



# CARESCAPE R860



## Physical Specifications




### Dimensions

Height:	48.85 cm/19.2 in (Display down) 73.8 cm/29.1 in (Display up)
Height including cart:	126.82 cm/49.9 in (Display down) 151.77 cm/59.8 in (Display up)
Width:	38 cm/15 in
Depth:	36 cm/14 in
Weight:	31 kg/68.0 lb (not including cart); 78 kg/171.2 lb (including cart)

### Display motion



Vertical tilt:	162.1° in raised position 47.6° in lowered position
Height adjustment:	24.95 cm/9.8 in

### Key:

-  Available only when Adult patient type is selected
-  Available only when Pediatric patient type is selected
-  Available only when Neonatal patient type is selected




























Note: Ranges and Settings without an icon pertain to all patient types unless otherwise stated.










## Modes of Ventilation






















- A/C VC (Volume Control)
- A/C PC (Pressure Control)
- A/C PRVC (Pressure Regulated Volume Control)
- SIMV VC (Synchronized Intermittent Mandatory Ventilation, Volume Control)
- SIMV PC (Synchronized Intermittent Mandatory Ventilation, Pressure Control)
- CPAP/PS (Continuous Positive Airway Pressure/ Pressure Support)
- SBT (Spontaneous Breathing Trial)
- APRV\* (Airway Pressure Release Ventilation)
- BiLevel\* (BiLevel Airway Pressure Ventilation)
- BiLevel VG\* (BiLevel with Volume Guarantee)
- SIMV PRVC\* (Synchronized Intermittent Mandatory Ventilation, Pressure Regulated Volume Control)
- VS\* (Volume Support)
- NIV\* (Non-invasive Ventilation) 
- nCPAP\* (Nasal Continuous Positive Airway Pressure) 

\*Optional







## Control and Ranges

Maximum peak flow:	30 L/min 
	100 L/min 
	208 L/min 
Flow:	0.2 to 30 L/min 
	2 to 72 L/min 
	2 to 160 L/min 
Incremental settings:	0.2 to 5 L/min (increments of 0.1 L/min)
	5 to 30 L/min (increments of 0.5 L/min) 
	2 to 40 L/min (increments of 1 L/min)
	40 to 72 L/min (increments of 2 L/min) 
	2 to 40 L/min (increments of 1 L/min)
	40 to 160 L/min (increments of 5 L/min) 
FiO <sub>2</sub> :	21 to 100% O <sub>2</sub>
Rate:	3 to 150 breaths per minute for A/C VC, A/C PC, A/C PRVC and BiLevel (increments of 1 breath per minute) 
	3 to 120 breaths per minute for A/C VC, A/C PC, A/C PRVC and BiLevel (increments of 1 breath per minute)  
	2 to 60 breaths per minute for SIMV VC, SIMV PC, SIMV PRVC and BiLevel VG (increments of 1 breath per minute) 
	1 to 60 breaths per minute for SIMV VC, SIMV PC, SIMV PRVC and BiLevel VG (increments of 1 breath per minute)  
	Off, 1 to 30 breaths per minute for nCPAP (increments of 1 breath per minute) 
Minimum rate:	1 to 60 breaths per minute for VS (increments of 1 breath per minute)  
	2 to 60 breaths per minute for VS (increments of 1 breath per minute) 
	Off, 1 to 60 breaths per minute for CPAP/PS (increments of 1 breath per minute)
	Off, 1 to 40 breaths per minute for NIV (increments of 1 breath per minute)  
Inspiratory/ expiratory ratio:	1:9 to 4:1 (ventilator setting)
	1:199 to 40:1 in BiLevel and APRV 
	1:79 to 60:1 in BiLevel and APRV  
Tidal volume range:	2 to 50 mL 
	20 to 300 mL 
	100 to 2000 mL 

