

MULTIPARAMETER PATIENT MONITOR

EMCO 4950 MPM



Large Font Display



Trend Screen Mode



OxyCRG View

- 10.1" 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
- 120 seconds full disclosure waveforms review
- Selectable Layout - Standard Display, Large Font, Trend Screen & OxyCRG View
- Offline Trends available - 96 hours, 500 sets NIBP, 60 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

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



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EMCO MEDITEK® PVT. LTD.

An ISO9001:2008(TUV Rheinland) & ISO13485:2003(Zenith/ASCB) 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 : 318(W)x264(H)x152(D)mm
 Weight : Standard Configuration 4kg (with Battery)

Display

Type : Color TFT LCD 10.1"
 Resolution : 800 x 480 pixels
 Traces Displayed : up to 11
 Indicators : Power LED, Two Alarm LED, Charge LED

Working Environment

Ambient Temperature : +5 to +40°C
 Humidity : 25% - 80% Non-Condensing

Storage Environment

Ambient Temperature : -20 to +55°C
 Humidity : 25% - 93% Non-Condensing

Power Supply

Input : 100 - 240V AC, 50/60HZ, Pmax=80VA
 Battery Backup : upto 80min (2100mAh)
 Battery Type : Rechargeable Li-ion 14.8VDC, 2100mAh
 Recharging time : <180 minutes (2100mAh)

Data Output Ports

USB Port, RJ-45 Ethernet (LAN) Port - IEEE 802.3
 WLAN Access Point 802.11g 54Mbps (optional)

SpO₂ & Pulse Rate (ISO9919)

Measurement & Alarm Range : 0 - 100%
 Resolution : 1%
 Accuracy : ± 2% (70-100% Adult/Pediatric)
 ± 3% (70-100% Neonate)
 PR Measurement & Alarm Range : 25-300 bpm
 Resolution : 1 bpm
 Accuracy : ± 2 bpm (Stationary)
 ± 5 bpm (Moving condition)

Respiration

Method : Trans-thoracic impedance (RA-LL)
 Calculation type : Manual/Automatic
 RR Measurement range : Adult : 0-120 rpm
 Neo/Ped : 0-150 rpm
 Resolution : 1 rpm
 Accuracy : ± 2 rpm
 Apnea Alarm Threshold : 10/15/20(Def)/25/30/35/40s
 Alarm : Yes, audible and Visual Alarm
 Measuring Sensitivity : 0.3Ω (baseline imp 200-4500Ω)
 Baseline Impedance : 200-4500Ω (no leads cable resist)
 2200-4500Ω (leads cable 1KΩ)
 Sweep Speed : 6.25, 12.5, 25, 50 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 : x0.125; x0.25; x0.5; x1; x2; x4; auto
 Sweep Speed : 6.25, 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 -150 Hz
 Monitoring mode : 0.5 - 40 Hz
 Surgical mode : 1 - 20Hz
 Sensitivity : >300 μV/P-P
 Differential Input Imp. : ≥ 5 MΩ
 Patient Leakage Current : < 10 μA
 CMRR : > 100 dB
 Protection : Withstand 5000VAC/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 5 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/Automatic/Continuous
 Auto measurement time interval : Adjustable
 1/2/3/4/5/10/15/30/60/90/120/240/480 Minutes
 Measurement types : Systolic, Diastolic, Mean
 Measurement Pressure range
 Adult Systolic : 40 - 270 mmHg
 Diastolic : 10 - 215 mmHg
 Mean : 20 - 235 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 mmHg
 Over-Pressure Protection : Dual Safety Protection
 Adult : 297 ± 3 mmHg
 Pediatric : 240 ± 3 mmHg
 Neonate : 147 ± 3 mmHg
 Resolution : 1mmHg
 Accuracy : ± 5mmHg (Mean Error)
 8 mmHg (Max Std. deviation)
 Alarm : Systolic, Diastolic, Mean
 Typical Measuring Period : 30-45 sec

Temperature (2 Channels, 1 Probe by Default)

Measurement & Alarm Range : 0~50 °C
 Sensor Type : YSI-10K and YSI-2.252K
 Resolution : 0.1 °C
 Accuracy : ± 0.1 °C
 Refresh Time : Every 1-2 sec
 IEC 12470-4

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

Labels : ART, PA, CVP, RAP, LAP, ICP, P1, P2
 Measurement Range : -50 to 300 mmHg
 Resolution : 1 mmHg
 Accuracy : ± 2% or ± 1 mmHg (whichever greater)
 Sensitivity : 5 μV/mmHg
 Impedance range : 300-3000 Ω
 Meas. range : ART 0 ~ 300 mmHg
 PA -6 ~ 120 mmHg
 CVP/RAP/LAP/ICP -10 ~ 40 mmHg
 P1/P2 -50 ~ 300 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 3 channels printing (1, 2, 3 channels selectable)
 Print Speed : 25mm/s, 50mm/s
 Paper width : 50 mm
 Record width : 48mm

Specifications subject to change without prior notice.



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