

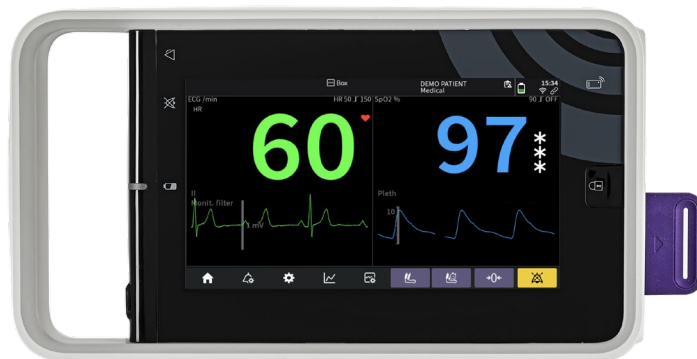
Carescape ONE Monitoring System

Match your excellence

Carescape ONE™ is a FlexAcuity™ monitoring system that defies the conventional thinking of an intra-hospital transport solution. Durable, lightweight, and intelligently designed, the Carescape ONE monitor and micro-modules can dynamically flex across care areas and patient acuities without the need for additional hardware or software configurations.

Carescape ONE monitor

- With Carescape host monitors as an acquisition device, coupled with interchangeable medical-grade USB connectors for micro-module, supports different patient environments and acuity levels.
- Modular intra-hospital transport monitor with different viewing options, including classic and large number views, supporting patient care.
- Customizable user interface and auto-rotating screen helps reduce workflow challenges.
- Wi-Fi intra-transport feature ensures patient data continuity and visibility at the Carescape Central Station.
- Via the Carescape host monitor, integrates with the Carescape Gateway enabling gapless communications to EMR systems, Carescape Central Station and remote devices, ensuring up-to-date patient records.
- Passive RFID functionality enables easier location of devices and reading asset information.
- Secure Boot technology helps protect patient data and device integrity and helps ensure devices are safe and operational.



- Application layer data encryption in transit on air and in-wire helps ensure communications between Carescape host monitor and the Carescape ONE v4 monitor is encrypted.
- Provides a standardized yet fully flexible platform with one device and one software system to support cost effective fleet management.

Micro-modules

- Offers a comprehensive set of flexible measurements to meet the various needs for patients of various acuities.
- Minimized in size, the micro-module plug-and-play experience enables streamlined workflow.
- Utilizes GE HealthCare's clinical algorithms to aid in accurate diagnosis including single-vector respiration rate algorithm TruSignal RRsv™, 12SL™ ECG analysis, EK-Pro four ECG lead simultaneous arrhythmia analysis with ST detection, DINAMAP™ SuperSTAT non-invasive blood pressure, TruSignal™ SpO₂ along with partner parameters including Masimo rainbow SET® SpO₂, SpHb® & Pi/PVi®, Nellcor™ Oximax™ SpO₂, INVOS™ Regional Oximetry (including for pediatric and infant use), and Microstream™ Capnography from Medtronic.

Technical specifications

Carescape ONE monitor



Display

Display characteristics

Size	7 inch diagonal
Type	Active matrix color TFT LCD
Resolution	800x480
Layout and colors	User-configurable
Technology	Projected capacitive touch screen

Touch screen with direct function keys and selections and adjustments in menus.

Rotation	Display image rotates when Carescape ONE is rotated 180 degrees.
Analog out / Defibrillator synchronization connector	Invasive pressure and ECG analog outputs. Defibrillator synchronization input and output signals.

Waveforms and numeric fields

Waveform	Up to 4 simultaneously
Numeric	Classic view: Up to 16 Box view: Up to 6

Power specifications

Power requirements	Battery or DC input from Carescape Dock F0
Output	15 VDC nominal, 60 W (Max)
Cooling	Natural convection

Battery

Type	One removable Lithium-Ion battery
Voltage	10.8 Volt (nominal)
Capacity	3.8 Amp hour minimum (new)
Charge time	4 hours (typical)
Run time	5 hours ¹ (new, fully charged)
Battery life	300 cycles to 60% capacity
Battery status	LED indicators on the battery

Environmental specifications

Operating conditions

Temperature	0°C to 40°C (32°F to 104°F)
Humidity	10% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 4000 m (616 hPa)

Storage conditions

Temperature	-30°C to 70°C (-22°F to 158°F)
Humidity	10% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 5573 m (500 hPa)

Degree of enclosure protection against solid objects and water

IP44

Physical specifications

Dimensions (H x W x D)	15.5 cm x 27.0 cm x 6.5 cm (6.1 in x 10.6 in x 2.6 in)
Weight	<1.90 kg (4.20 lbs) with battery

