Multi-Parameter Patient Monitor

Features
- 12.1" Large-screen Color TFT Display
- Windows interface, Easy to control
- Optional Chinese and English, Multi-language
- Adjustable colors for parameter data and curve
- S-T segment analysis
- Arrhythmia analysis
- Pacemaker analysis
- oxyCRG interface
- Drug dose calculation
- Full functions: Alarming volume, knob volume, HR volume, voice/light alarm, screen brightness adjustable
- Various interfaces: Standard interface, Trends Graph review interface, oxyCRG interface, big font interface, View bed interface
- Patient data record

- Maximum 96 hours storing and replaying of trends graphic
- Maximum 90 minutes capturing and replaying of ECG waveform waveform
- NIBP List record time: 400 groups of NIBP storage, can be recalled and printed
- Waveform record time: 4 minutes of ECG waveform storage, can be recalled and printed, offer power off protection
- 2 hours Short Trend interface
- Optional built-in thermal recorder, real waveform and clinical data recording
- IP network interface, compatible with central monitoring system.
- Wire and wireless network available, support maximum 128 units patient monitors

Safety
- ISO 13485:2003 approved, CE marking according to MDD93/42/EEC

Operation Environment
- Power: AC100-250V, 50/60Hz
- Temperature: 0 - 40°C
- Humidity: 15 - 85%
- Patient Range: Adult, Pediatric, Neonate

Physical Characteristics
AV-9000B
- Inner size: 320mm x 170mm x 280mm
- Carton size: 520mm x 300mm x 420mm Dimension: 0.07m³
- gross weight: 9.5kg
- net weight: 6kg
- chargeable weight: 12.5kg

AV-9000D
- Inner size: 320mm x 170mm x 280mm
- Carton size: 420mm x 320mm x 400mm Dimension: 0.06m³
- gross weight: 9.5kg
- net weight: 6kg
- chargeable weight: 10kg

AV-9000B and AV-9000D
Performance Specifications
- Display: 12.1" color TFT (diagonal)
- Rolling and refreshing waveform display
  Resolution: 800x600
- Multi displays selectable, including:
  - Standard display
  - Freeze display
  - Large-font Display
  - Trend coexist display
  - Alarm limit display
- OxyCRG dynamic view display
- Bed-to-bed view display
- Multi-lead and ECG simultaneous display
- Trace: 7 waveforms
- Sweep Speed: 12.5mm/s, 25mm/s, 50mm/s
- Indicator: Power indicator light / Battery indicator light
- Interface: Parameter cable interface
  - AC Power input socket
  - Network interface
  - External VGA interface for connection of an
    - Alternate Display
- Battery: Lithium-ion battery / Rechargeable
  - Maximum 12 hours for charging;
  - AV-9000B: 6 hours for continuous working
  - AV-9000D: 3 hours for continuous working
- Trend time: 1 ~ 96 hours
- Alarm: User-adjustable High and Low limits audible and visual alarm
- Networking: Connected to central monitoring system
- Recorder: Built-in, thermal array
  - Waveform: 2 channels
  - Record mode: manual, on alarm, time-defined, etc
  - Paper width: 50mm
  - Print speed: 12.5 mm/s, 25mm/s, 50mm/s

ECG
- HR and Alarm Range:
  - Adult 15 ~ 300bmp (beats per minute)
  - Newborn/children 15 ~ 350bmp
- Accuracy: ±1% or ±1bmp, whichever is greater
- Resolution: 1 bpm
- Sensitivity: > 200μV (P-P value)
- 5 Lead cable and 3 lead cable, selectable
  - 5 leadwire cable: RA; LA; RL; LL; V or R; L; N; F; C
  - 3 leadwire cable: RA; LA; LL or R; L; F
  - Lead selection: 12-Lead I; II; III; aVR; aVL; aVF; V1-V6.
  - 5-lead: I; II; III; aVR; aVL
  - 3-lead: I; II; III
  - ECG waveform: 2 channels

- Electrode desquamated indicator: automatic detection
- Gain selection: x1/4, x1/2, x1, x2, automatic
- Sweep speed: 12.5mm/s, 25mm/s, 50mm/s
- HR alarming time: ≤12s
- ECG noise level: ≤30μV (P-P value)
- ECG input loop current: 0.1μA
- Input impedance: > 5MΩ
- CMRR: ≥80Db
- Time constant: Monitoring mode ≥0.3s; Diagnostics Mode ≥3.2s
- Anti-jamming: line frequency, electrosurgical interference and defibrillation
- ECG cable: standard configuration - ECG cable for Adult
- Alarm setting: Adjustable from lower to upper and automatic memory

SPO2
- Display:
  - SPO2 digital
  - pulse columnar graphics
  - volume waveform
  - pulse rate
- Measurement range: 0 ~ 100%
- Alarm range: 0 ~ 100%
- Resolution: 1%
- Accuracy:
  - 70 ~ 100% ±2%
  - 0% ~ 69% unspecified
  - When SPO2 rate is lower than 70%, it can be normally display, but no accuracy required.
- Pulse Rate range: 20 ~ 300 bpm
- Pulse Rate Accuracy: ±3bpm
- SPO2 sensor:
  - standard: Adult
  - optional: Pediatric and Neonate
- Alarm setting: Adjustable from lower to upper and automatic memory

