHg ± 10% of reading; Above 80 breath per minute ± 12% of reading
Sampling Rate	100ml/min
Respiration Rate	2 – 150 bpm
Respiration Rate Accuracy	±1 breath
Response Time	<3 seconds (includes transport time and rise time)
Inspired CO_2 Measurement Range	3 – 50 mmHg

Also available: Anesthesia Gas and Automatic Agent I.D. Consult your sales representative for specifications.

Specifications subject to change without notice.

1800 Williamson Ct. • Louisville, Kentucky 40223 USA
800-477-2006 • 502-244-4444 • FAX: 502-244-0369

www.dremed.com

DRE