EDAN

elite V8

Patient Monitor

reddot design award
winner 2011

Interchangeable Modules Available:

Basic Module
Option -1 (3/5lead ECG, NIBP, EDAN SPO2, Respiration , 2 X Temperature)
Option -2 (3/5/12 lead ECG, NIBP, EDAN SPO2, Respiration , 2 X Temperature)
Option -3 (3/5 lead ECG, NIBP, EDAN SPO2, Respiration , 2 X Temperature, 2 X IBP)
EDAN ETCO2 Module (Side Stream).
Respironics ETCO2 Module (Main and Side Stream)
BIS Module including BIS EEG.
AG Module.
NMT Module.
Nellcor Oximax Module.
Cardiac Output Module, ICG Module (Non Invasive)
2 X IBP.
Omron M3600 NIBP Module.
12 Lead ECG Module(Optional)

Calculation Packages:

Haemodynamic, Renal, Oxygenation, OxyCRG & Ventilation

Optonal Conectivity / Upgrades:

Central Nursing Station (EDAN) (Wired / Wireless).
HL 7 , HIS via XM L Files.
External Display thru VGA ouput Port.
Nurse call Interface output.
USB Ports for Data Storage / Transfer and Upgrades of Software (If required).
Other Ouput Interface sockets (Refer over leaf)

Mounting Options:

Wall Mount.
Rolling Stand.

Care for Health

elite V8
Patient Monitor

Safety Standards
CE Marking in accordance to Council Directive 2007/47/EC concerning Medical Devices
IEC 60601-1+A1+A2; IEC 60601-1-2+A1; IEC 60601-1-8(Alarm)

Physical Specification
Size: 425 mm (L) × 245 mm (W)× 382 mm (H)
Weight: Standard Configuration 14 kg

Display
17" Full Touch-screen Color TFT
Resolution: 1280×1024 dpi
Traces Displayed: up to 8
Waveforms Displayed: up to 13
Various Working Interface Selectable:
Standard Monitoring Display
Large Font Intensive Care Display
Trend Graph/ Monitoring Co-Display
Bed to Bed view Display (Optional)
OxyCRG Dynamic View Display
Drug Dose Calculation Interface
Sweep Speed: 6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s

Trend Display
NIBP Measurement Review: 1500
Trend Review: 150 h
Alarm Review: 200 Events
Frozen Waveform: 720 Sec

Environment Requirement
Ambient Temperature: -20℃ - 55℃ (-4 -131°F)
Humidity: 15%-95% non-condensing

Power Supply
External Power Supply
100-240V AC, 50/60HZ
Internal Battery Power Supply
Type: Rechargeable Li-ion
4200 mAh 14.8 V DC
Battery Backup : 3 - 4 Hours

RESP
Method: Trans-thoracic impedance
Operation mode: Auto/ Manual
RR Measurement range: Adult: 0~120 rPM
Neonate/Pediatric: 0~150 rPM
Resolution: 1rPM
Apnea alarm threshold: 10s,15s,20s (default),25s,30s,35s,40s
Alarm: 3 levels of audible and visual alarm, alarm events recallable
Band width: 0.2-2.5Hz (-3dB)
Sweep speed: 6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s

ECG
Lead type: 5-lead and 3-lead selectable, 12-lead optional
3 leadwire cable: RA; LA; LL or R; L; F
5 leadwire cable: RA; LA; RL; LL; V or R; L; N; F; C
12-lead (including 3/5-lead) optional
Input: 10 leadwire cable: RA; LA; RL; LL; V1-V6 or R; L; N; F; C1-C6
Lead selection: 3-lead: I; II; III;
5-lead: I; II; III; aVR; aVL; aVF; V
12-lead: I; II; III; aVR; aVL; aVF; V1-V6
Gain selection: x0.125;x0.25; x0.5; x1; x2; x4; auto
Sweep speed: 6.25mm/s,12.5mm/s, 25mm/s, 50mm/s
ECG HR Range: Adult: 15-300bpm
Pediatric / Neonate: 15-350bpm
Resolution & accuracy: ±1bpm or ±1%, whichever is greater
Filter:
Diagnostic mode: 0.05-100Hz or 0.05-150Hz(optional 12-lead)
Monitoring mode: 0.5-40 Hz
Surgical mode: 1-20Hz
Protection: Withstand 5000VAC/50Hz voltage in isolation against Defibrillation and electrosurgical interference
ST-Segment Detection:
Measurement range: -2.0 mV~2.0mV
Alarm range: -2.0 mV~2.0mV
ST-Segment Arrhythmia analysis and catergorization : Yes
Alarm: 3 levels of audible and visual alarm, alarm events recallable
12 lead ECG analysis
208 Reference Diagnostic Results
Pace maker detection:
Yes, and 5 types abnormal status detectable
Arrhythmia verification compliant with AHA and MIT-BIH databases
IEC 60601-2-25 / EN 60601-2-25 / AAMI EC 11 / EC 13
IEC 60601-2-27 / EN 60601-2-27