Nellcor SpO2 (Optional)
- Measurement range: 0 ~ 100%
- Resolution: 1%
- Accuracy:
  - ±2% (70-100%, MAX-A, MAX-AL, MAX-N, MAX-P, MAX-I and MAX-FAST sensors);
  - ±3% (70-100%, D-Y5, DS-100A, OXI-A/N and OXI-P/I sensors);
  - 0-69% unspecified
- Alarm range: 0 ~ 100%
- Pulse rate: - Range: 0 ~ 254bpm
  - Resolution: 1bp
  - Accuracy: ±3bpm
  - Alarm range: 0 ~ 254bpm

AV-9000B and AV-9000D

Email: info@ambisea.com
Website: www.ambisea.com
NIBP
- Measurement method: Automatic vibration
- Measurement types:
  - Systolic
  - Diastolic
  - Mean
- Work mode:
  - Manual
  - Automatic
  - STAT (Continuous)
- Auto measurement time: Adjustable 1min-480min selectable
- Measurement unit: mmHg / KPa selectable
- Measurement 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
- Alarm type:
  - Systolic pressure
  - Diastolic pressure
  - Mean pressure
- Accuracy: ±3mmHg
- NIBP pressure range: 0 ~ 300mmHg
- Over-pressure protection
  - Adult mode: 300 mmHg
  - Pediatric mode: 240mmHg
  - Neonatal mode: 150 mmHg
- Over-pressure protection mode: hardware and software double protection way
- NIBP cuff
  - Standard: Adult NIBP cuff
  - Optional: Pediatric and Neonatal NIBP cuff
  - Alarm setting: Adjustable from lower to upper and automatic memory

IBP (Optional)
- Measurement Mode: Pressure Transducer
- Measurement Types: Systolic, Diastolic, Mean
- Channel: 2 channel
- Pressure names: AVP, CVP, PAR, LAP, RAP, ICP
- Measurement Range: -30 ~ 300mmHg
- IBP Accuracy:
  - 0 ~ 100mmHg, ±4mmHg
  - 100mmHg ~ 300mmHg, ±2%
- Pulse Accuracy: ±1% or ±1bpm, whichever is greater
- Calibration Mode: Zero Calibration

TEMP
- Measurement range: 0 ~ 50°C
- Resolution: 0.1°C
- Accuracy: ±0.1°C (exclusive of error of sensor)
- Measurement unit: ºC / F selectable
- TEMP sensor: standard configuration- skin TEMP sensor
- Alarm setting: Adjustable from lower to upper and automatic memory.

RESP
- Method: R-F(RA-LL) impedance method
- RR measurement range:
  - Adult: 7 ~ 120rpm
  - Pediatric / neonatal: 7 ~ 150rpm
- Resolution: ±1rpm
- Accuracy: ±2rpm
- Alarm setting: Adjustable from lower to upper and automatic memory
- Choke alarm: 10seconds, 15seconds, 20seconds, 25seconds, 30seconds, 40seconds, no alarm.

EtCO2 (Optional)
- Sidestream CO2
- CO2 Measurement Range:
  - 0 ~ 150 mm Hg, 0 to 79%,
  - 0 to 20kPa (at 760mmHg)
- 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)
- Sampling Rate: 50ml/min. ±10ml/min
- Sampling rate accuracy: 15%
  - Start-up time: <1 min, once the module starts up, it reaches ISO accuracy
  - Mode: 10 minutes after start-up, the module reaches full accuracy mode
- Respiration rate: 0 ~ 120rpm
- Respiration rate accuracy: ±2rpm (0-70rpm)
  ±5rpm (>70rpm)
- Response time: <240msec (10% to 90%)
- Delay time: <2s
  (Sampling line length: 7 inches; internal diameter: 0.055 inches; sampling gas flow rate: 150ml/min)

Mainstream CO2 (Optional)
- Method: Infrared Absorption
- Measuring mode: Mainstream
- Measurement range: 0 ~ 150 mmHg, 0 to 79%, 0 to 20kPa (at 760mmHg)
- Resolution: 0.1 mmHg 0 to 69mmHg
  - 0.25mmHg 70 to 150mmHg
- Accuracy: ±2 mmHg (0 ~ 40mmHg)
  - ±5% of reading (41 ~ 70mmHg)
  - ±8% of reading (71 ~ 100mmHg)
  - ±10% of reading (101 ~ 150mmHg)
- Alarm range: Same as measurement range
Device Configuration
- YY9107-1999 the appropriate standard requirement of ECG monitor
- Safety grade: grade-I, CF type, BF type
- Recorder: Built-in thermal printing
- Record type: Consecutive real-time record, Automatic record, Parameter alarm record, freeze Waveform record, Review and Saving, Trend Review
- Electric specification: AC 220±22V, DC 12V, 50Hz±1Hz
- Power: 70VA
- Battery working time: 1 hour
- Standard configuration: ECG/HR, SpO2, NIBP, Respiration, Temperature, Pulse

Standard accessories packing list
- Power Plug - 1 pc
- Earth line - 1 pc
- 5 lead ECG cable - 1 pc
- Adult NIBP cuff - 1 pc
- NIBP cable - 1 pc
- Adult spo2 sensor - 1 pc
- Temp sensor - 1 pc (2.25k)
- Electrode - 1 bag
- Warranty card - 1 pc
- Packing list - 1 pc
- Menu - 1 pc

Optional configuration:
AV-9000B
- Nellcor SPO2
- EtCO2
- CF Card
- Built-in Recorder
- IBP
- Special Accessories for Neonatal and Pediatric Patient

AV-9000D
- Nellcor SPO2
- EtCO2
- CF Card
- Built-in Recorder
- BP
- ICG
- Anesthesia Gas
- Special Accessories for Neonatal and Pediatric Patient