Incremental settings:	2 to 20 mL (increments of 0.1 mL)
	20 to 50 mL (increments of 0.5 mL)
	For A/C VC, A/C PRVC, SIMV VC, SIMV PRVC, BiLevel VG, and VS 
	20 to 50 mL (increments of 0.5 mL)
	50 to 100 mL (increments of 1 mL)
	100 to 300 mL (increments of 5 mL)
	For A/C VC, A/C PRVC, SIMV VC, SIMV PRVC, BiLevel VG, and VS 
	100 to 300 mL (increments of 5 mL)
	300 to 1000 mL (increments of 25 mL)
	1000 to 2000 mL (increments of 50 mL)
	For A/C VC, A/C PRVC, SIMV VC, SIMV PRVC, BiLevel VG, and VS 
Patient weight:	0.25 to 1 kg (increments of 0.01 kg)
	1 to 7 kg (increments of 0.1 kg)
	7 to 10 kg (increments of 0.5 kg)
	0.5 to 2 lb (increments of 0.02 lb)
	2 to 15 lb (increments of 0.2 lb)
	15 to 22 lb (increments of 1 lb) 
	4 to 7 kg (increments of 0.1 kg)
	7 to 15 kg (increments of 0.5 kg)
	15 to 60 kg (increments of 1 kg)
	8 to 15 lb (increments of 0.2 lb)
	15 to 34 lb (increments of 1 lb)
	34 to 132 lb (increments of 2 lb) 
	20 to 100 kg (increments of 1 kg)
	100 to 200 kg (increments of 2 kg)
	44 to 220 lb (increments of 2 lb)
	220 to 440 lb (increments of 5 lb) 
Inspiratory pressure (P <sub>insp</sub> ) range:	1 to 98 cm H <sub>2</sub> O (increments of 1 cm H <sub>2</sub> O)
	1 to 30 cm H <sub>2</sub> O (increments of 1 cm H <sub>2</sub> O) in NIV  
	1 to 25 cm H <sub>2</sub> O (increments of 1 cm H <sub>2</sub> O) in nCPAP 
P <sub>high</sub> :	1 to 98 cm H <sub>2</sub> O (increments of 1 cm H <sub>2</sub> O)
P <sub>low</sub> :	Off, 1 to 50 cm H <sub>2</sub> O (increments of 1 cm H <sub>2</sub> O)
Pressure limit (P <sub>limit</sub> ) range:	7 to 100 cm H <sub>2</sub> O for A/C VC and SIMV VC (increments of 1 cm H <sub>2</sub> O)
P <sub>min</sub> :	2 to 20 cm H <sub>2</sub> O (increments of 1 cm H <sub>2</sub> O)
Max. inspiratory pressure (P <sub>max</sub> ) range:	7 to 100 cm H <sub>2</sub> O (increments of 1 cm H <sub>2</sub> O)
	9 to 100 cm H <sub>2</sub> O (increments of 1 cm H <sub>2</sub> O) in NIV and nCPAP

