



# CARESCAPE Monitor B850

## Engineered to help provide better care

The CARESCAPE™ Monitor B850 is a high-acuity monitor that can help you manage your patient flow by providing a dependable level of data continuity and integration across care areas. Its intuitive design allows for easy training for all staff experience levels, and upgradability protects your long-term system investments.

### Providing clinical excellence, dependable data continuity and integration

- iPanel™ integration enables easy access to labs, X-rays, charting and other data at the bedside
- CARESCAPE Patient Data Module provides consistent hemodynamic measurement during intra-hospital transport and also transfers trend data
- Innovative algorithms aid in accurate diagnoses, including GE EK-Pro, GE DINAMAP® non-invasive blood pressure, and 12 SL™ diagnostic ECG with direct 2-way MUSE® communication
- Specifically designed airway modules provide for complete respiratory monitoring with gas exchange measurement
- Various parameters can help you assess the adequacy of anesthesia in the OR, and give insight to patients' readiness for ventilator weaning in the ICU
- Auto View on Alarm (AVOA) automatically shares high priority alarms within the care unit
- High-definition visualization of real-time and historic patient data, for beat-to-beat and breath-to-breath trending
- Integration with the Aware® Gateway enables communications to EMR systems through standard HL7 protocol

### Intuitive design

- Pages & Profiles functionality can increase flexibility and workflow efficiency by configuring monitors to unit standards and patient populations
- Integrated alarm light on top of the display provides a visual indication of alarm status, enabling viewing from a greater distance
- User-controlled views, from eight to 14 waveforms and up to 22 parameter boxes, allow for flexibility and customization, based on caregivers' and patients' needs
- Integrated USB ports allow for a keyboard, mouse, barcode readers and other data entry device attachment
- Trim Knob® control and optional hard keys provide one-touch activation of key features
- Dedicated software and parameters for the Anesthesia, PACU, Critical Care, Emergency Care and NICU care areas make it easy to configure to your work patterns

### Protecting long-term investments

- Combines the best of Marquette® and Datex-Ohmeda® legacies into one platform
- Backwards compatible with many existing Marquette and Datex-Ohmeda components
- Remote service through InSite ExC provides updates and predictive maintenance
- Structured upgrade programs can lower costs of ownership and simplify long-term capital equipment planning



## Technical specifications

### CPU

Dimensions (H x W x D)	9.1 x 40.1 x 34 cm (3.6 x 15.8 x 13.4 in)
Weight	7.5 kg (16.5 lb)
Power consumption	300 Watts (max)
Power requirements	100 to 240 VAC, 50-60 Hz
Heat dissipation	1024 BTU/hour (max)
Processor	Intel 423 embedded
Degree of protection against harmful ingress of water	IPX1

### Alarms

Priority	3 levels - High, Medium and Low
High-priority alarm volume	in accordance with IEC 60601-1-8 D15K* 81 dB(A) D19KT* 82 dB(A)
Visual alarm notification	Red, yellow, cyan  Audio silence indicator General alarm indicator
Audible alarm notification	Internal speakers
Audio pause	Configurable for 2 or 5 minutes

### I/O connectors

Ethernet	2 RJ45 for CARESCAPE Network MC and CARESCAPE Network IX
E-Port/Tram-Net®	2 DB9F for CARESCAPE Patient Data Module, Frame, or Tram-Rac®
Serial port	2 DB9M
Video	1 DVI-I, 1 DVI-D
Optional video	1 DVI-I with optional third video card
USB port	4 USB 2.0 standard
M-port	4 RJ45

### Display characteristics

Colors	16 million
Type	Active matrix color TFT LCD
Brightness	
D15K	210 cd/m <sup>2</sup>
D19KT	180 cd/m <sup>2</sup>
Resolution	1024 x 768 @ 60 Hz (XGA)
Viewing angle	(horizontal/vertical)
D15K	170°/170°
D19KT	178°/178°

\* D15K = 15-inch display with keypad;  
D19KT = 19-inch display with keypad and touchscreen

\*\*CARESCAPE Patient Data Module only

Pixel dimension	
D15K	0.297 x 0.297 mm
D19KT	0.294 x 0.294 mm

Contrast ratio	
D15K	700:1
D19KT	1300:1

Response time	
D15K	25 ms
D19KT	20 ms

### Waveforms

Based on configuration. Standard view includes up to 8 individual waveforms, optional views include overlays or insets for up to 14 waveforms per display. Additional clinical display allows for 16-28 waveforms.

### Numerics

16 to 22 parameter numerics based on configuration, per display. Additional clinical display allowed for 32 to 44 parameter numerics.

See separate technical specifications document for displays. Displays are ordered separately.