Sustainability specifications

Percentage of Green energy for production site	100% when country of origin is Finland
Manufacturing site green energy	ISO14001
EU RoHS compliant	Yes
Device estimated life-time with wear and tear	7 years
Features to support Sustainability	Standby mode
Percentage of spare parts	100%
Product material composition (% per product weight)	11% metals (100% recyclable) 35% plastics (100% recyclable) 54% electronics and circuit boards
Packing materials (% per product weight)	68% cardboard (100% recyclable) 25% paper (100% recyclable) 5.5% plastics (100% recyclable) 1.5% other (silica gel dessicant)

¹ Fully charged with 12 lead ECG, TruSignal SpO₂, 2 X Temp, 2 X InvP, Auto NIBP at 15 min interval, maximum volume and display at 70% brightness.

Carescape Dock F0



Environmental specifications

Operating conditions

Temperature	0°C to 40°C (32°F to 104°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	616 hPa to 1075 hPa (4000 m to -500 m)

Storage conditions

Temperature	-30°C to 70°C (-22°F to 158°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	500 hPa to 1075 hPa (5573 m to -500 m)
Degree of enclosure protection against solid objects and water	IP42

Physical specifications

Carescape Dock F0

Size (H x W x D)	9.0 cm x 21.0 cm x 7.5 cm (3.5 in x 8.3 in x 3.0 in)
Weight	< 0.5 kg (1.0 lb)

Carescape Frame F2



Carescape ONE monitor can be connected to Frame F2 when used with Carescape Canvas monitors.

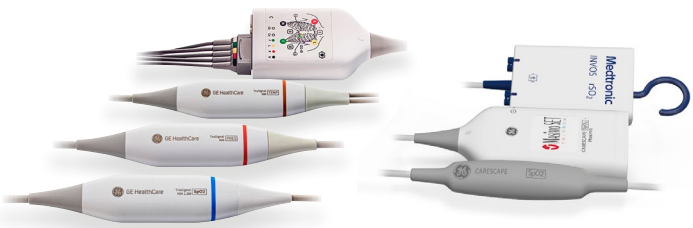
Physical specifications

Carescape Frame F2 frame without modules and cables

Size (H x W x D)	16.0 cm x 28.4 cm x 16.5 cm (6.3 in x 11.2 in x 6.5 in)
Weight	< 2.4 kg (5.29 lb)

For more information on Frame F2, please refer to the Carescape Canvas user manuals.

Micro-modules



The following micro-modules are currently available with the Carescape ONE monitor:

- TruSignal ECG
- TruSignal SpO₂
- Carescape SpO₂ - Nellcor
- Carescape SpO₂ - Masimo
- TruSignal Pressure
- TruSignal Temperature
- Carescape CO₂ - Microstream
- INVOS rSO₂
- Built-in NIBP, no additional micro-module required

ECG

TruSignal ECG

ECG lead system

Standard leads available	I, II, III, aVR, aVL, aVF, V1–V6
Supported lead sets	3, 5, 6, and 10-leadwire 10-leadwire setup builds on the 6-leadwire by adding four additional wires for leads V2, V3, V4, and V6
Lead fail detection	Identifies disconnected electrodes and switches to those intact
Lead fail sensing current	Active electrode: 12.8 nA typical (each) Neutral electrode: <150 nA maximum

Signal acquisition

Input impedance	>2.5 M Ω from 0.67 Hz to 40 Hz
Differential input DC offset voltage	± 0.4 V
Common Mode Rejection Ratio (CMRR)	≥ 90 dB at 50/60 Hz
Sampling rate	500 samples/sec
Sample resolution	4.88 μ V (referenced to input)
Noise	<30 μ V peak-to-peak (referred to input for a period of 10 seconds)

ECG waveform display specification and options

Signal gain accuracy	$\pm 5\%$
Gain settings	0.5x = 5 mm/mV 1x = 10 mm/mV 2x = 20 mm/mV 4x = 40 mm/mV
Bandwidth modes	Diagnostic: 0.05–150 Hz Monitoring: powerline frequency dependant 0.05–32 Hz (50 Hz) 0.05–40 Hz (60 Hz) Moderate: 0.05–23 Hz Maximum: 4.5–27 Hz

Heart rate monitoring

Range	20–300 bpm
Accuracy	$\pm 1\%$ or ± 1 bpm, whichever is greater
Resolution	1 bpm
Heart rate sensitivity	≥ 0.5 mV peak