PEEP:	Off, 1 to 50 cm H <sub>2</sub> O (increments of 1 cm H <sub>2</sub> O) 2 to 15 cm H <sub>2</sub> O (increments of 1 cm H <sub>2</sub> O) in nCPAP  2 to 20 cm H <sub>2</sub> O (increments of 1 cm H <sub>2</sub> O) in NIV  	PS Rise Time:	0 to 500 ms of inspiratory period for pressure supported breaths only. Active in SIMV VC, SIMV PC, SIMV PRVC, CPAP/PS, BiLevel VG, BiLevel and VS (increments of 50 ms)
Inspiratory time:	0.1 to 10 sec 0.1 to 2 sec in nCPAP 0.1 to 1 sec (increments of 0.01) 1 to 4 sec (increments of 0.1) 4 to 10 sec (increments of 0.25) 	Trigger window:	80% of expiration time
	0.25 to 15 sec 0.25 to 5 sec in NIV 0.25 to 1 sec (increments of 0.05) 1 to 4 sec (increments of 0.1) 4 to 15 sec (increments of 0.25)  	Insp Trigger, flo :	0.2 to 1 L/min (increments of 0.05 L/min) 1 to 3 L/min (increments of 0.1 L/min) 3 to 9 L/min (increments of 0.5 L/min)   1 to 3 L/min (increments of 0.1 L/min) 3 to 9 L/min (increments of 0.5 L/min)  
T <sub>high</sub> :	0.1 to 10 sec 0.1 to 1 sec (increments of 0.01) 1 to 4 sec (increments of 0.1) 4 to 10 sec (increments of 0.25) 	Insp Trigger, pressure:	-10 to -3 cm H <sub>2</sub> O (increments of 0.5 cm H <sub>2</sub> O) -3 to -0.25 cm H <sub>2</sub> O (increments of 0.25 cm H <sub>2</sub> O)
	0.25 to 15 sec 0.25 to 1 sec (increments of 0.05) 1 to 4 sec (increments of 0.1) 4 to 15 sec (increments of 0.25)  	Bias flow rate:	2 to 10 L/min (increments of 0.5 L/min)  2 to 15 L/min (increments of 0.5 L/min) for nCPAP 
T <sub>low</sub> :	0.25 to 18 sec 0.25 to 1 sec (increments of 0.01) 1 to 4 sec (increments of 0.1) 4 to 18 sec (increments of 0.25) 		8 to 20 L/min for NIV (increments of 0.5 L/min)  
	0.25 to 18 sec 0.25 to 1 sec (increments of 0.05) 1 to 4 sec (increments of 0.1) 4 to 18 sec (increments of 0.25)  	Insp. pause:	0 to 75% of inspiration time (increments of 5%)
T <sub>supp</sub> :	0.1 to 0.8 sec (increments of 0.01) 	T <sub>pause</sub> :	0 to 7.5 sec 0 to 1 sec (increments of 0.05) 1 to 4 sec (increments of 0.1) 4 to 7.5 (increments of 0.25) 
	0.25 to 1.5 sec 0.25 to 1 sec (increments of 0.05) 1 to 1.5 sec (increments of 0.1) 		0 to 11 sec 0 to 1 sec (increments of 0.05) 1 to 4 sec (increments of 0.1) 4 to 11 (increments of 0.25)  
Expiratory time:	0.25 to 59.75 sec   0.25 to 29.9 sec Invasive vent modes  0.5 to 59.75 sec for NIV  	Pressure support from PEEP level:	0 to 60 cm H <sub>2</sub> O for SIMV VC, SIMV PC, SIMV PRVC, BiLevel, BiLevel VG and CPAP/ PS (increments of 1 cm H <sub>2</sub> O)  0 to 30 cm H <sub>2</sub> O for NIV (increments of 1 cm H <sub>2</sub> O)  
Rise time:	0 to 500 ms of inspiratory period for pressure depending on the mode selected. Active in APRV, A/C PC, A/C PRVC, SIMV PC, SIMV PRVC, BiLevel VG, NIV and BiLevel (increments of 50 ms)	Expiratory Trigger:	5 to 80% of peak flow for NIV, SIMV VC, SIMV PC, SIMV PRVC, BiLevel, BiLevel VG, VS and CPAP/PS (increments of 5%)

## Alarm Settings

Tidal volume:	Low: Off, 1 to 1950 mL
	High: 3 to 2000 mL, Off
Minute volume:	Low: 0.01 to 40 L/min
	High: 0.02 to 99 L/min
Respiratory rate:	Low: Off, 1 to 99/min
	High: 2 to 150/min, Off
Inspired oxygen (FiO <sub>2</sub> ):	Low: 18 to 99%
	High: 24 to 100%, Off
P <sub>max</sub> :	High: 7 to 100 cm H <sub>2</sub> O 9 to 100 cm H <sub>2</sub> O in NIV and nCPAP
P <sub>peak</sub> :	Low: 1 to 97 cm H <sub>2</sub> O
PEEP <sub>e</sub> :	Low: Off, 1 to 20 cm H <sub>2</sub> O
	High: 5 to 50 cm H <sub>2</sub> O, Off
PEEP <sub>i</sub> :	High: 1 to 20 cm H <sub>2</sub> O, Off  
P <sub>limit</sub> :	7 to 100 cm H <sub>2</sub> O
Apnea alarm:	5 to 60 sec
Circuit leak:	10 to 90%, Off
EtO <sub>2</sub> :	Low: Off, 10 to 99%
	High: 11 to 100%, Off  
EtCO <sub>2</sub> :	Low: Off, 0.1 to 14.9% Off, 0.5 to 114.5 mmHg
	High: 0.2 to 15%, Off  
Ventilation soft limit indicators:	When adjusting selected ventilator parameters, color indicators show when parameters are approaching their setting limits.

