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Defibrillator/Monitor

S 6



Standard configuration:

Manual defibrillator, AED, pacemaker, 5-lead ECG, RESP, thermal Recorder

Optional:

12-lead ECG, NIBP, TEMP, PR, EtCO2, SPO2

Safety regulations

Approved according to ISO 13485:2016, CE marked according to MDD93/42/EEC

Physical characteristics

Size:	323 mm x 277 mm x 338 mm
Weight	7.2 kilos
Screen size:	8.4" TFT display
Resolution	800 x 600
Waveforms:	5 waveforms

Operating environment

Temperature:	0 – 45
Humidity:	10% 95%, non-condensing

Water resistance:	IP44 (without external power supply)
Resistance to solids:	IP4X

Power requirement:	100-240 V~, 50/60 Hz ± 1 Hz
Battery Type:	Rechargeable lithium-ion battery
Battery capacity:	7500 mAh, DC 14.8 V
Battery number:	Maximum 2

Battery recharge	
Time:	Less than 2 hours at 80% and less from 3 hours to 100% with equipment off

Backup Battery:	Monitoring mode: 12 hours; Defibrillator mode: 420 times (360 J) charge at 1 minute intervals without recording); Stimulation mode: 9 hours (50 ȳ load) Impedance, Stimulation frequency: 80 bpm, Stimulation output: 60 mA, without recording)
Glows:	Manual from 1 to 100

Indicator:

Two alarm indicators

Interface

USB interface
RJ45 interface
AC power input
VGA interface
Multifunctional connector

Storage date

Alarm event:	200 groups
Patient profiles:	1000 groups
Wave Review:	48 hours
NIBP Review:	2000 groups
Trend chart:	160 hours
Trend table:	160 hours
ECG Report:	500 cases of 12-lead ECG

	Diagnostic report (up to 5 cases) reports per patient)
Voice recording:	Maximum 240 min in total; (Up to 60 min per patient)

Marked events	Available
Storage in power-off state:	Yeah
Alarm:	User adjustable high and low 3- Level limits; Audible and visual priority alarm
Grid:	Connected to the Monitoring Center Wired or wireless system

Recorder

Guy:	Built-in; Thermal matrix
Channel:	4-channel waveforms
Real-time recording:	3s, 5s, 8s, 16s, 32s, continuous
Speed:	25 mm/s, 50 mm/s
Record width:	80 mm

Resolution: 8 points/mm (horizontal and vertical)

Background grid: Configurable

External printer: Yes

Defibrillator

Operating mode: Manual mode, AED mode, Synchronous defibrillation

Waveform: biphasic truncated exponential waveform, with impedance compensation

Defibrillation pathway: external defibrillation and internal defibrillation defibrillation

Electrode type: External defibrillation paddles, multifunctional electrode and internal defibrillation paddles

External defibrillation Supports loading and unloading.

Electrode paddles: and power selection; Charging completion indicator

Charging time: Less than 5 seconds at 200 joules (Battery power) with a new, fully charged battery

Less than 8 seconds at 360 joules with a new, fully charged battery

Charging time: Less than 7 seconds for 200 (AC) Joules;

Less than 11 seconds for 360 Joules

Energy accuracy: ±1.5 J or ±10% of setting, whichever is greater, while 50Ω

impedance ±2J or 15% of setting, whichever is greater

is greater, while 25Ω, 75Ω, 100 Ω, 125 Ω, 150 Ω, 175 Ω

impedance

Patient impedance 20~250Ω (external defibrillation);

Range: 15250Ω (internal defibrillation)

Defibrillation-proof: CF Type: ECG, RESP, SpO2, NIBP, SEASON, PUBLIC RELATIONS; Type BF: CO2

Manual mode

External defibrillators: 1J360J, 25 types (1/2/3/4/5/6/7/8/9/10/15/20/30 /50/70/100/120/150/170/200/22 0/250/270/300/360J)

Internal defibrillation: 1J50J (1/2/3/4/5/6/7/8/9/10/15/20/30 /50J)

Synchronous Energy transfer begins within Cardioversion: 60ms of the R wave

Energy transfer begins within 25 ms of the external synchronization signal

DEA

Output energy: Adjustable: 100-360J Number of electrics Adjustable: once, twice, 3 times

shock

Maximum AED time Battery powered: 18 s

necessary for the heart rate analysis AC power: 21 s

ready for discharge

The types can be DEA VF and VT

Non-invasive stimulation

Waveform: Monophasic square wave pulse

Pulse width: 20 ms

Accuracy: ±5%

Rhythm mode: On demand or fixed

Stimulation frequency: From 40 ppm to 170 ppm

Accuracy: ±1 ppm or ±1.5% (whichever is greater)

Rhythm output: 0 mA to 200 mA

Accuracy: ±5% or ±5 mA, whichever is greater

greater than

Reduced stimulation pulse rate

up to 25% of the original value.

