

MULTIPARAMETER PATIENT MONITOR

EMCO 4850 MPM



Large Number Display



Dynamic Trend Mode



OxyCRG View

- 10.4" Color TFT Display with maximum 11 waveforms
- Standard Configuration - 5 Parameters - ECG, SpO₂, NIBP, Respiration, Temperature
- Upgradeable to etCO₂, Dual IBP, Thermal Recorder
- Display of 7-Lead ECG Waveforms in one screen
- Arrhythmia and ST Segment Analysis
- 60 seconds full disclosure waveforms review
- Selectable Layout - Standard Display, Large Number, Dynamic Trend & OxyCRG View
- Offline Trends available - 168 hours, 1500 sets NIBP, 100 Alarm events
- Trends - Graphical/Tabular, Arrhythmia Events & Technical Alarms Review
- Drug Dose Calculation
- Suitable for Adult, Pediatric and Neonate
- Central Monitoring/Network capability through LAN Ethernet
- USB port for saving Offline Memory
- VGA Port for External Display

Emco Meditek, an ISO9001:2008 & ISO13485:2003 certified company, was formed in the year 1989 with the main objective of manufacturing and marketing of Electronic Medical Equipment. The equipment are designed and manufactured indigenously with the assistance of technology obtained from leading Medical Equipment manufacturing companies around the world especially USA, UK and Germany.

ISO 9001:2008



www.tuv.com
ID 0910079221



At the heart
of healthcare

EMCO MEDITEK® PVT. LTD.

An ISO9001:2008(TUV Rheinland) & ISO13485:2003(Zenith/ISA) Certified Company





Technical Specifications

Classification

Anti-Electroshock type : Class I / Internal Powered Equip
 EMC Type : Class A
 Anti-Electroshock degree : ECG/TEMP/IBP - Type CF
 SpO₂ / NIBP/CO₂ - Type BF
 Ingress Protection : IPX1
 Safety : IEC 60601-1+A1+A2; IEC 60601-1-2+A1

Physical Specification

Device dimension : 304(W) x 279(H) x 150(D) mm
 Weight : Standard Configuration 4kg (with Battery)

Display

Type : Color TFT LCD 10.4"
 Resolution : 800 x 600 pixels
 Traces Displayed : up to 8
 Indicators : Power LED, Alarm LED, Charge LED

Working Environment

Ambient Temperature : 0 to +40 °C
 Humidity : 15% - 80% Non-Condensing

Storage Environment

Ambient Temperature : -20 to +55°C
 Humidity : 10% - 93% Non-Condensing

Power Supply

Input : 100 - 250V AC, 50/60HZ, Pmax=140VA
 Battery Backup : > 2 hours
 Battery Type : Rechargeable Li-ion 11.1VDC, 4800mAh
 Recharging time : 8 hours (90% capacity)

Data Output Ports

USB Port, RJ-45 Ethernet (LAN) Port, SD Card
 WLAN Access Point & VGA Output (optional)

SpO₂ & Pulse Rate (ISO9919)

Measurement & Alarm Range : 0 - 100%
 Resolution : 1%
 Accuracy : ± 2% (70-100%)
 PR Measurement & Alarm Range : 20-254 bpm
 Resolution : 1 bpm
 Accuracy : ± 2 bpm (70-100%)

Respiration

Method : Trans-thoracic impedance (user selectable leads)
 RR Measurement range : Adult : 0-120 rpm
 Neo/Ped : 0-150 rpm
 Resolution : 1 rpm
 Accuracy : ± 2 rpm or ± 2% (greater)
 Apnea Alarm Threshold : 10 - 40s
 Alarm : Yes, audible and Visual Alarm
 Sweep Speed : 6.25, 12.5, 25 mm/s

ECG

Lead Type : 5-lead /3-lead selectable
 3 leadwire cable : RA; LA; LL or R; L; F
 5 leadwire Cable : RA; LA; RL; LL; V or R; L; N; F; C
 Lead Selection : 3-lead: I; II; III;
 5-lead: I; II; III; aVR; aVL; aVF; V

Gains Selection : x0.25; x0.5; x1; x2; x4; auto

Sweep Speed : 12.5, 25, 50mm/s

ECG HR Range : Adult / Pediatric : 15-300bpm

Neonate : 15-350bpm

Resolution & Accuracy : ± 1bpm or 1% (greater)

Bandwidth : Diagnostic mode : 0.05 -100 Hz

Monitor mode : 0.5 - 40 Hz

Operation mode : 1.0 - 25 Hz

CMRR : > 90 dB

Protection : Withstand 8000VAC/50Hz voltage in isolation
 against Defibrillation and Electrosurgical interference

