

# GE Dash 2000

## Product Specifications

### Display

Size: 5.8-inch (diagonal)

Type: Monochrome LCD; optional color LCD

Resolution: 320 by 240 pixels

Number of traces: 3

Number of seconds/trace: 3.8 at 25 mm/sec

Sweep speed: 25 mm/sec (with erase bar)

Information window: Displays non-real-time information without obstructing the display of real-time information

Display organization: Prioritized by parameter

### Controls

Trim Knob control

Five hard keys: Silence Alarm, Graph Go/Stop, NBP Go/Stop, Function, and Power On/Off

### Alarms

Categories: Patient status and system status

Priority: 4 levels – Crisis, Warning, Advisory, Message

Notification: Audible and visual

Setting: Default and individual

Silencing: 1 minute, current alarm only

Pause: 5 minutes in Adult ICU mode, 3 minutes in Neonatal ICU mode, and 5 minute, 15 minute, or permanent pause in OR mode

Volume: Default 70%, 70 dB measured at 1 meter

## **ECG**

Standard leads available: I, II, III, V, aVR, aVL, and aVF

Leads analyzed simultaneously: I, II, III, and V (multi-lead mode)

Lead fail: identifies failed lead

Alarms: User-selectable upper and lower heart rate limits

## **Input specifications**

Voltage range:  $\pm 0.5$  mV to  $\pm 5$  mV with size 2x or 4x below 1 mV and with QRS width Adult ICU 70 to 120 ms Neonatal ICU 40 to 80 ms

Signal width: 40 ms to 120 ms (Q to S)

Heart rate range: 30 to 300 bpm

Input impedance:

Common mode:  $> 10 M^*$  at 50/60 Hz

Differential:  $> 2.5 M^*$  from dc to 60 Hz

Common mode rejection: 90 dB minimum at 50 or 60 Hz

## **Output specifications**

**Frequency response:**

**Display:**

Diagnostic: 0.05 to 40 Hz

Monitoring: 0.05 to 40 Hz

Moderate: 0.05 to 25 Hz

Maximum: 5 to 25 Hz

## **Paper:**

Recorder:

Diagnostic: 0.05 to 100 Hz

Monitoring: 0.05 to 40 Hz

Moderate: 0.05 to 25 Hz

Maximum: 0.05 to 25 Hz

Noise: <30  $\mu$ V RTI (referred to input)

## **Pacemaker detection/rejection**

Input voltage range:  $\pm 2$  mV to  $\pm 700$  mV

Input pulse width: 0.1 to to 2 ms

Rise time: 10 ms to 100  $\mu$ s

Over/under shoot: 2 mV (max.) with Diagnostic or Monitor filter setting and size 1x or 0.5x

Baseline drift: <0.5 mV/hour with a  $\pm 700$ -mV, 2-ms pacemaker pulse applied

## **Respiration**

Measurement technique: Impedance variation detection

Range:

Respiration rate: 0-200 breaths per minute

Base impedance: 100-1000 \* at 52.6 kHz

Detection sensitivity: 0.4 to 10 \* variation

Waveform display bandwidth: 0.1 to 1.8 Hz (-3dB)

Alarms: User-selectable upper and lower respiration rate limits and apnea limit

## **Temperature**

Number of channels: 1

## **Input specifications**

Probe type: YSI Series 400

Temperature range: 0°C to 45°C (32°F to 113°F)

Resolution:  $\pm 0.1^{\circ}\text{C}$

## **Output specifications**

Parameters displayed: TP

Accuracy: (independent of source)  $\pm 0.1^{\circ}\text{C}$

Alarms: User-selectable upper and lower limits

## **Noninvasive Blood Pressure**

Measurement technique: Oscillometric

Displayed parameters: Systolic, diastolic, and mean pressures, pulse rate, time of last measurement

Measurement modes: Manual, auto, and stat in Adult ICU and OR modes; manual and auto in neonatal mode  
Heart rate detection: 30 to 300 beats per minute