ECG monitoring

Lead type: 3-lead ECG, 5-lead ECG, 12-lead ECG

ECG, AUTO

Selecting potential clients: 12 leads: I; II; III; aVR; aVL; aVF;

V1 ~ V6

5 leads: I; II; III; aVR; aVL; aVF; V

3 leads: I; II; III

Multi-conductor

synchronization

analysis:

ECG sensitivity: Automatic, 1.25 mm/mV (x0.125), 2.5

mm/mV (x0.25), 5 mm/mV

(x0.5), 10 mm/mV (x1),

20mm/mV (x2), 40mm/mV (x4),

Less than ±5%

Sweep speed: 6.25mm/s, 12.5mm/s, 25mm/s,

50 mm/s

Accuracy: Less than ±10%

Heart rate: Adult: 15~300 bpm

Pediatric: 15~350 bpm

Accuracy: ±1 lpm

Alarm limit range	Adult:
	High limit: (low limit + 2bpm) ~ 300 bpm
	Low limit: 15bpm~ (high limit- 2 bpm)
	Pediatric:
	High limit: (low limit + 2bpm) ~ 300 bpm
	Low limit: 15 bpm~(high limit- 2 bpm)
	Resolution:
	1 lpm
Accuracy:	±1% or ±1 lpm (whichever is greater)
Bandwidth:	Monitoring: 0.5~40 Hz (- (3.0 dB ~ + 0.4 dB)
	Diagnostic: 0.05~150 Hz (- (3.0 dB ~ + 0.4 dB)
	Surgery: 1~20 Hz (-3.0 dB~+0.4 dB)
	Frequency: 0.05 ~ 40 Hz (-3.0 dB ~ +0.4 dB)
CMRR:	Monitoring: 105dB
	Diagnosis: 90dB
	Surgery: 105dB
	STEREO: >105dB
Input impedance:	γ5 Mγ
Input signal range:	±8 mV
FC activation threshold	200 γV
Lead Loss Detection current:	Measuring electrode: <0.1 γV
Pacemaker pulse suppression switch:	Drive electrode: <1γV
	Manual selection when the
	The pacemaker is on
	Magnification: 1:1000;
Analog output:	Accuracy: ±5%
	Bandwidth: 0.5 Hz 40 Hz
	Delay: γ35ms
	-2.0 mV +2.0 mV
ST Detection:	-2.0 mV +2.0 mV
Resolution:	0.01 mV
Accuracy:	-0.8 mV ~ +0.8 mV: ±0.02 mV or ±10%; Others: Not specified
System noise:	Less than 25 γV
Calibration voltage	1 mV; Accuracy: ±5%
Arrhythmia analysis:	26 types
Pacemaker detection:	Detectable
Defibrillation ECG	
Lead type:	Single-lead ECG

Heart rate	Adult: 15~300 bpm
Measurement and alarm range:	Pediatric: 15~350 bpm
Resolution:	1 lpm
Accuracy:	±1% or ±1 lpm (whichever is greater)
Bandwidth:	Defibrillator: 1~20 Hz
	Defibrillator: 105dB
	γ5 Mγ
	±8 mV
Input impedance:	200 γV
Input signal range:	5 types, ASY, VF, VT, PNC and
HR activation value	
Arrhythmia analysis:	

Breathing

Method:	Thoracic impedance method
RR measurement	Adult: 0~120 rpm
range:	Pediatric: 0 ~150 bpm
Accuracy:	7~150 rpm: ±2 rpm or ±2% (whichever is greater)
Apnea alarm:	0~6 rpm: not specified
	Adult: 10s~60s. Ped.: 10s~40s.
	±5 s
	Audible and visual alarm; alarm reviewable events

Method	Automatic oscillometric
Working mode:	Manual / Automatic / Continuous
Time interval:	Adjustable