NIBP
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 unit: mmHg/kPa selectable
Measurement types: Systolic, Diastolic, Mean
Pressure range for Adults Systolic: 40 - 270 mmHg
Diastolic: 10 - 215 mmHg
Mean: 20 - 235 mmHg
Pressure range for Pediatrics: Systolic: 40 - 200 mmHg
Diastolic: 10 - 150 mmHg
Mean: 20-165 mmHg
Pressure range for Neonates: Systolic: 40 - 135 mmHg
Diastolic: 10 - 100 mmHg
Mean: 20 - 110 mmHg
Leak test and pressure auto calibration: Yes
Over-pressure protection: Dual Safety protection
Resolution: 1mmHg
Accuracy: Max mean error ±5mmHg
Max standard deviation ±8 mmHg
Alarm: Systolic, Diastolic, Mean
PR from NIBP: Measurement 40~240 bpm
Resolution 1 bpm
Accuracy 3bpm or 3% whichever is greater
Leak test and pressure auto calibration: Yes
IEC 60601-2-30 / EN 60601-2-30 /
EN 1060-1 / EN 1060-3 / EN 1060-4
SP10:2002

NIBP (By Omron M3600)
Measurement Ranges
Adult/Pediatric:
Pulse Rate: 40 - 200bpm
Systolic Pressure: 60 - 250mmHg
Diastolic Pressure: 40 - 200mmHg
Mean Arterial Pressure: 45 - 235mmHg
Neonate:
Pulse Rate: 40 - 240bpm
Systolic Pressure: 40 - 120mmHg
Diastolic Pressure: 20 - 90mmHg
Mean Arterial Pressure: 30 - 100mmHg
Measurement Accuracy
Pulse Rate: ±2bpm or 2% of reading whichever is greater
Blood Pressure: Complies with ANSI/AAMI SP10:2002
Measurement
Modes of Measurement: Manual
Long-term automatic
Short-term automatic
Smart Inflation
Smart measurement
High speed
Pressure Transducers: Two independent solid-state
Deflation Methods: Dynamic Linear Deflation rate specific to pulse rate

SpO2
Measurement & Alarm Range: 0 - 100%
Resolution: 1%;
Accuracy: ±2% (70-100%, Adult/Pediatric);
±3% (70-100%, Neonate)
PR Measurement and Alarm Range: 30 - 300bpm
Resoluton: 1bpm
Accuracy: 3bpm
Refresh 1s
ISO 9919

SpO2 (By Nellcor OxiMax™)
Measurement & Alarm Range: 0 - 100%
Resolution: 1%;
Accuracy: ±2-3% (70-100%, Adult/Pediatric);
±3-3.5% (70-100%, Neonate)
PR Measurement and Alarm Range: 20 - 300bpm
Resoluton: 1bpm
Accuracy: 3bpm (depends on probe)

Temperature (2 Channels, 1 probe by default)
Measurement range: 0~50℃ (32-122°F)
Resolution: 0.1℃
Accuracy: ±0.1℃ (without probe)
Channel: Dual-channel. Provide T1; T2; ΔT
IEC 12470-4

IBP (Multi-channel extendable)
Measuremed Pressure: ART, PA, CVP, RAP, LAP, ICP, P1,P2
Measurement range: -50 - 300 mmHg; Resolution: 1 mmHg
Accuracy: ±2% or ±1mmHg,
whichever is greater (without probe)
Sensitivity: 5μV/V/mmHg;
Impedance range: 300-3000Ω
IEC 60601-2-34