Update interval	< 2 seconds
Response time	<10 seconds for step changes from 80 to 120 bpm increase and a step decrease from 80 to 40 bpm
Averaging	12-second median (extended to 32 seconds maximum based on signal noise with ICU, ED, OR, or PACU software package)
Heart rate calculation operates with irregular rhythms IEC 606012-27 Clause 201.7.9.2.9.101 b) 4), according to Figure 201.101, as follows:	Maximum tall T-wave rejection capability: < 4.5 mV with a 1 mV QRS test signal Ventricular bigeminy 80 bpm Slow alternating ventricular bigeminy 59 bpm Rapid alternating ventricular bigeminy 126 bpm Bidirectional systoles 110 bpm

QRS detection

QRS amplitude range	± 0.5 to ± 5 mV
QRS width range	40–120 ms (Q to S)
PVC rate range	0–300 PVCs/min
PVC resolution	1 PVC/min

ST segment analysis

Description	ST segment deviation is measured for all acquired leads
Display	Lead with the most deviation
Deviation range	-20.0 to +20.0 mm
Resolution	0.1 mm
Accuracy	± 0.4 mm or 20% whichever is greater
Averaging	16 beats

Pacemaker and defibrillator compatibility

Pacing pulse detection and rejection	Normal: ± 2.4 mV to ± 700 mV amplitude, duration 0.1–2 ms Sensitive: ± 1.2 mV to ± 700 mV amplitude, duration 0.1–2 ms Overshoot time constant: 4 ms to 8ms; measured using a maximum amplitude of 2 mV according to Method A under sub-bullet k) of IEC 60601-2-27 Clause 201.12.1.101.13.
Analog pacing pulse marker pulse	5 V amplitude, 2 ms duration Summed with the signal driven to Analog Output
Analog defibrillator sync pulse	10 V nominal amplitude, 10 ms ± 0.5 ms duration, delay <35 ms
Defibrillation protection	5000V, 360 J

Analog output

ECG signal gain	1 V/mV $\pm 10\%$
ECG signal bandwidth	Diagnostic: 0.05–125 Hz Monitoring: 0.05–40 Hz Moderate and Maximum: 0.05–25 Hz
ECG output delay	<35 ms

Alarms

Heart rate limit alarms	User selectable upper and lower limits
Heart rate limit alarms	20-300 bpm
ST segment limit alarms	User selectable upper and lower limits for individual lead
PVC and SVC limit alarms	User selectable upper limit
Arrhythmia	Full, lethal, or none

Power specifications

Consumption	625 mW maximum
Input voltage	5 VDC ± 0.25 VDC
Input current	125 mA maximum

Environmental specifications

Operating conditions

Temperature	0°C to 35°C (32°F to 95°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 4000 m (616 hPa)

Storage conditions

Temperature	-30°C to 70°C (-22°F to 158°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 5573 m (500 hPa)
Degree of enclosure protection against solid objects and water	IP47

Physical specifications

Length	3.6 m or 1.8 m (12.1 or 6.2 ft)
Weight	<0.57 kg (1.26 lb), with long 10 leadwire set

Impedance Respiration

Measurement and display options

Leads available	I, II, or RL-LL
Sweep speeds	0.625, 6.25, 12.5, 25, 50 mm/s

Measurement specifications

Display range	Adult/pediatric: 0 to 120 breaths/minute Neonate: 0 to 200 breaths/minute
Resolution	1 breath/minute
Measurement accuracy ¹	4 to 120 breaths per minute: ± 1 breath per minute 121-200 breaths per minute: ± 3 breaths per minute

Signal acquisition

Carrier frequency	52.3 kHz
Sensing current	<100 μ A RMS
Input impedance range	100–1500 Ω @ 52.3 kHz

Alarms

Alarm limits	User selectable upper and lower limits
Alarm range	Alarm range: 4-120 breaths/minute
No breath alarm range	10-40 seconds

¹ Clinical validation: 2 breaths/minute average mean absolute error over all 80 patients (admitted ICU/WARD patients ages 3 days to 81 years representing RR range of 8-108 breaths/minute).

Simulator bench testing: Adult/Pediatric/Neonate: 3–120 brpm, ± 1 breath/minute
Neonate: 121–200 breaths/minute, ± 3 breaths/minute.

Pulse Oximetry

TruSignal SpO₂

SpO₂ displayed saturation values

TruSignal pulse oximetry is calibrated to display functional saturation.