Maximum measurement cycle	1/2/2.5/3/4/5/10/15/30/60/90/1 20/180/240/480/720 minutes
	Adu/Ped: 120 s
Unit of measurement:	mmHg/kPa selectable
Types of pressure:	Systolic, diastolic, mean
Systolic pressure range	Adult mode: 5.3~36 kPa
pressure:	(40 ~ 270 mmHg)
Diastolic pressure range	Pediatric mode: 5.3 ~ 26.7 kPa
	(40 ~ 200 mmHg)
	Adult mode: 1.3 ~ 28.7 kPa
	pressure: (10 ~ 215 mmHg)
Average range	Pediatric mode: 1.3~20 kPa
	(10 ~ 150 mmHg)
	Adult mode: 2.7 ~ 31.3 kPa
	pressure: (20 ~ 235 mmHg)
	Pediatric mode: 2.7 ~ 22 kPa
	(20 ~ 165 mmHg)

Overpressure protection:	Adult: 297 mmHg Pediatric: 240 mmHg Tolerance: ±3 mmHg
Accuracy:	Maximum mean deviation: ±
Resolution:	5 mmHgO (±0.667 Kp) Maximum standard deviation: ±
Alarm limit:	8 mmHg (±1.607 kPa) Same as the range of measurement
NIBP PR:	40 bpm ~ 240 bpm
Resolution:	1 lpm
Accuracy:	±3% or ±3 lpm, whichever is greater greater than

SpO2 Nellcor

Measuring range:	0 ~ 100 %
Resolution:	1%
Accuracy:	±2% (70~100%, adult/pediatric, without motion) 1~69% unspecified
Alarm range:	20 ~ 100 %
Public Relations Measurement	
Range:	20 ~ 300 bpm
Resolution:	1 lpm
Accuracy:	±3 lpm (20~250 lpm) Not specified (251~300 bpm)
Alarm range:	20 ~ 350 bpm

SpO2 Masimo

Measurement and alarm	
range	1 ~ 100%
Resolution:	1%
Accuracy:	±2% (70~100%, Ped/Adu, non-motion) ±3% (70~100%, no motion); 1~69% unspecified
Alarm range	1 ~ 100%
Public Relations Measurement	25 ~ 240 bpm
Range	
Resolution:	1 lpm
Accuracy:	±3% (no movement) ±5% (movement);
Alarm range:	20 ~ 350 bpm
PI Value: Resolution:	0.02 ~ 20% 0.01% (0.02% 9.99%) 0.1% (10.0% 20.0%)
Accuracy:	not specified Available

Start with SpO2

Measurement and alarm	0 ~ 100 %
range:	
Resolution:	1%
Accuracy:	±2% (70~100%, pedestrians and adults, without motion) 0~69% unspecified
Public Relations Measurement	
Range:	20 ~ 254 bpm
Resolution:	1 lpm
Accuracy:	±2 lpm
Alarm range:	20 ~ 350 bpm
PI value:	0.05 ~ 20%
Resolution:	0.01% (0.05% 9.99%) 0.1% (10.0% 20.0%)
Accuracy:	not specified Available

Temperature (Dual channel)

Measurement and alarm	
range:	0 ~ 50 °C
Temperature sensor:	Standard skin configuration Temperature sensor
Resolution:	0.1 °C
Accuracy:	±0.1 °C (excluding error of sensor)
Channel type:	T1, T2, TD (Temperature Difference)

MASIMO EtCO2 (sidestream)

Measuring range:	0~190 mmHg, 0~25% (a 760 mmHg)
Accuracy:	Standard environment 22 ± 5 , 1013 ± 40 kPa: 0~15%: ±0.2%+readingx 2% 15~25%: undefined All environment: ±0.3 kPa+readingx4%
Resolution:	1 mmHg or 0.1%
awRR range:	0 ~ 150 rpm
awRR Accuracy:	±1 rpm
Response time:	<3 seconds
Delay time:	<2 s
Respironics EtCO2 (Sidestream)	
Measuring range:	0~150 mmHg, 0 to 25% (a 760 mmHg)



Accuracy:

- ± 2 mmHg (0 – 40 mmHg)
- ± 5% of reading (41 – 70 mmHg)
- ± 8% of reading (71 –100 mmHg)
- ±10% of reading (101–150 (mmHg)

- Resolution: 1 mmHg
- awRR range 0 ~ 150 rpm
- awRR Accuracy: ±1 rpm
- Response time: 240 msec (10% to 90%)
- Delay time: <2 s

*Notice: Specifications subject to change without notice.

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