### Parameters

with soft limits: P<sub>max</sub>, PEEP, P<sub>insp</sub>, PS, T<sub>insp</sub>, RR, I:E, P<sub>high</sub>, P<sub>min</sub>, P<sub>low</sub>, T<sub>high</sub> and T<sub>low</sub>

## Alarm System

Escalating alarms:	High priority alarms escalate to a higher pitch if unattended for specified time
Adjustable to:	0, 10, 20 and 30 sec, Off
Auto limits:	Alarm limits calculated on the current measured values for selected parameters

## Procedures







### Suction

Program routine:	Automatic
Pre-oxygenation:	≤ 2 minutes with 100% O <sub>2</sub> with automatic disconnection detection*
Standby pause:	≤ 2 minutes with automatic patient (re-connection) detection
Post-oxygenation:	≤ 2 minutes with 100% O <sub>2</sub> *
<i>Note: FIO<sub>2</sub> can be set to level other than 100%</i>	
<i>*Note: 5 to 75% above current FIO<sub>2</sub> setting</i>	

### Manual breath

Auto PEEP (includes PEEP<sub>i</sub> Volume)




Lung Mechanics:	P0.1 NIF Vital Capacity
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Inspiratory hold:	2 to 15 sec (increments of 1 sec)  
	15 to 40 sec (increments of 5 sec) 
Expiratory hold:	2 to 20 sec (increments of 1 sec)  
	20 to 60 sec (increments of 5 sec) 

### Spontaneous Breathing Trial (SBT)

(Adjustable range: 15 min, 30 min, 45 min, 1 h, 1.5 h, 2 h, 4 h, 6 h, 8 h, 12 h)

## Spirometry

Data source: Ventilator or Compact Airway Module (E-COV, E-COVX, E-CAiOV, E-CAiOVX, E-sCOV, E-sCAiOV)    
Ventilator or Neonatal Flow Sensor 

Loop types: Pressure-Volume, Pressure-Flow and Flow-Volume

Saved loop: Up to six loops can be saved

Reference loop: A saved loop can be selected as the reference loop to compare with the current loop being displayed

Cursor: Freezes current loops and provides numeric display of X and Y axis as cursor moves across loops

### Pulmonary

mechanics: P<sub>peak</sub>, P<sub>plat</sub>, P<sub>mean</sub>, PEEP<sub>e</sub>, PEEP<sub>i</sub>, VT<sub>insp</sub>, VT<sub>exp</sub>, MV<sub>insp</sub>, MV<sub>exp</sub>, Compliance and Resistance, I:E

## Auxiliary Pressure

Auxiliary pressure (P<sub>aux</sub>): Measured range: -20 to +120 cm H<sub>2</sub>O  
Alarm range: 12 to 100 cm H<sub>2</sub>O

Purge flow: Low flow to clear the P<sub>aux</sub> line, can be turned Off

## SpiroDynamics (optional)

*Note: Not available when Neonatal patient type is selected*

- Tracheal Pressure – Volume loop displayed
- Dynostatic Curve displays calculated alveolar pressure
- Tracheal pressure measured via GE's intratracheal pressure sensor
  - Connects directly to CARESCAPE R860's auxiliary pressure port
- 3 point compliance measurement
  - at 5-15% of the breath
  - at 45-55% of the breath
  - at 85-95% of the breath
- Store up to 6 SpiroDynamic loops
- Store up to 6 Dynostatic curves
- Overlay loops and/or curves over current loop
- Cursor available across all displayed loops and curves
  - Pressure and volume values displayed at cursor position
- $P_{peak}$ ,  $PEEP_e$ , Compliance and  $P_{mean}$

## FRC INview (optional)

*Note: Not available when Neonatal patient type is selected*

- Functional Residual Capacity measurement
  - Wash-in and Wash-out method provides 2 separate FRC measurements
- FRC displayed both numerically and graphically
- The most recent 5 FRC procedures displayed
- $PEEP_e$ ,  $C_{stat}$  and  $PEEP_i$  displayed with each FRC
- Trend Log records:
  - FRC measurements
  - Ventilator settings and procedures that may affect the FRC procedure
- Programmable time intervals for automatic FRC measurements

## PEEP INview (available with FRC INview)

*Note: Not available when Neonatal patient type is selected*

- Measures FRC at up to 5 different PEEP levels
- Graphic and numeric display of FRC values
- User selectable beginning and ending PEEP levels
  - Ventilator evenly spaces additional PEEP levels
  - PEEP levels can either increase or decrease
- $PEEP_e$ ,  $C_{stat}$  and  $PEEP_i$  displayed during each FRC measurement