Alarms

Alarm limits	User selectable upper and lower limits for SpO ₂
Alarm limit range	Upper limit 32 - 100% Lower limit 30 - 100%
Alarm limit increment	1 %
Pulse rate alarm limits	User selectable upper and lower limits for SpO ₂ pulse rate
Pulse rate alarm limit increment	1 beat/minute

Performance specifications

Display resolution	1 digit (% of SpO ₂)
Peripheral pulse rate resolution	1 bpm
Display update period	< 30s
Sweep speed options	6.25, 12.5, 25, and 50 mm/s
Waveform scale options	AUTO, 50, 20, 10, 5, 2
Parameters monitored	Arterial oxygen saturation (SpO ₂) and pulse rate
Number of SpO ₂ measurements	1
Range	SpO ₂ : 0 to 100% Pulse rate: 30 to 300 bpm
Accuracy	
Without motion	SpO ₂ (70% to 100%): ±2 Adult/ Pediatric, ±3 Neonatal SpO ₂ (<70%): Unspecified
With motion	SpO ₂ (70% to 100%): ±3 Adult/Pediatric/Neonatal SpO ₂ (<70%): Unspecified
Low perfusion	SpO ₂ (70% to 100%): ±2 Adult/ Pediatric, ±3 Neonatal SpO ₂ (< 70%): Unspecified

Peripheral pulse rate

Low perfusion range	0.03 - 20%
Accuracy	
Without motion	30 to 250 bpm: ±2 Adult/ Pediatric/Neonatal
With motion	30 to 250 bpm: ±5 Adult/ Pediatric/Neonatal
Low perfusion	30 to 250 bpm: ±3 Adult/ Pediatric/Neonatal

Power specification

Consumption	375 mW maximum
Input voltage	5 VDC ±0.25 VDC
Input current	75 mA maximum

Environmental specifications

Operating conditions

Temperature	0°C to 40°C (32°F to 104°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 4000 m (616 hPa)

Storage conditions

Temperature	-30°C to 70°C (-22°F to 158°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 5573 m (500 hPa)
Degree of enclosure protection against solid objects and water	IP47

Physical specifications

Length	3.0 m or 1.8 m (9.8 or 5.9 ft)
Weight	<0.17 kg (0.38 lb)

Carescape SpO₂ - Nellcor

SpO₂ displayed saturation values

Nellcor OxiMax pulse oximetry is calibrated to display functional saturation.

Alarms

Alarm limits	User selectable upper and lower limits for SpO ₂
Alarm limit range	Upper limit 32 - 100% Lower limit 30 - 100%
Alarm limit increment	1 %
Pulse rate alarm limits	User selectable upper and lower limits for SpO ₂ pulse rate
Pulse rate alarm limit increment	1 beat/minute

Performance specifications

Display resolution	1 digit (% of SpO ₂)
Peripheral pulse rate resolution	1 bpm
Display update period	< 30s
Sweep speed options	6.25, 12.5, 25, and 50 mm/s
Waveform scale options	1x, 2x, 4x, and 8x
Parameters monitored	Arterial oxygen saturation (SpO ₂) and pulse rate
Range	SpO ₂ : 1 to 100% Pulse rate: 20 to 250 bpm
Accuracy ¹	
Without motion	SpO ₂ (70 to 100%): ±2 Adult/Neonatal SpO ₂ (60 to 80%): ±3 Adult/Neonatal SpO ₂ (< 60%): Unspecified
With motion	SpO ₂ (70 to 100%): ±3 Adult/Neonatal SpO ₂ (< 70%): Unspecified
Low perfusion	SpO ₂ (70 to 100%): ±2 SpO ₂ (< 70%): Unspecified

Peripheral pulse rate

Low perfusion range	0.03 - 20%
Accuracy	
Without motion	20 to 250 bpm: ±3 Adult/Neonatal
With motion	20 to 250 bpm: ±5 Adult/Neonatal
Low perfusion	20 to 250 bpm: ±3 Adult/Neonatal

Power specification

Consumption	350 mW maximum
Input voltage	5 VDC ±0.25 VDC
Input current	70 mA maximum

Environmental specifications

Operating conditions

Temperature	0°C to 35°C (32°F to 95°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 4000 m (616 hPa)

Storage conditions

Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 5572 m (500 hPa)
Degree of enclosure protection against solid objects and water	IP47

Physical specifications

Length	3.0 m or 1.8 m (9.8 or 5.9 ft)
Weight	<0.24 kg (0.53 lbs)

¹ Saturation accuracy varies by sensor type . Contact Medtronic for sensor accuracy information.

Carescape SpO₂ - Masimo

SpO₂ displayed saturation values

Masimo rainbow SET pulse oximetry is calibrated to display functional saturation.

