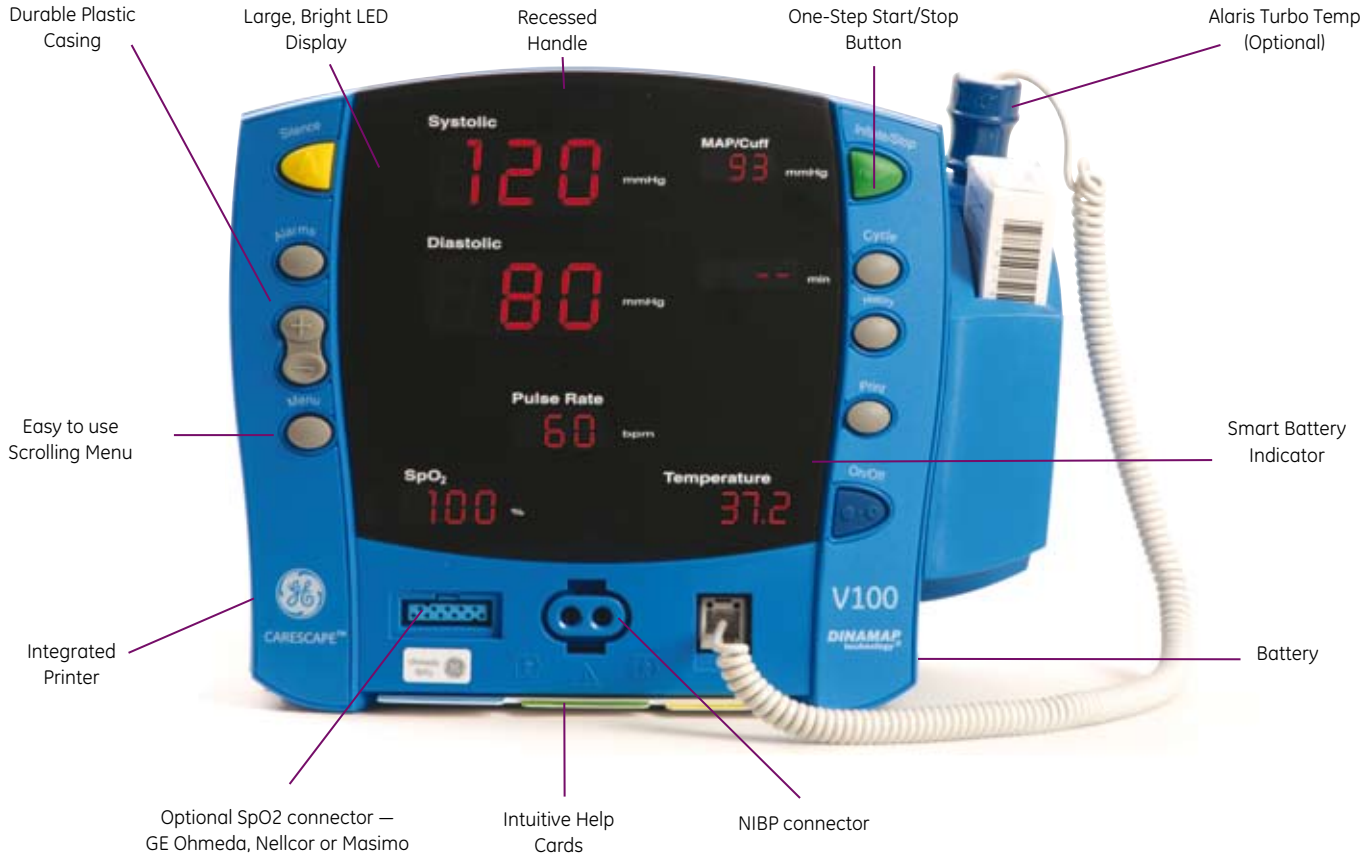
GE Healthcare

CARESCAPE V100

Vital signs monitor

In the general medical/surgical unit, you periodically check patients' vital signs to monitor their status before and after treatment. A quick, reliable, easy-to-use vital signs monitor is essential in helping you care for many patients with efficiency.