## Lung INview (available with SpiroDynamics and FRC INview)

*Note: Not available when Neonatal patient type is selected*

- Integrates SpiroDynamics and FRC INview within the PEEP INview procedure
- Measures the amount of volume between the Dynostatic curves at each FRC measurement
- Estimate of recruitment volume

## Vent Calculations

*Note: Not available when Neonatal patient type is selected*

Data from CARESCAPE R860 and external lab results are used to provide the following values:

- $PAO_2$  – Alveolar partial pressure of oxygen
- $AaDO_2$  – Alveolar arterial oxygen difference
- $Pa/FiO_2$  – Oxygenation index
- $PaO_2/PAO_2$  – Alveolar arterial oxygen pressure difference
- CO – Cardiac output
- OI – Oxygen Index
- $SpO_2/FiO_2$  – Saturation  $FiO_2$  Ratio
- $Vd/Vt$  – Dead space ventilation
- $Vd$  – Dead space volume
- VA – Alveolar ventilation

## Non-Invasive Ventilation (NIV) (optional)

Mask ventilation: Yes

Integrated unique leak recognition algorithm

## Automatic Patient Detection (APD)

Patient re-connection: Automatic detection in standby

Detection by: Back pressure to Bias-flow

## 100% $O_2$ ( $\uparrow O_2$ )

Delivers 5 to 75% above current  $FiO_2$  setting for  $\leq 2$  minutes

Delivers 100%  $O_2$  for  $\leq 2$  minutes

Can be adjusted to other  $O_2\%$

## Take Snapshot

Immediate capture and storage of critical data currently on the CARESCAPE R860's display

Stored data:	All available waveform data (15 or 30 seconds) Alarm messages (Currently active Alarm messages) All measured parameters All set ventilator parameters
Maximum stored Snapshots:	10 most recent
Cursor:	Ability to cursor across waveforms for specific measured values

## Ventilator Preferences

Backup Mode:	Establishes the specific ventilator mode and parameters used in the event that the ventilator switches to Backup ventilation
Tube Compensation:	Allows control and setting of the airway resistance compensation
Assist Control:	Allows the user to turn the Assist Control capability On or Off
Leak Compensation:	Allows the user to turn the Leak Compensation capability On or Off
Trigger Compensation:	Allows the user to turn On or Off compensation for flow triggering

## Tube Compensation

*Note: Not available when Neonatal patient type is selected*





















Type of compensation:	Electronic tube compensation
Compensation for:	Endotracheal and tracheostomy tubes
Tube diameter:	5 to 10 mm
Level of compensation:	25 to 100%

## Mode Families

Allows user adjustment to specify certain parameters that align with the hospital's current ventilator usage.

Adjustable parameters:	Flow and Inspiratory timing
Family 1:	Flow control is On/Insp. Timing is I:E
Family 2:	Flow control is Off/Insp. Timing is I:E
Family 3:	Flow control is On/Insp. Timing is $T_{insp}$
Family 4:	Flow control is Off/Insp. Timing is $T_{insp}$
Family 5:	Flow control is On/Insp. Timing is $T_{pause}$

## Ventilator Monitoring

Airway pressure	-20 to +120 cm H <sub>2</sub> O
Patient flow	0.1 to 32 L/min  1 to 200 L/min  
Tidal volume	0.5 to 1,000 mL with the Neonatal Flow Sensor  1 to 1,000 mL without the Neonatal Flow Sensor  5 to 2,500 mL  
Minute volume	0 to 99.9 L/min
CO <sub>2</sub>	0 to 15%/0 to 113 mmHg  
Compliance	0.1 to 150 mL/cm H <sub>2</sub> O
Resistance	1 to 500 cm H <sub>2</sub> O/L/s
RQ	0.6 to 1.2  
VO <sub>2</sub>	20 to 1000 mL/min  
VCO <sub>2</sub>	20 to 1000 mL/min  
Rate	0 to 150 breaths per minute (increments of 1 breath per minute)  0 to 120 breaths per minute (increments of 1 breath per minute)  
FiO <sub>2</sub>	10 to 100%
Rapid Shallow Breathing Index (RSBI)	1 to 999 bpm/L  

## Oxygen Monitoring

Technology:	Dynamic Paramagnetic Oxygen monitoring system
Life span:	Non-depleting technology