Alarms

Alarm limits	User selectable upper and lower limits for SpO ₂
Alarm limit range	Upper limit 32 - 100% Lower limit 30 - 100%
Alarm limit increment	1 %
Pulse rate alarm limits	User selectable upper and lower limits for SpO ₂ pulse rate
Pulse rate alarm limit increment	1 beat/minute

Performance specifications

Display resolution	1 digit (% of SpO ₂)
Peripheral pulse rate resolution	1 bpm
Display update period	Less than 30s
Sweep speed options	6.25, 12.5, 25, and 50 mm/s
Waveform scale options	1x, 2x, 4x, and 8x
Parameters monitored	Arterial oxygen saturation (SpO ₂) and pulse rate
Range	SpO ₂ : 0 to 100% Pulse Rate: 25 to 240 bpm
Accuracy	
Without motion	SpO ₂ (70 to 100%): ±2% Adult, Pediatric, Infant, ±3% Neonate SpO ₂ (< 70%): Unspecified
With motion	SpO ₂ (70 to 100%): ±3% All patient populations SpO ₂ (< 70%): Unspecified
Low perfusion	SpO ₂ (70 to 100%): ±2% All patient populations SpO ₂ (< 70%): Unspecified

Peripheral pulse rate

Low perfusion range	0.02 - 20%
Accuracy	
Without motion	25 to 240 bpm: ±3 Adult/ Pediatric/Infant/Neonate
With motion	25 to 240 bpm: ±5 Adult/ Pediatric/Infant/Neonate
Low perfusion	25 to 240 bpm: ±3 Adult/ Pediatric/Infant/Neonate

Pi, PVi and SpHb values

Ranges

Perfusion Index (Pi)	0.02 to 20%
Pleth Variability Index (PVi)	0 to 100%
SpHb	0 g/l to 250 g/l 0.0 g/dl to 25.0 g/dl 0.0 mmol/l to 16.0 mmol/l

SpHb accuracy

Measurement range	0 - 25 g/dl
Accuracy	Refer to the sensor instructions for use

Power specification

Consumption	2.15 W maximum
Input voltage	5 VDC ±0.25 VDC
Input current	430 mA maximum

Environmental specifications

Operating conditions

Temperature	0°C to 35°C (32°F to 95°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 4000 m (616 hPa)

Storage conditions

Temperature	-30°C to 70°C (-22°F to 158°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 5572 m (500 hPa)
Degree of enclosure protection against solid objects and water	IP47

Physical specifications

Length 1.9 m or 1.0 m (6.2 or 3.3 ft)

Weight <0.33 kg (0.82 lb)

Note that perfusion index (Pi), pleth variability index (PVi), and hemoglobin (SpHb) measurements are available only when the Carescape ONE is used in acquisition mode with Carescape Canvas 1000, Carescape Canvas Smart Display, bedside monitors equipped with corresponding license. Monitoring of Pi, PVi and SpHb is disabled on the Carescape ONE monitor in standalone mode

NIBP*

NIBP - DINAMAP™ SuperSTAT

Performance specifications

Measurement technique	Oscillometric
Displayed parameters	Systolic, diastolic, and mean pressures, time of last measurement, and cuff pressure
Modes	Manual, Auto and Stat

Heart rate detection

Adult, child, infant	30 to 265 beats/min
Total cycle time	20 to 40 seconds typical (Dependent on heart rate, pressure, and motion artifact)

Measurement range

Adult	15 to 300 mmHg (2.0 to 40.0 kPa)
Child	15 to 260 mmHg (2.0 to 34.7 kPa)
Infant	15 to 145 mmHg (2.0 to 19.3 kPa)

NIBP pressure display range

Adult	15 to 300 mmHg (2.0 to 40.0 kPa)
Child	15 to 260 mmHg (2.0 to 34.7 kPa)
Infant	15 to 145 mmHg (2.0 to 19.3 kPa)
Cuff pressure range	0 to 315 mmHg (0.0 to 42.0 kPa)

Pressure accuracy

Static	±2% or ±3 mmHg (0.4 kPa), whichever is greater
Clinical	±5 mmHg (0.7 kPa) average error, 8 mmHg (1.1 kPa) standard deviation
Auto zero	Auto zero pressure reference
Automatic cuff deflation conditions	Power off Adult and child cuff cycle time exceeding 125 seconds Infant cuff cycle time exceeding 90 seconds Adult and child cuff pressure exceeds 300 mmHg (40.0 kPa) Infant cuff pressure exceeds 150 mmHg (20.0 kPa)

Tubing length Variable

Maximum inflation pressures

Adult	300 mmHg (40.0 kPa)
Child	260 mmHg (34.7 kPa)
Infant	150 mmHg (20.0 kPa)

Automatic cycle times

1 min, 2 min, 2.5 min, 3 min, 4 min, 5 min, 10 min, 15 min, 20 min, 30 min, 1 h, 2 h and 4 h

Default NIBP measurement initial inflation pressures

Adult	135 mmHg (18.0 kPa)
Child	125 mmHg (16.7 kPa)
Infant	100 mmHg (13.3 kPa)

Alarms

NIBP limit alarms	User selectable upper and lower limits for systolic, diastolic, and mean pressures
-------------------	--

* Built-in NIBP, no additional device required.

