

S 6

The logo features the word "COMEN" in large, bold, white, 3D-style capital letters. The letters are set against a blue background that has a subtle gradient and a faint, repeating pattern of the word "COMEN" in a lighter shade. The letters appear to be resting on a curved, light blue surface that resembles a globe or a lens.

COMEN Share with the world

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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;

(Two new, completely Defibrillator mode: 420 times (360 J)

(battery charged) 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)

Glow: Manual from 1 to 100

Indicator:

Two alarm indicators

Power indicator

Battery indicator

Keep indicator

Error indicator

QRS beep and alarm sound

Operation key sound

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: Year

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 $\pm 10\%$ of setting,
whichever is greater, while 50 \bar{y}

impedance

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

is greater, while 25 \bar{y} , 75 \bar{y} , 100

\bar{y} , 125 \bar{y} , 150 \bar{y} , 175 \bar{y}

impedance

Patient impedance 20–250 \bar{y} (external defibrillation);

Range: 15250 \bar{y} (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

Cardioversion:

Energy transfer begins within

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:

$\pm 5\%$

Rhythm mode:

On demand or fixed

Stimulation frequency:

From 40 ppm to 170 ppm

Accuracy:

± 1 ppm or $\pm 1.5\%$ (whichever is greater)

Rhythm output:

0 mA to 200 mA

Accuracy:

$\pm 5\%$ or ± 5 mA, whichever is greater

greater than

Slow down:

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

Available

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 $\pm 5\%$

Accuracy:

Sweep speed:

6.25mm/s, 12.5mm/s, 25mm/s,

50 mm/s

Accuracy:

Less than $\pm 10\%$

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)	Heart rate	Adult: 15~300 bpm
Resolution:	1 lpm	Measurement and alarm range:	Pediatric: 15~350 bpm
Accuracy:	±1% or ±1 lpm (whichever is greater)	Resolution:	1 lpm
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)	Accuracy:	±1% or ±1 lpm (whichever is greater)
CMRR:	Monitoring: 105dB Diagnosis: 90dB Surgery: 105dB STEREO: >105dB	Bandwidth:	Defibrillator: 1~20 Hz
Input impedance:	5 M Ω	CMRR:	Defibrillator: 105dB
Input signal range:	±8 mV	Input impedance:	5 M Ω
FC activation threshold	200 μ V	Input signal range:	±8 mV
Lead Loss Detection current:	Measuring electrode: <0.1 μ V Drive electrode: <1 μ V	HR activation value	200 μ V
Pacemaker pulse suppression switch:	Manual selection when the The pacemaker is on	Arrhythmia analysis:	5 types, ASY, VF, VT, PNC and
Analog output:	Magnification: 1:1000; Accuracy: ±5% Bandwidth: 0.5 Hz 40 Hz Delay: 5ms	Breathing	
ST Detection:	-2.0 mV +2.0 mV	Method:	Thoracic impedance method
Resolution:	0.01 mV	RR measurement	Adult: 0~120 rpm
Accuracy:	-0.8 mV ~ +0.8 mV: ±0.02 mV or ±10%; Others: Not specified	range:	Pediatric: 0 ~150 bpm
System noise:	Less than 25 μ V	Accuracy:	7~150 rpm: ±2 rpm or ±2% (whichever is greater)
Calibration voltage	1 mV; Accuracy: ±5%	Apnea alarm:	0~6 rpm: not specified
Arrhythmia analysis:	26 types	Accuracy:	Adult: 10s~60s. Ped.: 10s~40s.
Pacemaker detection:	Detectable	Alarm:	±5 s
Defibrillation ECG			Audible and visual alarm; alarm reviewable events
Lead type:	Single-lead ECG	Time interval:	
		Method	Automatic oscillometric
		Working mode:	Manual / Automatic / Continuous
		Maximum measurement cycle	Adjustable 1/2/2.5/3/4/5/10/15/30/60/90/1 20/180/240/480/720 minutes
		Unit of measurement:	Adult/Ped: 120 s
		Types of pressure:	mmHg/kPa selectable
		Systolic pressure range	Systolic, diastolic, mean
		pressure:	Adult mode: 5.3~36 kPa (40 ~ 270 mmHg)
		Diastolic pressure range	Pediatric mode: 5.3 ~ 26.7 kPa (40 ~ 200 mmHg)
		pressure:	Adult mode: 1.3 ~ 28.7 kPa (10 ~ 215 mmHg)
		Average range	Pediatric mode: 1.3~20 kPa (10 ~ 150 mmHg)
		pressure:	Adult mode: 2.7 ~ 31.3 kPa (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: \pm
Resolution:	5 mmHgO (± 0.667 Kp) Maximum standard deviation: \pm
Alarm limit:	8 mmHg (± 1.607 kPa) Same as the range of measurement
NIBP PR:	40 bpm ~ 240 bpm
Resolution:	1 lpm
Accuracy:	$\pm 3\%$ or ± 3 lpm, whichever is greater greater than

SpO2 Nellcor

Measuring range:	0 ~ 100 %
Resolution:	1%
Accuracy:	$\pm 2\%$ (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:	$\pm 2\%$ (70~100%, Ped/Adu, non-motion) $\pm 3\%$ (70~100%, no motion); 1~69% unspecified
Alarm range:	1 ~ 100%
Public Relations Measurement Range:	25 ~ 240 bpm
Resolution:	1 lpm
Accuracy:	$\pm 3\%$ (no movement) $\pm 5\%$ (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 range:	0 ~ 100 %
Resolution:	1%
Accuracy:	$\pm 2\%$ (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 \pm 40 kPa: 0~15%: $\pm 0.2\% + \text{reading} \times 2\%$ 15~25%: undefined All environment: ± 0.3 kPa+reading $\times 4\%$
Resolution:	1 mmHg or 0.1%
awRR range:	0 ~ 150 rpm
awRR Accuracy:	± 1 rpm
Response time:	<3 seconds

Respironics EtCO2 (Sidestream)

Measuring range:	0~150 mmHg, 0 to 25% (a 760 mmHg)
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Accuracy:

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

(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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