



# 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\*, BISTM, 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-to-bed 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 fatigue
- 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 user-configurable profiles for care-specific 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.

<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<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=Patient Spirometry; s=single width.

<sup>3</sup> Displayed data (including but not limited to TV, MV, RR, Raw and N<sub>2</sub>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.

### Software options

|                        |                                                                                                  |
|------------------------|--------------------------------------------------------------------------------------------------|
| Main software          | ESP v2<br>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                                         |

## Networking

|                                        |                                                                                                |
|----------------------------------------|------------------------------------------------------------------------------------------------|
| Compatibility                          | CARESCAPE Network, S/5 Network, MUSE ECG database, Unity Network ID                            |
| Features                               | Centralized viewing and remote alarm management with bed-to-bed viewing and AVOA functionality |
| Network type                           | LAN, WLAN (optional)                                                                           |
| WLAN communication protocol (optional) | IEEE 802.11a/b/g                                                                               |
| Operating frequency                    | 2.4 GHz and 5 GHz                                                                              |
| Data rate                              | 1 - 54 Mbps                                                                                    |

## I/O Connectors

|                          |                                                                                                                                                                            |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethernet                 | 3 RJ45 for IX, MC, Unity Network ID                                                                                                                                        |
| Serial Port              | Available via USB converter                                                                                                                                                |
| Slave/independent screen | 1 DVI-D out                                                                                                                                                                |
| USB Port                 | 2 USB 2.0                                                                                                                                                                  |
| ePort                    | 1 E-port                                                                                                                                                                   |
| Analog output            | Proprietary analog output connector on CARESCAPE Patient Data Module. Analog output connector (Mini-DIN 7) on the monitor frame is for Patient Side Module (PSM) use only. |
| Remote-On                | Remote power on control input for anesthesia machine integration                                                                                                           |

## Paper recorder (optional, in-built)

|                              |                                               |
|------------------------------|-----------------------------------------------|
| Method                       | Thermal dot array                             |
| Horizontal resolution        | 24 dots/mm (600 dpi) @ 25 mm/sec              |
| Vertical resolution          | 8 dots/mm (200 dpi)                           |
| Number of recorder waveforms | 4                                             |
| Paper width                  | 50 mm (2 in)                                  |
| Paper speed                  | 1, 5, 10, 12.5, 25, and 50mm/sec. ( $\pm$ 2%) |

## Mounting

|                            |
|----------------------------|
| GCX compatible             |
| FM Quick-Mount compatible  |
| Integrated carrying handle |

## Performance specifications

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### Alarms

|                            |                                                                                  |
|----------------------------|----------------------------------------------------------------------------------|
| Categories                 | Patient status and system status                                                 |
| Priority                   | High, Medium, Low, Escalating and Informational In accordance with IEC 60601-1-8 |
| Notification               | Audible and visual                                                               |
| Audio pause, active alarms | 2 min                                                                            |
| Audio pause, all alarms    | 2 or 5 min                                                                       |
| Trend                      |                                                                                  |
| 1 min resolution           | 72h                                                                              |
| 10 s resolution            | 30min                                                                            |
| 2 s resolution             | 24h                                                                              |
| Snapshot                   |                                                                                  |
| 15 s Waveform              | 400 snapshots                                                                    |
| ST                         | 10 snapshots                                                                     |
| Events                     | 999 events                                                                       |

## Power specifications

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### Power supply

|                               |                                 |
|-------------------------------|---------------------------------|
| Universal input voltage range | 100 to 240 Vac +/-10%, 50/60 Hz |
| Power consumption             | < 200 VA                        |
| Protection class              | Class I                         |
| Grounding                     | Hospital grade                  |
| Cooling                       | Natural convection – no fans    |

### Battery (optional)

|                     |                                                      |
|---------------------|------------------------------------------------------|
| Type                | Exchangeable Lithium-Ion                             |
| Number of batteries | 1 or 2                                               |
| Voltage             | 10.8 V (nominal)                                     |
| Capacity            | 3.8 Ah per battery, 7.6 Ah with 2 batteries (min)    |
| Charge time         | 2 to 3 hours per battery, depending on configuration |
| Run time            | 3.5 hours, depending on configuration                |
| Battery life        | 300 cycles to 60% capacity                           |

## Environmental conditions

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### 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

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|                        |                                                                |
|------------------------|----------------------------------------------------------------|
| Dimensions (H x W x D) | 29 x 30 x 16 cm<br>(11.4 x 11.9 x 6.2 in)                      |
| Weight                 | 5.0 kg (11.0 lb) with all options and battery, without modules |

## Warranty

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One year.

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

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GE imagination at work