Invasive Pressure

TruSignal Pressure

Performance Specifications

Number of channels	4
Transducer sites, site name, and displayed values	Arterial (ART) Systolic, diastolic, mean and rate Femoral (FEM) Systolic, diastolic, mean and rate Femoral Vein (FEMV) Mean Pulmonary artery (PA) Systolic, diastolic, mean Central venous pressure (CVP) Mean Intra-cranial pressure (ICP) Mean Left atrial (LAP) Mean Right atrial (RAP) Mean Right vein (RVP) Mean Umbilical artery (UAC) Systolic, diastolic, mean, and rate Umbilical vein (UVC) Mean
Range	-30 to 320 mmHg (-4 to 42.7 kPa)
Resolution	1 mmHg
Displayed frequency response	DC to 4 Hz, 5 Hz, 6 Hz, 7 Hz, 8 Hz, 9 Hz, 11 Hz, 14 Hz, 17 Hz, 22 Hz or 40 Hz (-3dB) user-selectable
Zero balance accuracy	±1 mmHg (±0.1 kPa)
Measurement accuracy	±0.5% ±1.50 mmHg (excluding transducer) ±4% or ±4 mmHg, whichever is greater (including transducer)
Pulse rate accuracy	±2% or ±2 bpm, whichever is greater
Units	mmHg or kPa
Sweep speed options	6.25, 12.5, 25, and 50 mm/s
Pulse rate range	0 to 360 bpm
Pulse rate resolution	1 bpm
Waveform display scale	User and automatic
Display scale selections	0-10, to 0-300 mmHg, with a step size of 10 mmHg (0.0-2.0, to 0.0-40.0 kPa, with a step size of 2.0 kPa); or automatic scale based on valid waveform values from last 4 seconds with a lower limit of -100 mmHg (-14 kPa) and an upper limit of 350 mmHg (48 kPa) and a step size of 10 mmHg (2.0 kPa)

Connector options	Argon Medical, ICU Medical, Edwards Lifesciences, Utah Medical and GE HealthCare's Carescape*
Transducer measurement accuracy	Compatible Invasive pressure transducers used in the system shall have an accuracy specification of ±2% or ±2 mmHg, whichever is greater

Alarms

Alarm limits	User selectable upper and lower limits for systolic, diastolic, and mean pressures
Alarm limit range	-25 to 320 mmHg
Pulse rate alarm limits	User selectable upper and lower limits for invasive pressure pulse rate

Power specification

Consumption	425 mW maximum
Input voltage	5 VDC ±0.25 VDC
Input current	85 mA maximum

Environmental specifications

Operating conditions

Temperature	0°C to 40°C (32°F to 104°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 4000 m (616 hPa)

Storage conditions

Temperature	-30°C to 70°C (-22°F to 158°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 5573 m (500 hPa)
Degree of enclosure protection against solid objects and water	IP47

Physical specifications

Length	3.6 m or 1.8 m (11.8 or 5.9 ft)
Weight	<0.26 kg (0.57 lb)

*Note: The Carescape connector type must be used with your choice of a GE HealthCare's invasive pressure transducer adapter cable.

Temperature

TruSignal Temperature

Number of channels	2
Parameters displayed	T1, T2
Measurement units	°C or °F
Measurement range	0°C to 45°C (32°F to 113°F)
Display resolution	0.1°C (0.1°F)
Test measurement cycle	Every minute

Temperature system measurement accuracy

Carescape ONE system with series 400 reusable temperature probes with ±0.1°C accuracy	18 to 45°C (64 to 113°F): ±0.2°C (±0.4°F) 0 to less than 18°C (32 to 64°F): ±0.3°C (±0.5°F)
---	---

Carescape ONE system with series 400 disposable temperature probes with ±0.2°C accuracy	18 to 45°C (64 to 113°F): ±0.3°C (±0.5°F) 0 to less than 18°C (32 to 64°F): ±0.4°C (±0.7°F)
---	---

Alarms

Alarm limit	User selectable upper and lower limits for T1, T2
Alarm limit range	10°C to 45°C (50°F to 113°F)
Alarm limit increment	0.1°C (0.18°F)
Delta temperature alarm limit	User selectable upper limit

