



# CARESCAPE Monitor B450

# For smart transport and bedside monitoring

The CARESCAPE\* Monitor B450 is an important component of the CARESCAPE monitoring platform. It is a lightweight bedside monitor that is robust enough to meet changing patient acuity and care area needs as well as capable of maintaining all bedside monitoring functions during intra-hospital transport.

#### **Exceptional clinical excellence**

- Enables you to use a wide parameter set with its compatibility with the CARESCAPE Patient Data Module (PDM), Patient Side Module (E-PSM) as well as single-width E-modules
- Consistent, innovative algorithms aid in accurate diagnoses, including Datex-Ohmeda sidestream CO<sub>2</sub>, 12SL\* diagnostic ECG with direct two-way MUSE\* ECG communication, DINAMAP\* SuperSTAT NIBP, Entropy\*, BIS\*\*, and your choice of GE TruTrak+\*, Masimo SET\*\* or Nellcor\*\* OxiMax\*\* SpO<sub>2</sub>

# Lightweight, intuitive design and simplified servicing

- Especially developed for the intra-hospital transport of patients, with the capability to attach and detach GE hemodynamic modules, E-PSM(P) or CARESCAPE Patient Data Module
- Designed for flexible acuity care settings, the Pages and Profiles functionality may increase workflow efficiency by allowing you to configure the monitor to unit standards and patient populations

- Exceptional alarm functionality enables remote bed-tobed viewing (Auto View on Alarms), quick adjustment to all parameter limits, defining parameter limit range(s), preventing specific alarms from being turned off and setting adjustments to meet patient changing conditions may help optimize your workflow and reduce alarm fatique
- Dedicated software and parameters for the OR, PACU,
   Critical Care, Emergency Care and NICU care areas make it easier to configure to your work patterns
- Remote service through InSite\* ExC provides updates and predictive maintenance to assist your biomed servicing capabilities

### Dependable data continuity and integration

- Provides continuous hemodynamic measurement during intra-hospital transport and also transfers trend data with the CARESCAPE Patient Data Module
- Wireless connectivity with GE's CARESCAPE Gateway enables communications to EMR systems through standard HL7 protocol
- Eases workflow and enables patient mobility with telemetry and combination monitoring capability
- Provides a peer-to-peer networking option that allows monitors to communicate and view information from other GE CARESCAPE monitors
- Supports networking with other GE Healthcare products including CARESCAPE CIC Pro, iCentral, MUSE\* ECG database, Unity Network\* ID and other products that run on the CARESCAPE Network



#### **Technical specifications**

#### Display

Size 12 in (diagonal)

Type Active matrix color TFT LCD

Resolution 1024 x 768 pixels (XGA)

Number of traces 6 (max)

Sweep speed 0.625, 6.25, 12.5, 25, 50 mm/sec

Configuration Automatic configuration according

to parameter availability. Manual configuration with up to 8 userconfigurable profiles for carespecific configurations, and up to 6 user-configurable display pages for

each profile

**Controls** 

Touch screen Standard

Power on Front of unit

Remote control (USB) Optional 11 keys to facilitate non

touch use: Alarm Setup, Monitor Setup, Procedures, Trends, Data & Pages, Print Waveforms, Freeze/ Snapshot, NIBP Auto, NIBP Start/ Stop, Parameters and Zero ALL

**Pressures** 

#### Parameters and modules

Parameters	Patient Side Module (E-PSM, E-PSMP)	CARESCAPE Patient Data Module (PDM)
ECG	3, 5, 6 and 10 leadwires	3, 5, 6 and 10 leadwires
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>2</sup>			
Multi parameter modules				
InvBP & Temp	E-P <sup>1</sup> , E-PP <sup>1</sup> , E-PT			
SvO <sub>2</sub> & C.O.	E-COP, E-COPSv			
Single parameter modules				
SpO <sub>2</sub>	E-NSATX, E-MASIMO			
NMT	E-NMT			
CCO	E-PiCCO			
EEG	E-EEG			
BIS	E-BIS			
Entropy*	E-ENTROPY			
Respiratory modules				
Sidestream CO <sub>2</sub>	E-miniC			
Sidestream CO <sub>2</sub> & O <sub>2</sub>	E-sCO, E-sCOV			
Sidestream CO <sub>2</sub> , O <sub>2</sub> , Agents & N <sub>2</sub> O	E-sCAiO <sup>3</sup> , E-sCAiOV <sup>3</sup>			
Patient Spirometry	E-sCOV <sup>3</sup> , E-sCAiOV <sup>3</sup>			

#### Parameter modules are ordered separately.

#### Software options

Main software ESP v2

Care-area specific software packages to optimize workflows: OR, PACU, ICU, NICU and ED

Other software options Extended software options specific

to each main software

 $<sup>^{1}</sup>$  Module measures invasive pressure only.