### Frames

#### Target use and support modules

F7	Carestation® Aisys®, Avance®, Aestiva®, Aespire®, ADU anesthesia machines, Patient Side Module, E-modules
F5	Stand-alone use; E-modules, Patient Side Module, CARESCAPE Patient Data Module
Power requirements	16.7 V @ 4.6 A supplied by CPU-C1 Host through ePort interface cable
Power consumption	< 3 Watts idle (no modules)
F7	65 Watts (max)
F5	77 Watts (max)

Frames are ordered separately.

### Parameters and modules

Parameters	Patient Side Module	CARESCAPE Patient Data Module /Tram®
ECG	3, 5, 6, 10-lead wires	3, 5, 6**, 10-lead wires
SpO <sub>2</sub>	GE SpO <sub>2</sub>	Masimo SET®, Nellcor OxiMax®
NIBP	GE	GE DINAMAP® SuperSTAT™ algorithm**
InvBP	0 or 2	0 or 4
Temp	2	2, Optional with C.O.
Cardiac output	-	Optional with temperature

Parameters	E-Modules <sup>(3)</sup>	Tram and Tram-Rac <sup>®</sup> Modules
Multi parameter modules		
	E-PRESTN E-RESTN E-PRETN	Tram models: 451, 451M & 451N5 851, 851M & 851N5
InvBP & Temp	E-p <sup>(1)</sup> E-pp <sup>(1)</sup> E-PT	BP/ Dual Temp Module <sup>(2)</sup> BP Module <sup>(1)</sup> Dual BP Module <sup>(1)</sup>
SvO <sub>2</sub> & C.O.	E-COP E-COPSV	- -
Single parameter modules		
SpO <sub>2</sub>	E-NSATX E-MASIMO	SpO <sub>2</sub> Module Masimo SpO <sub>2</sub>
NMT	E-NMT	-
EEG	E-EEG	-
BIS	E-BIS	-
Entropy™	E-ENTROPY	-
Gas		
ms CO <sub>2</sub>	-	Capnostat Mainstream CO <sub>2</sub> Module
ss CO <sub>2</sub>	E-miniC	-
ms/ss CO <sub>2</sub>	-	CapnoFlex LF Module
ss CO <sub>2</sub> , O <sub>2</sub> & N <sub>2</sub> O	E-CO E-COV E-COVX E-CAiO E-CAiOV E-CAiOVX	-
Agents	E-CAiO E-CAiOV E-CAiOVX	-
Patient Spirometry	E-COV E-COVX E-CAiOV E-CAiOVX	-
Gas exchange/ metabolics	E-COVX E-CAiOVX	-

Parameter modules are ordered separately.

NOTE: For a complete list of compatible devices, including M-series modules, please refer to the CARESCAPE Monitor B850 Addendum for Device Compatibility

(1) Module measures invasive blood pressure only

(2) Module compatible for blood pressure only, not temperature measurement

(3) Acronyms for the parameters measured are as follows: P=invasive pressure; R=respiration rate, E=ECG; S=SpO<sub>2</sub>; T=temperature; N=NIBP; C=CO<sub>2</sub> and N<sub>2</sub>O; Ai=anesthetic agents and nitrous oxide with agent identification; O=O<sub>2</sub>; V=Spirometry; X=gas exchange

## Software options

Main software	Care-area specific software versions to optimize workflows: OR, PACU, CCU, ED, NICU
Other software options	Extended software options specific to each main software package.
Upgradeable with the CARESCAPE Life Upgrade Program	

## Networking

Compatibility	CARESCAPE Network
Features	Peer-to-peer communication with AVOA functionality, centralized viewing and remote alarm management
Network type	LAN
Interfaces	For a complete list of compatible networked devices, please refer to the CARESCAPE Monitor B850 Addendum for Device Compatibility

## Mounting

GCX compatible

## Paper recorder

Optional, PRN 50-M digital writer or network laser printer. See separate technical specifications for PRN 50-M digital writer. Paper recorders are ordered separately.

## Environmental specifications

Operating temperature	10°C to 35°C (50°F to 95°F)
Storage/transport temperature	-20°C to 60°C (-4°F to 140°F)
Operating humidity	15% to 90% (non-condensing)
Storage humidity	10% to 90% (non-condensing)
Operating altitude	700 to 1060 hPa; 3011 to -382 meters
Storage/transport altitude	500 hPa to 1060 hPa; 5,572 to -382 meters

## Warranty

One year. Extended service contracts available.

## Certifications

IEC 60601-1

CAN/CSA C22.2 No. 601.1-M90

IEC 60601-1-2

CE marking according to the Medical Devices Directive 93/42/EEC

For accessory information, please refer to CARESCAPE Monitor B850 Supplies and Accessories document.

For upgrade information, please refer to the CARESCAPE Life Upgrade Program.

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Our “healthymagination” vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality and efficiency around the world.

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