Power specification

Consumption	325 mW maximum
Input voltage	5 VDC ±0.25 VDC
Input current	65 mA maximum

Environmental specifications

Operating conditions

Temperature	0°C to 40°C (32°F to 104°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 4000 m (616 hPa)

Storage conditions

Temperature	-30°C to 70°C (-22°F to 158°F)
Humidity	5% to 95% RH (non-condensing)
Altitude	-500 m (1075 hPa) to 5573 m (500 hPa)
Degree of enclosure protection against solid objects and water	IP47

Physical specifications

Length	1.5 m (4.9 ft) with reusable sensor interface cable 3.0 m or 1.5 m (9.8 ft or 4.9 ft) with disposable sensor interface cable
Weight	<0.22 kg (0.49 lb)

Capnography

Carescape CO₂ - Microstream

CO ₂ Measurement Range	0 to 150 mmHg
CO ₂ waveform sampling	20 samples/second
Sampled Gas Flow Rate	50 ml ±5 ml/min
CO ₂ Accuracy	±2 mmHg at 0-38 mmHg ±{5% x CO ₂ reading + 8% x (CO ₂ reading - 39 mmHg)} at 39-99 mmHg ±{0.43% x Ambient Pressure + 8% x CO ₂ reading} at 100-150 mmHg For respiration rates above 80 bpm, the accuracy is up to either 4 mmHg or ±12 % of reading, whichever is higher
CO ₂ Accuracy in the Presence of Interfering Gases	Nominal accuracy is not reduced by more than 4% of the reading in the presence of interfering gases, as detailed in ISO 80601-2.55 clauses 201.12.1.101.3, 201.101, including also Ethanol, Isopropanol, and Acetone at up to 0.1%, Methane at up to 1%, and Oxygen, Heliox up with up to 50% Helium and with up to 15% Oxygen.
Respiration Rate Range	0 to 150 breaths/minute
Respiration Rate Accuracy	± 1 breaths/minute for 0-70 breaths/minute ± 2 breaths/minute for 71-120 breaths/minute ± 3 breaths/minute for 121-150 breaths/minute
Startup Time	Maximum 30 seconds, not including monitor startup time.

Power Specifications

Consumption	2.5 W
Input voltage	5 V DC ±0.25 VDC
Input current	482 mA maximum

Environmental Specifications

Operating Conditions

Temperature	0°C to 40°C (32°F to 104°F)
Humidity	10% to 95%, ambient non-condensing relative humidity
Altitude	-487 to 4572 m (-1600 to 15000 ft)

Storage and Transport Conditions

Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	10% to 90%, ambient non-condensing relative humidity
Altitude	-487 to 15240 m (-1600 to 50000 ft)
Atmospheric pressure	11 kPa (88 mmHg) to 108 kPa (805 mmHg)
Degree of protection against matter and water ingress	IP33

Physical Specifications

Product dimensions	94 mm x 60 mm x 58 mm (3.7 in x 2.4 in x 2.3 in)
Product weight	340 g (0.75 lb)

Regional Oxygen Saturation

INVOS rSO₂

Note that rSO₂ is monitored only when an INVOS rSO₂ cable is connected to the Carescape ONE, and the Carescape ONE is used in acquisition mode with Carescape Canvas 1000 and Carescape Canvas Smart Display, bedside monitors equipped with corresponding license. Monitoring of rSO₂ is disabled on the Carescape ONE monitor in standalone mode.

Number of channels	4
Measurement units	Unitless
rSO ₂ Measurement Range	15 to 95
rSO ₂ Measurement Resolution	1
rSO ₂ Accuracy	Clinical study results specified in the INVOS rSO ₂ instructions for use.

Power Specifications

Consumption	2.5 W
Input voltage	5V DC
Input current	482 mA maximum

Environmental Specifications

Operating Conditions

Temperature	10°C to 35°C (50°F to 95°F)
Humidity	10% to 95%, non-condensing
Altitude	-500 to 4000 meters (1640 to 13123 feet)
Atmospheric Pressure	616 hPa to 1075 hPa (18 inHg to 32 inHg)

Storage and Transport Conditions

Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	10% to 95%, non-condensing
Altitude	-500 to 5572 m (-1640 to 18281 ft)
Atmospheric Pressure	500 hPa to 1075 hPa (15 inHg to 32 inHg)
Ingress protection	IPX2

Physical Specifications

Product dimensions	12.8 x 8.7 x 3.4 cm (5.04 x 3.43 x 1.3 in) with hook folded down
Product weight	313g (0.69 lb)
Host cable length	428.4 cm (14 ft) (approximate)
Reusable sensor cable length	Adult and Pediatric: 162 cm (5.3ft) approximate Infant: 17.5 cm (6.9 in) approximate

Micro-module standards compliance

ECG Standards Compliance

The system with TruSignal ECG complies with IEC 60601-2-27:2011-03.