The CARESCAPE™ V100 monitor can go with you from one patient to the next, enabling you to capture vital signs on all your patients using a single, mobile vital signs monitor. With speed, accuracy and connectivity, the CARESCAPE V100 monitor helps you manage Clinical Information Logistics™ by collecting the right information at the point of care, and presenting it wherever it is needed. So you can make fast, quality care decisions informed by relevant, current clinical intelligence.



CARESCAPE V100 Specifications

Mechanical Dimensions

Height	7.7 in (19.5 cm)
Width	8.6 in (21.9 cm) without temperature 10.0 in (25.4 cm) with temperature
Depth	5.3 in (13.5 cm)
Weight	5.4 lb (2.4 kg) including battery
Mountings	Self-supporting on rubber feet or pole mounted
Portability	Carried by recessed handle

Power Requirements

Power converter universal P/N	2018859-001
Protection against electrical shock	Class II
AC input Voltage	100 to 250VAC, 12VA
DC output Voltage	12VDC at 1A
	The AC mains power adapter contains a nonresettable and nonreplaceable fuse.

Monitor

Protection against electrical shock	Internally powered or Class II when powered from specified external power supply.
DC input voltage	12 VDC, supplied from a source conforming to IEC 60601-1.

Fuses: The monitor contains three fuses. The fuses are mounted within the monitor. The fuses protect the low voltage DC input, the battery, and the remote alarm output. The +5 V output on the host port connector is regulated by internal supply.

Battery	Refer to “Battery” Section

Environmental

Operating Temperature: + 5°C to + 40°C (+ 41°F to + 104°F)
Operating Atmospheric Pressure: 700 hPa to 1060 hPa

Storage/Transportation

Storage Temperature	– 20°C to + 50°C (– 4°F to + 122°F)
Atmospheric Pressure	500 hPa to 1060 hPa
Humidity Range	5% to 95% noncondensing

Radio Frequency: Complies with IEC Publication 60601-1-2 (2001). Medical Electrical Equipment, Electromagnetic Compatibility Requirements and Tests and CISPR 11 (Group 1, Class B) for radiated and conducted emissions

Alaris Turbo-Temp Specs

Scale °Fahrenheit (F); °Celsius (C)

Range

Predictive mode	Max: 41.1°C; 106.0°F Min: 35.6°C; 96.0°F
Monitor mode	Max: 41.1°C; 106.0°F Min: 26.7°C; 80.0°F
Monitor mode accuracy	±0.1°C; ±0.2°F

(when tested in a calibrated liquid bath; meets ASTM E1112, Table 1, in range specified)

Determination time approximately 7 seconds, typical

NOTE: Use only IVAC probes and P850A probe covers. The size, shape, and thermal characteristics of the probe covers can affect the performance of the instrument. Inaccurate readings or retention problems may occur unless IVAC® probes and probe covers are used.

Printer Spec

Printer type: Thermal dot array

Resolution: 384 dots/inch horizontal

Paper type: The paper roll used by the printer must be compatible with GE PN 770137.

Languages printed: English, German, French, Italian, Spanish, Portuguese (Brazil and Portugal), Hungarian, Polish, Czech, Finnish, Swedish, Danish, Dutch, Norwegian, and Slovak

Battery Specs

Capacity: 6V; 3.3 Ahr sealed lead acid battery protected by internal auto-resetting fuse and thermal protection

Battery Life:
8.1 hours with a usage scenario of: NIBP determinations every 15 minutes with SpO2 and temperature active.

11.5 hours non-SpO2 versions with a usage scenario of: NIBP determinations every 15 minutes with temperature active.

Charge time: Approximately 5 hours from full discharge when the monitor is off. Approximately 8 hours when the monitor on.