 $<sup>^2</sup>$  Acronyms for the parameters measured are as follows: P=invasive pressure; R=respiration rate, E=ECG; S=SpO $_2$ : T=temperature; N=NIBP; C=CO $_2$  and N $_2$ O; Ai=anesthetic agents and nitrous oxide with agent identification; O=O $_2$ : V=Patient Spirometry; s=single width.

 $<sup>^3</sup>$  Displayed data (including but not limited to TV, MV, RR, Raw and N $_2$ O) trends and alarms may vary depending on the host device. Specifications listed represent the capabilities of the modules. Always check the host device's User Manual for additional information.

# Performance specifications

Networking		Alarms		
Compatibility CARESCAPE Network, S/5 Network		Categories	Patient status and system status	
	MUSE ECG database, Unity Network ID	Priority	High, Medium, Low, Escalating and	
Features	Centralized viewing and remote		Informational In accordance with IEC 60601-1-8	
	alarm management with bed-to- bed viewing and AVOA functionality	Notification	Audible and visual	
Network type	LAN, WLAN (optional)	Audio pause, active alarms	2 min	
WLAN communication protocol (optional)	IEEE 802.11a/b/g	Audio pause, all alarms	2 or 5 min	
Operating frequency	2.4 GHz and 5 GHz	Trend		
Data rate	1 - 54 Mbps	1 min resolution	72h	
I/O Connectors	'	10 s resolution	30min	
Ethernet	3 RJ45 for IX, MC, Unity Network ID	2 s resolution	24h	
Serial Port	Available via USB converter	Snapshot		
Slave/independent scree	n 1 DVI-D out	15 s Waveform	400 snapshots	
USB Port	2 USB 2.0	ST	10 snapshots	
ePort	1 E-port	Events	999 events	
Analog output			Power specifications	
on CARESCAPE Patient Data Module.				
	on CARESCAPE Patient Data Module.	Power supply		
		Power supply Universal input voltage range	100 to 240 Vac +/-10%, 50/60 Hz	
Remote-On	on CARESCAPE Patient Data Module. Analog output connector (Mini- DIN 7) on the monitor frame is for Patient Side Module (PSM) use only. Remote power on control input for	Universal input voltage	100 to 240 Vac +/-10%, 50/60 Hz < 200 VA	
Remote-On	on CARESCAPE Patient Data Module. Analog output connector (Mini- DIN 7) on the monitor frame is for Patient Side Module (PSM) use only.	Universal input voltage range		
Paper recorder (optiona	on CARESCAPE Patient Data Module. Analog output connector (Mini- DIN 7) on the monitor frame is for Patient Side Module (PSM) use only.  Remote power on control input for anesthesia machine integration  I, in-built)	Universal input voltage range Power consumption	< 200 VA	
Paper recorder (optiona Method	on CARESCAPE Patient Data Module. Analog output connector (Mini-DIN 7) on the monitor frame is for Patient Side Module (PSM) use only. Remote power on control input for anesthesia machine integration I, in-built) Thermal dot array	Universal input voltage range  Power consumption  Protection class	< 200 VA Class I	
Paper recorder (optiona Method Horizontal resolution	on CARESCAPE Patient Data Module. Analog output connector (Mini-DIN 7) on the monitor frame is for Patient Side Module (PSM) use only. Remote power on control input for anesthesia machine integration I, in-built) Thermal dot array 24 dots/mm (600 dpi) @ 25 mm/sec	Universal input voltage range  Power consumption  Protection class  Grounding	< 200 VA Class I Hospital grade	
Paper recorder (optiona Method Horizontal resolution Vertical resolution	on CARESCAPE Patient Data Module. Analog output connector (Mini-DIN 7) on the monitor frame is for Patient Side Module (PSM) use only. Remote power on control input for anesthesia machine integration  I, in-built) Thermal dot array 24 dots/mm (600 dpi) @ 25 mm/sec 8 dots/mm (200 dpi)	Universal input voltage range  Power consumption  Protection class  Grounding  Cooling	< 200 VA Class I Hospital grade	
Paper recorder (optiona Method Horizontal resolution	on CARESCAPE Patient Data Module. Analog output connector (Mini-DIN 7) on the monitor frame is for Patient Side Module (PSM) use only. Remote power on control input for anesthesia machine integration I, in-built) Thermal dot array 24 dots/mm (600 dpi) @ 25 mm/sec	Universal input voltage range  Power consumption  Protection class  Grounding  Cooling  Battery (optional)	< 200 VA Class I Hospital grade Natural convection – no fans	
Paper recorder (optional Method Horizontal resolution Vertical resolution Number of recorder	on CARESCAPE Patient Data Module. Analog output connector (Mini-DIN 7) on the monitor frame is for Patient Side Module (PSM) use only. Remote power on control input for anesthesia machine integration  I, in-built) Thermal dot array 24 dots/mm (600 dpi) @ 25 mm/sec 8 dots/mm (200 dpi)	Universal input voltage range Power consumption Protection class Grounding Cooling Battery (optional) Type	< 200 VA Class I Hospital grade Natural convection – no fans Exchangeable Lithium-Ion	
Paper recorder (optional Method Horizontal resolution Vertical resolution Number of recorder waveforms	on CARESCAPE Patient Data Module. Analog output connector (Mini-DIN 7) on the monitor frame is for Patient Side Module (PSM) use only.  Remote power on control input for anesthesia machine integration  I, in-built)  Thermal dot array  24 dots/mm (600 dpi) @ 25 mm/sec  8 dots/mm (200 dpi)	Universal input voltage range  Power consumption  Protection class  Grounding  Cooling  Battery (optional)  Type  Number of batteries	< 200 VA Class I Hospital grade Natural convection – no fans Exchangeable Lithium-Ion 1 or 2	
Paper recorder (optional Method Horizontal resolution Vertical resolution Number of recorder waveforms Paper width Paper speed Mounting	on CARESCAPE Patient Data Module. Analog output connector (Mini-DIN 7) on the monitor frame is for Patient Side Module (PSM) use only. Remote power on control input for anesthesia machine integration  I, in-built) Thermal dot array 24 dots/mm (600 dpi) @ 25 mm/sec 8 dots/mm (200 dpi) 4  50 mm (2 in) 1, 5, 10, 12.5, 25, and	Universal input voltage range Power consumption Protection class Grounding Cooling Battery (optional) Type Number of batteries Voltage	< 200 VA Class I Hospital grade Natural convection – no fans  Exchangeable Lithium-Ion 1 or 2 10.8 V (nominal) 3.8 Ah per battery, 7.6 Ah with 2	
Paper recorder (optional Method Horizontal resolution Vertical resolution Number of recorder waveforms Paper width Paper speed  Mounting GCX compatible	on CARESCAPE Patient Data Module. Analog output connector (Mini-DIN 7) on the monitor frame is for Patient Side Module (PSM) use only. Remote power on control input for anesthesia machine integration  I, in-built) Thermal dot array 24 dots/mm (600 dpi) @ 25 mm/sec 8 dots/mm (200 dpi) 4  50 mm (2 in) 1, 5, 10, 12.5, 25, and 50mm/sec. (± 2%)	Universal input voltage range Power consumption Protection class Grounding Cooling Battery (optional) Type Number of batteries Voltage Capacity	< 200 VA Class I Hospital grade Natural convection – no fans  Exchangeable Lithium-Ion 1 or 2 10.8 V (nominal) 3.8 Ah per battery, 7.6 Ah with 2 batteries (min) 2 to 3 hours per battery, depending on configuration 3.5 hours, depending on	
Paper recorder (optional Method Horizontal resolution Vertical resolution Number of recorder waveforms Paper width Paper speed Mounting	on CARESCAPE Patient Data Module. Analog output connector (Mini-DIN 7) on the monitor frame is for Patient Side Module (PSM) use only. Remote power on control input for anesthesia machine integration  I, in-built) Thermal dot array 24 dots/mm (600 dpi) @ 25 mm/sec 8 dots/mm (200 dpi) 4  50 mm (2 in) 1, 5, 10, 12.5, 25, and 50mm/sec. (± 2%)	Universal input voltage range  Power consumption  Protection class  Grounding  Cooling  Battery (optional)  Type  Number of batteries  Voltage  Capacity  Charge time	< 200 VA Class I Hospital grade Natural convection – no fans  Exchangeable Lithium-Ion 1 or 2 10.8 V (nominal) 3.8 Ah per battery, 7.6 Ah with 2 batteries (min) 2 to 3 hours per battery, depending on configuration	