NOTE: Moderate and maximum reduced bandwidths do not comply with all requirements of the IEC 60601-2-27 standard.

The TruSignal ECG enclosure and interface cable are treated as TYPE CF DEFIBRILLATION-PROOF APPLIED PARTS per IEC 60601-2-27 Clause 201.8.3 and Clause 201.8.5.5. Compatible leadwires are TYPE CF DEFIBRILLATION-PROOF APPLIED PARTS.

Pulse Oximetry Standards Compliance

The system with TruSignal SpO₂ complies with ISO 80601-2-61:2017-12 + Corrected version:2018-02.

The TruSignal SpO₂ sensor interface cable, excluding the module strain relief, and compatible sensors are type BF DEFIBRILLATION-PROOF APPLIED PARTS per IEC 60601-1 Clause 8.3 and ISO 80601-2-61 Clause 201.8.3.101.

NIBP Standards Compliance

The system complies with IEC 80601-2-30:2018-03.

The system was clinically tested according to ISO 81060-2:2013.

WARNING: PREGNANT PATIENTS. Effectiveness of the NIBP measurement has not been established in pregnant (including pre-eclamptic) patients.

The NiBP Hose and Cuff accessory applied parts are classified as DEFIBRILLATION PROOF APPLIED PARTS per IEC 80601-2-30:2018 Clause 201.8.5.5 and TYPE BF APPLIED PARTS per IEC 60601-1:2020-08 Clause 8.3.

Invasive Pressure Standards Compliance

The system with TruSignal Pressure complies with IEC 60601-2-34:2011-05.

The TruSignal Pressure device, including the enclosure and USB interface cable are not applied parts or treated as applied parts. The TruSignal Pressure sensor interface cable and compatible sensors, excluding the Carescape Pressure connector, excluding the strain relief, and if present, excluding the TruSignal Pressure dual adapter cable, are type CF DEFIBRILLATION-PROOF APPLIED PARTS per IEC 60601-2-34 Clause 201.8.3 and Clause 201.8.5.5.1.

CO₂ Standards Compliance

The system with Microstream CO₂ complies with ISO 80601-2-55:2018-02 + Amendment 1:2023-12.

The Microstream CO₂ accessories that are intended to be connected with the breathing system are TYPE BF DEFIBRILLATION-PROOF APPLIED PARTS per ISO 80601-2-55 Clause 201.4.6.

Temperature Standards Compliance

The system with TruSignal Temperature complies with ISO 80601-2-56:2017-03 + Amendment 1:2018-11.

The TruSignal Temperature sensor interface cable, and compatible probes are type CF DEFIBRILLATION-PROOF APPLIED PARTS per IEC 60601-1:2020-08 Clause 8.3.

Not all products or features are available in all markets. Full product technical specification is available upon request. Contact a GE HealthCare Representative for more information.

Data subject to change.

© 2025 GE HealthCare

12 SL, Carescape, DINAMAP, FlexAcuity, TruSignal RRsv and TruSignal are trademarks of GE HealthCare. GE is a trademark of General Electric Company used under trademark license.

Masimo rainbow, Masimo rainbow SET, SpHb and PVi are registered trademarks of Masimo Corporation. INVOS, Microstream, Nellcor and OxiMax are trademarks of a Medtronic Company. Dragontrail is a trademark of Asahi Glass Company, Limited. All other trademarks are property of their respective owners.

Reproduction in any form is forbidden without prior written permission from GE HealthCare. Nothing in this material should be used to diagnose or treat any disease or condition. Readers must consult a healthcare professional.

Carescape ONE: version 2

Carescape Dock F0: version 1

Carescape Frame F2: F2-01

TruSignal ECG: TruSignal™ ECG MM version 1

TruSignal Invasive Pressure: TruSignal™ PRES MM version 1

TruSignal Temperature: TruSignal™ TEMP MM version 1

TruSignal SpO₂: TruSignal™ SpO₂ MM 1.8M, TruSignal™ SpO₂ MM 3.0M version 1

Carescape SpO₂ — Masimo: MKM101

Carescape SpO₂ — Nellcor: MKN101

Carescape CO₂ — Microstream: PMC450M-GE

INVOS rSO₂ — MM: PMC71VP-GE

DOC3162717 rev2 11/2025



GE HealthCare