Nellcor Oxi-Max Specifications

Measurement Range

SpO2	1 to 100%
Pulse Rate	20 to 250 bpm
Perfusion Range	0.03 to 20%

Accuracy

Saturation

Adult*	70 to 100% ±2 digits
Neonate*	70 to 100% ±3 digits
Low Perfusion**	70 to 100% ±2 digits

Pulse Rate

Adult and neonate	40 to 250 bpm ±3 digits
Low Perfusion**	40 to 250 bpm ±3 digits

*Adult specifications are shown for OxiMax® MAX-A and MAX-N sensors with the N-600. Saturation accuracy will vary by sensor type. This variation equals plus or minus one standard deviation. Plus or minus one standard deviation encompasses 68% of the population.

**Applicability: OxiMax MAX-A, MAX-AL, MAX-P, MAX-I, and MAX-N sensors.

Oxi-Max Sensor Accuracy

NOTE: All Nellcor® OxiMax sensors must be used with the Nellcor cable; the DOC-10 cable. RS-10 and Oxisensor® II sensors are not compatible with the V100 Vital Signs Monitor.

Sensor Model	SpO2 Range 70% to 100%
OxiMax	
MAX-A, MAX-AL	±2 digits
MAX-N* (adult)	±2 digits
MAX-N** (neonate)	±3 digits
MAX-P	±2 digits
MAX-I	±2 digits
MAX-FAST	±2 digits
SC-A (adult)	±2 digits
SC-PR (neonate)	±3 digits
SC-NEO	±3 digits
MAX-R†	±3.5 digits
OxiCliq®	
OxiCliq A	±2.5 digits
OxiCliq P	±2.5 digits
OxiCliq N* (adult)	±2.5 digits
OxiCliq N** (neonate)	±3.5 digits
OxiCliq I	±2.5 digits
Reusable Sensor Models	
D-YS* (infant to adult)	±3 digits
D-YS** (neonate)	±4 digits
D-YS & D-YSE	±3.5 digits
D-YS & D-YSPD	±3.5 digits
DS-100A	±3 digits
OXI-A/N* (adult)	±3 digits
OXI-A/N** (neonate)	±4 digits
OXI-P/I	±3 digits
Sensor Light Source	
Wavelength‡	Infrared: 890 nm (nominal) Red 660 nm (nominal)
Power Dissipation	Infrared: 22.5mW (max) Red: 30 mW (max)

* The MAX-N, D-YS, OXI-A/N, and OxiCliq N were tested on patients >40 kg.

** Neonatal Sensor Accuracy: When sensors are used on neonatal subjects as recommended, the specified accuracy range is increased by ±1 digit, as compared to adult usage, to account for the theoretical effect on oximeter measurements of fetal hemoglobin in neonatal blood. For example, MAX-N accuracy on neonates is ±3 digits, rather than ±2 digits.

† The accuracy specification has been determined between saturations of 80%-100%.

‡ Information about wavelength range can be especially useful to clinicians.

Factory Default Settings

SpO2 HIGH Alarm Limit	100%
SpO2 LOW Alarm Limit	90%
Response mode (for Mode 1: Normal Response)	1
SatSeconds™	0

Masimo SET Specifications

Measurement Range

SpO2	1 to 100%
Pulse Rate	25 to 240 bpm
Perfusion Range	0.02 to 20%

Accuracy and Motion Tolerance

Saturation

Without Motion adult/pediatric*	70 to 100% ±2 digits
Without Motion neonate*	70 to 100% ±3 digits
With Motion adult/ped/neonate**†	70 to 100% ±3 digits
Low Perfusion‡	70 to 100% ±2 digits 0 to 69% unspecified

Pulse Rate

Without Motion	25 to 240 bpm ±3 digits
With Motion	normal physiologic range 25 to 240 bpm ±5 digits

* The Masimo SET® SpO2 parameter with LNOP-Adt sensors has been validated for no motion accuracy in human blood studies on healthy adult volunteers in induced hypoxia studies in the range of 70-100% SpO2 against a laboratory CO-oximeter and ECG monitor. This variation equals plus or minus one standard deviation. Plus or minus one standard deviation encompasses 68% of the population.