## Screen

Display type:	38 cm/15 inch touch screen full color LCD adjustable viewing angle
Waveforms in screen:	Up to four at a time
Waveform parameters:	Pressure, flow, volume, CO <sub>2</sub> , O <sub>2</sub> and auxiliary pressure
Graphic scaling:	Automatic scaling for optimal size or independent scaling
Data:	Control parameters, patient data, alarm settings and messages
Status indicator:	Ventilation mode, battery level, clock
Favorites:	9 procedure Hyperlink shortcuts to choose from 4 selectable at one time

## Ventilator Monitoring Accuracy\*\*

Pressure readings:  $\pm 2$  cm H<sub>2</sub>O

\* Pressure reading accuracy may decrease with use of HME

Volume readings:  $\pm 10\%$  or  $\pm 1$  mL, whichever is greater (with proximal neonatal flow sensor)  
 $\pm 10\%$  or  $\pm 5$  mL, whichever is greater without proximal neonatal flow sensor   
 $\pm 10\%$  or  $\pm 10$  mL, whichever is greater  


O<sub>2</sub> concentration monitor:  $\pm 2.95\%$

Note that these values are only true if you do not have a leak and have no pneumatic nebulizer flow.

## Delivery Accuracy\*\*

Inspired pressure control:  $\pm 2$  cm H<sub>2</sub>O

Oxygen – Air mixing:  $\pm 2.95\%$  V/V of setting




Tidal volume delivery:  $\pm 10\%$  of setting or  $\pm 1$  mL, whichever is greater (with proximal neonatal flow sensor)   
 $\pm 10\%$  of setting or  $\pm 5$  mL, whichever is greater

## Nebulization

Nebulizer:	Aeroneb Nebulizer System built-in
Nebulizer technology:	Electronic micro pump
Nebulizer run time:	7, 8, 11, 16, 21, 26, 32 min Continuous (Aeroneb Solo only)
Nebulizer delivery volume:	Volumes correspond to time settings; 2.5, 3, 4, 6, 8, 10, 12 respectively.
Particle size:	Average 3.1 microns MMAD (MMAD = "Mass Median Aerodynamic Diameter")
Residual volume:	Average < 0.1 mL

Performance may vary depending upon the type of drug used. For additional information contact Aerogen or drug supplier.

## Pneumatic nebulizer

Flow compensation: 1 to 4 L/min (increments of 0.5 L/min)   
1 to 12 L/min (increments of 0.5 L/min)  

## Monitor Module

Compact airway module compatibility: E-CO, E-COV, E-COVX, E-CAiO, E-CAiOV, E-CAiOVX, E-miniC, E-sCO, E-sCOV, E-sCAiO, E-sCAiOV

Note: The CARESCAPE R860 does not utilize the Ai, (inhaled anesthesia) feature of the compact airway modules at this time.

Note: The CARESCAPE R860 does not utilize any of the compact airway modules when the Neonatal Option is in use.

## Trends

Trend data:	Set parameters and measured data
Trend styles:	Measured and graphic
Maximum trending:	72 hours
Trend scaling:	15 min, 30 min, 45 min, 1 h, 1.5 h, 2 h, 4 h, 6 h, 8 h
Resolution:	1 minute intervals

## External Communications

Communication ports: 2 Serial port (RS-232), RS-422 port (service support), nurse call

\*\* Ventilation delivery specifications requirements:  
• Operating at ISO 80601-2-12 patient conditions



## Electrical Specifications

### Line supply

Line voltage: 85 to 132 Vac, 47/63 Hz  
190 to 264 Vac, 47/63 Hz

Power consumption: < 200 VA

### Battery supply

Back-up battery: Built-in

Type: Lead acid gel

Battery back-up time: Up to 85 minutes, 30 minute minimum,  
battery fully charged

### Gas supply

Single gas operation: Yes

Emergency air valve: Built-in

### Oxygen supply

Pressure range: 240 to 650 kPa/35 to 94 psi

Flow: 160 L/min

### Air supply

Pressure range: 240 to 650 kPa/35 to 94 psi

Flow: 160 L/min

## Environmental Specifications

### Thermal

Operating range: 10° to 40°C

Storage range: -20° to 60°C

### Humidity

Operating range: 15 to 95% RH Non-condensing

Storage range: 15 to 75% RH Non-condensing

### Vibration and shock

System complies with ISO 80601-2-12:2011.

## Altitude

Operating range: -400 to 3000 m/525 to 800 mmHg

Storage range: -400 to 5860 m/375 to 800 mmHg