#### **Environmental conditions**

#### **Operating conditions**

Temperature 10 to 35°C (50 to 95°F)

Relative humidity 10 to 90% non-condensing

Storage conditions

Temperature -20 to 60°C (-4 to 140°F)

Relative humidity 10 to 90% non-condensing

#### **Physical specifications**

Dimensions (H  $\times$  W  $\times$  D) 29  $\times$  30  $\times$  16 cm

 $(11.4 \times 11.9 \times 6.2 \text{ in})$ 

Weight 5.0 kg (11.0 lb) with all options and

battery, without modules

#### Warranty

One year.

GE Healthcare P.O. Box 900, FIN-00031 GE, Finland

GE Direct United Kingdom: +44 (0)800 0329201

www.gehealthcare.com



For accessory information, please refer to CARESCAPE Modular Monitors Supplies and Accessories document.

© 2013 General Electric Company – All rights reserved.

GE and GE Monogram are trademarks of General Electric Company.

- \* Trademarks of General Electric Company.
- \*\* All third party trademarks are the property of their respective owner.

GE Healthcare reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation. Contact your GE Healthcare representative for the most current information.

GE Healthcare Finland Oy, a General Electric company, doing business as GE Healthcare.

GE Medical Systems Information Technologies, Inc. a General Electric Company, doing business as GE Healthcare.

GE Healthcare, a division of General Electric Company

EMEA DOC1381101 5/13

(Global version DOC1221577)