** The Masimo SET SpO2 parameter eith LNOP-Adt sensors has been validated for motion accuracy in human blood studies on healthy adult volunteers in induced hypoxia studies while performing rubbing and tapping motions at 2 to 4 Hz at an amplitude of 1 to 2 cm and a nonrepetitive motion between 1 to 5 HZ at an amplitude of 2 to 3 cm in induced hypoxia studies in the range of 70-100% SpO2 against a laboratory CO-oximeter and ECG monitor. This variation equals plus or minus one standard deviation. Plus or minus one standard deviation encompasses 68% of the population.

† The Masimo SET SpO2 parameter with LNOP-Neo Pt sensors has been validated for neonatal motion accuracy in human blood studies on neonates while moving the neonate's foot at 2 to 4 cm against a laboratory CO-oximeter and ECG monitor. This variation equals plus or minus one standard deviation. Plus or minus one standard deviation encompasses 68% of the population.

‡ The Masimo SET SpO2 parameter has been validated for low perfusion accuracy in bench top testing against a Biotek index 2 stimulator and Masimo's simulator with signal strengths of greater than 0.02% and a % transmission of greater than 5% for saturations ranging from 70 to 100%. This variation equals plus or minus one standard deviation. Plus or minus one standard deviation encompasses 68% of the population.

Low Perfusion Performance

0.02% Pulse amplitude	Saturation (% SpO2) ± 2 digits
% transmission >5%	Pulse rate ± 3 digits

Interfering substances: Carboxyhemoglobin may erroneously increase readings. The level of increase is approximately equal to the amount of carboxyhemoglobin present. Dyes, or any substance containing dyes, that change usual arterial pigmentation may cause erroneous readings.

Masimo Sensor Accuracy

Sensor Model	Sensor model SpO2 range 70% to 100%
LNOP	
LNOP ADT	± 2 digits without motion
LNOP NEO	± 3 digits without motion
LNOP NEO-L	Foot ± 3 digits without motion Finger ± 2 digits without motion
LNOP NEO PT-L	± 3 digits without motion
LNOP Adtx	± 2 digits without motion
LNOP Pdtx	± 2 digits without motion
LNOP DCI	± 2 digits without motion
LNOP DCIP	± 2 digits without motion
LNOP Hi Fi-Neo/adult	Foot ± 3 digits without motion Finger ± 2 digits without motion
LNOP Hi Fi-Infant/Ped	± 2 digits
LNOP Blue Infant Thumb/Toe*	± 3 digits (for 80-100) without motion ± 4 digits (for 60-80) without motion ± 3.3 digits (for 70-100) without motion
LNOP YI Multi-Site	Foot/hand ± 3 digits without motion Finger/toe ± 2 digits without motion
LNOP DC-195	± 2 digits without motion
LNOP TC-I	± 3.5 digits without motion
LNCS	
LNCS TCI	± 3.5 digits without motion
LNCS DC-I	± 2 digits without motion
LNCS DC-IP	± 2 digits without motion
LNCS Adult Adtx	± 2 digits without motion
LNCS Ped Pdtx	± 2 digits without motion
LNCS Infant-L	± 2 digits without motion
LNCS Neo PT-L	± 3 digits without motion
Resolution	
Saturation (% SpO2)	1%
Pulse rate (bpm)	1
Sensor Light Source	
Wavelength**	Infrared: 905 nm (nominal) Red: 660 nm (nominal)
Power Dissipation	Infrared: 27.5 mW (max) Red: 30 mW (max)

* Masimo SET Technology with LNOP Blue sensors have been validated for no motion accuracy in human blood studies on neonatal, infant and pediatric patients with congenital, cyanotic cardiac lesions in the range of 60% to 100% SpO2 against a laboratory CO-oximeter. This variation equals plus or minus one standard deviation, which encompasses 68% of the population.