EDAN Co2 Module (Sidestream optional)
Measuring Range
Co2: 0 mmHg ~ 150 mmHg (0 % ~ 20%)
AwRR: 2 rpm ~ 150 rpm
Resolution:
EtCO2 : 0.2mmHg (0 mmHg~ 70mmHg), 0.5mmHg (70 ~ 100mmHg
FiCO2: 0.2mmHg
AwRR: 1rpm
Accuracy: +2 mmHg, 0mmHg ~ 40mmHg
+5% of reading, 41 mmHg ~70 mmHg
+8% of reading, 71 mmHg ~100 mmHg
+10% of reading, 101 mmHg~ 150 mmHg
+12% or + 4 mmHg of reading, whichever is greater
AwRR: +1 rpm
Sample gas Flowrate 70ml/min or 100ml/min, optional (+15ml/min)

CO2 (Mainstream / Sidestream)
By Philips Respronics CAPNOSTAT 5 & LoFlo Technology
Range: 0~ 150mmHg
Accuracy: ±2% 0 ~ 40mmHg,
±5% 41~70mmHg
±8% 71~100mmHg
±10% 101~150 mmHg
AwRR Accuracy: ±1rpm
Convenient design for intubated and non-intubated applciations
Possible to work at low sample flow rate: 50ml / minute
Detailed specification refer to the user manual of Respronics
ISO 21647

Cardiac Output
Method: Thermodilution Technology
Measuring range
CO 0.1 ~ 20L/min
TB 23℃ ~ 43℃
TI - 1℃ ~ 27℃
Alarm range 23℃ ~ 43℃

Anesthetic GAS/O2
Technology Infra-red absorption characteristic
Paramagnetic Oxygen: Optional
Gas CO2, O2,N2O, Des, Iso, Enf, Hal, Sev
Warm-up time
(IRMA AX+) Iso accuracy mode: 45s
Full accuracy mode: 60s
(ISA OR+ / AX+) <20s
Sample flow rate (for ISA OR+ / AX+)
50 ±10 ml/min
Measuring range
CO2: 0 ~ 15%
N2O: 0 ~ 100%
Hal/Iso/Enf: 0 ~ 8%
Sev: 0~10%
Des: 0 ~ 22%
O2: 0 ~ 100%(ISA OR+/AX+)
Respiratory Rate: 0-150bpm ±1bpm
MAC Value displayed
ISO 21647

BIS
BIS: 0 ~100
SQI: 0% ~100%
SR: 0% ~100%
EMG: 30dB ~80dB
SEF: 0.5Hz ~ 30.0Hz
TP: 40dB ~100dB
BIS Trend Length: 6min, 12min, 30min, 60min
EEG Bandwidth: 0.25Hz~50Hz

NMT Module and Monitor
Train Of Four (TOF)
Post Tetanic Count (PTC)

Thermal Recorder
Built-in, direct thermal pixel array recorder
2 channels printing and 1,2 channels selectable
Up to 3 channels printing and 1,2,3channels selectable (to be released)
Print speed: 25mm/s, 50mm/s (to be released)
Paper width: 50 mm

I/O Interface
8-USB Ports
SD Card Socket
RS-232 Serial Port
RJ-45 Ethernet Port. IEEE 802.3
HDMI output
VGA output
Analog and Nurse Call output
Defibrilation Synchronization Output
WLAN Access Point 802.11g 54Mbps (optional)

EDAN
Edan Medical India Private Limited www.edan.com.cn
415, Time Tower , MG Road, Sector-28, Gurgaon - Haryana -122002, India
Tel: 0124-4227309 Fax : 0124-4221108 E-mail : india@edan.com.cn
Lucknow, Jaipur, Chandigarh, Bhopal, Agra,Varanasi, Hyderabad, Bangalore, Chennai, Mumbai, Ahmedabad, Pune, Patna, Kolkata
Edan Instruments, Inc.
3/F – B, Nanshan Medical Equipments Park, Nanhai Rd 1019# Shekou Nanshan Shenzhen 518067 P R China
Tel: +86-755-26898326 Fax: +86-755-26898330 Email: info@edan.com.cn

CE 0123
ISO 13485
FDA 510 K120173
ENG-PM- V8-V1.3- 20130827