ST Segment Detection : Measurement range : -2.0 to +2.0mV

ST Alarm range : -2.0 to +2.0mV

ST Segment Arrhythmia analysis and categorization

ARR Alarm : Audible and Visual Alarm, Alarm events Recallable

Pacemaker detection and 13 types abnormal status detectable

IEC 60601-2-25; AAMI EC 11/EC 13; IEC 60601-2-27

NIBP (IEC 60601-2-30)

Method : Automatic Oscillometric
 Operation modes : Manual/Auto/Stat
 Auto measurement time interval : Adjustable
 1-5/10/15/30/60/90/120/240/480 Minutes
 Measurement types : Systolic, Diastolic, Mean
 Measurement Pressure range

Adult Systolic : 40 - 270 mmHg

Diastolic : 10 - 210 mmHg

Mean : 20 - 230 mmHg

Pediatric Systolic : 40 - 200 mmHg

Diastolic : 10 - 150 mmHg

Mean : 20 - 165 mmHg

Neonate Systolic : 40 - 135 mmHg

Diastolic : 10 - 100 mmHg

Mean : 20 - 110 mmHg

Cuff Pressure Range : 0-300 (Adult), 0-150 (Neonate) mmHg

Over-Pressure Protection : Dual Safety Protection

Resolution : 1mmHg

Accuracy : ± 5mmHg (Mean Error)

Alarm : Systolic, Diastolic, Mean

Typical Measuring Period : 25-40 sec

Temperature (2 Channels, 1 Probe by Default)

Measurement & Alarm Range : 0-50 °C

Resolution : 0.1 °C

Accuracy : ± 0.1 °C

Refresh Time : Approx 1 sec

IEC 12470-4

IBP (2 Channels) (IEC 60601-2-34) (Optional)

Labels : ART, PA, CVP, RAP, LAP, ICP

Measurement Range : -50 to 400 mmHg

Resolution : 1 mmHg

Accuracy : ± 2% or ± 1 mmHg (greater)

Sensitivity : 5 µV/V/mmHg

Impedance range : 300-3000 Ω

Meas. range : ART 0 ~ 300 mmHg

PA -6 ~ 120 mmHg

CVP/RAP/LAP/ICP -10 ~ 40 mmHg

etCO₂ (Respironics LoFlo Sidestream) (Optional)

Principle of Operation : Non-dispersive Infrared (NDIR),

Single Beam, Dual wavelength, no moving parts

Sampling Rate : 50 ± 10 ml/min

Range : 0 to 150 mmHg (0 to 19.7 %Vol, 0 to 20 KPa)

Accuracy : ±2 mmHg 0 to 40mmHg

±5% of reading 41 to 70 mmHg

±8% of reading 71 to 100 mmHg

±10% of reading 101 to 150 mmHg

±12% of reading Above 80bpm Respiration

Respiration Range : 2 ~ 150 breaths per minute (bpm)

Resp. Accuracy : ±1 breath

Resp. Resolution : 1 bpm

Calibration : No routine user calibration required

etCO₂ (Respironics CapnoStat Mainstream) (Optional)

Principle of Operation : Non-dispersive Infrared (NDIR),

Single Beam, Dual wavelength, no moving parts

Range : 0 to 150 mmHg (0 to 19.7 %Vol, 0 to 20 KPa)

Accuracy : ±2 mmHg 0 to 40mmHg

±5% of reading 41 to 70 mmHg

±8% of reading 71 to 100 mmHg

±10% of reading 101 to 150 mmHg

Respiration Range : 2 ~ 150 breaths per minute (bpm)

Resp. Accuracy : ±1 breath

Resp. Resolution : 1 bpm

Calibration : No routine user calibration required. An airway adapter zero is required when changing to a different style of airway adapter.

Recorder (Optional)

Built-in, direct thermal pixel array recorder

Up to 7 channels printing

Print Speed : 25mm/s

Paper width : 112 mm

Specifications subject to change without prior notice.



At the heart of healthcare

EMCO MEDITEK® PVT. LTD.

Factory :

Luna Road, Post Dabhasa,
 Taluka Padra, District Baroda - 391440, India
 Phone : +91-2662-223397 / 98
 Fax : +91-2662-223397
 E-mail : emcomeditek@gmail.com

Head Office :

Unit No. 109, Vasan Udyog Bhavan,
 Off. Senapati Bapat Road, Lower Parel, Mumbai 400 013
 Phone : +91-22-24903653 • Fax : +91-22-24970102
 E-mail : emmeditek@emcomeditek.com
 Website : http://www.emcomeditek.com