** Information about wavelength range can be especially useful to clinicians.

NIBP Specifications

Cuff Pressure Range (Normal operating range)
0 to 290 mmHg (adult/ped)
0 to 145 mmHg (neonate)

Blood Pressure Accuracy (SuperSTAT™ NIBP algorithm)

Blood Pressure Accuracy (Classic and Auscultatory)
Meets ANSI/AAMI Standard SP-10:1992
(mean error ≤5 mmHg, standard deviation ≤8 mmHg)

Meets ANSI/AAMI Standard SP-10:2002
(mean error ≤5 mmHg, standard deviation ≤8 mmHg)

Maximum Determination
120 s (adult/ped)
85 s (neonate)

Overpressure Cutoff 300 to 330 mmHg (adult/ped)
150 to 165 mmHg (neonate)

Blood Pressure Range (SuperSTAT NIBP Algorithm)

Systolic	30 to 290 mmHg (adult/ped) 30 to 140 mmHg (neonate)
MAP	20 to 260 mmHg (adult/ped) 20 to 125 mmHg (neonate)
Diastolic	10 to 220 mmHg (adult/ped) 10 to 110 mmHg (neonate)

Blood Pressure Range (Classic and Auscultatory)

Systolic	30 to 245 mmHg (adult/ped) 40 to 140 mmHg (neonate)
MAP	15 to 215 mmHg (adult/ped) 30 to 115 mmHg (neonate)
Distolic	10 to 195 mmHg (adult/ped) 20 to 100 mmHg (neonate)

Pulse Rate Range (SuperSTAT NIBP algorithm)
30 to 240 beats/min (adult/ped)
30 to 240 beats/min (neonate)

Pulse Rate Range (Classic and Auscultatory)
30 to 200 beats/min (adult/ped)
30 to 220 beats/min (neonate)

Pulse Rate Accuracy ± 3.5% or 3 bpm

NOTE: All CARESCAPE V100 monitor regulatory and accuracy studies have been performed using CRITIKON® Blood Pressure cuffs. The size, shape, and bladder characteristics can affect the performance of the monitor.

GE Ohmeda® SpO2 Specifications

Measurement Range

SpO2	1 to 100%
Pulse Rate	30 to 250 bpm
Perfusion Range	0.03 to 20%

Accuracy

Saturation

Adult	70 to 100% ±2 digits whichever is greater, (without motion)
Neonate*	70 to 100% ±3 digits (without motion)
Adult/Neonate**	70 to 100% ±3 digits (during clinical motion)
Low Perfusion	70 to 100% ±2 digits (during clinical low perfusion)

Pulse Rate

Adult/Neonate	30 to 250 bpm: ± 2 digits or ± 2%, whichever is greater, (without motion) 30 to 250 bpm: ± 5 digits (during motion)
Low Perfusion	30 to 250 bpm ±3 digits

*SpO2 measurement accuracy is based on deep hypoxia studies using OxyTip+® sensors on healthy adult volunteer subjects. Arterial blood samples were analyzed simultaneously on multiple CO-oximeters. This variation equals plus or minus one standard deviation. Plus or minus one standard deviation encompasses 68% of the population.

**Applicability: OXY-AF and OXY-AP sensors.

NOTE: Accuracy may vary for some sensors; always check the instructions for the sensor.

GE Ohmeda Sensor Accuracy	
Sensor Model	SpO2 Range 70% to 100%
OxiTip+	
OXY-F-UN	±2 digits without motion
OXY-W-UN	±2 digits without motion
OXY-E-UN	±2 digits without motion
OXY-SE	±2 digits without motion
OXY-AP	±2 digits without motion
OXY-AF	±2 digits without motion
OXY-F2-GE	±2 digits without motion
OXY-F4-GE	±2 digits without motion
OXY-E2-GE	±2 digits without motion
OXY-E4-GE	±2 digits without motion
Sensor light source	
Wavelength*	Infrared: 930 to 950 nm (nominal) Red 650 to 670 nm (nominal)
Average power	< 1 mW
* Information about wavelength range can be especially useful to clinicians.	

Healthcare Re-imagined

GE is dedicated to helping you transform healthcare delivery by driving critical breakthroughs in biology and technology. Our expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, and biopharmaceutical manufacturing technologies is enabling healthcare professionals around the world to discover new ways to predict, diagnose and treat disease earlier. We call this model of care “Early Health.” The goal: to help clinicians detect disease earlier, access more information and intervene earlier with more targeted treatments, so they can help their patients live their lives to the fullest. Re-think, Re-discover, Re-invent, Re-imagine.

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GE imagination at work

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