Total cycle time: 20 to 40 seconds typical (dependent on heart rate and motion artifact)  
Automatic cycle times: 0 to 24 hours

Auto zero: Zero pressure reference prior to each cuff inflation

Tubing length: 12 feet adult, 8 feet neonatal

Automatic cuff deflation: Cycle time exceeding 3 minutes (90 seconds neonatal), power off, or cuff pressure exceeds 300 mmHg (+10%) adult, 150 mmHg (+10%) neonatal

## **Cuff sizes:**

Disposable: Large adult, adult, small adult, pediatric, small pediatric, and infant

Reusable: Thigh, large adult, adult, child, and infant

Alarms: User-selectable upper and lower limits for systolic, diastolic, and mean pressures

## **Pulse Oximetry**

Parameters monitored: Arterial oxygen saturation (SpO<sub>2</sub>) and peripheral pulse rate (PPR)

SpO<sub>2</sub> range: 50 - 100%

PPR range: 20 - 250 beats per minute ( $\pm 1/2$  3 beats per minute)

Accuracy: Actual accuracy depends on probe. Please reference manufacturer's specifications.

SpO<sub>2</sub>:  $\pm 2\%$  (70 - 100% SpO<sub>2</sub>)  $\pm 1$  standard deviation  $\pm 3\%$  (50 - 69% SpO<sub>2</sub>)  $\pm 1$  standard deviation

PPR:  $\pm 3$  beats per minute

Alarms: User-selectable upper and lower limits for SpO<sub>2</sub> and PPR

## **Paper Recorder (Option)**

Method: Thermal dot array

Horizontal resolution: 480 dots/in @ 25 mm/sec

Vertical resolution: 200 dots/in

Number of waveform channels: three

Paper width: 50 mm (1.97 in)

Paper length: 25 m (95 ft)

Paper speed: 0.1, 0.5, 1, 5, 10, 12.5, 25, and 50 mm/sec

## **Analog Output ECG**

Gain: 1 V/mV  $\pm 10\%$

DC offset:  $\pm 100$  mV (max)

Noise: <5 mV peak to peak dc to 300 Hz

Frequency response: 0.05 Hz to 100 Hz -0/+7 Hz

## **Internal Battery**

Battery type: Nickel-cadmium (Ni-Cd)

Charge time: 1 to 4 hrs

Run time: 3 to 4 hrs

## **Environmental Specifications**

Power requirements: 90-264 VAC 50/60 Hz 500 mA

Power consumption: 40 W (fully loaded)

Cooling: convection

Heat dissipation: 135 Btu/hr (max)

## **Operating Conditions**

Ambient temperature: 10 to 40°C (50 to 104°F)

Relative humidity: 5 - 95% @ 40°C

## **Storage Conditions**

(do not exceed):

Temperature: -25 to 70°C (-13 to 156°F)

Relative humidity: 15 to 95%

## **Physical Specifications**

Height: 22 cm (8.5 in)

Depth: 20 cm (8 in)

Width: 27 cm (10.5 in)

Weight: 5.5 kg (12 lb) with all options

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## **GE Dash 3000**

### **GE Dash 3000**

The DASH® 3000 Monitor is made to withstand your demanding portable applications. Advanced capabilities allow you to reliably move a patient throughout your enterprise, while feature-rich, no-compromise performance at the bedside helps maximize equipment utilization.

Weighing no more than 12 pounds, regardless of configuration, this lightweight monitor is made to move with a patient. The compact, ergonomic package, complete with integral power supply, allows easy handling. And drop-test rugged design means the DASH 3000 is made to withstand your demanding portable applications.

The DASH 3000 also accommodates two invasive blood pressures, mainstream CO2 monitoring, and your choice of full arrhythmia, true 12-lead ECG with enhanced ST segment analysis, cardiac output and PA wedge procedures.

As part of the DASH family of monitors, the DASH 3000 is field upgradable and expansion enabled to leverage your investment over time. To ensure continuity of care, it supports 2-way wired or wireless networking, can import HIS demographic and lab data and can view other patients. And it looks and feels like other GE Medical Systems Information Technologies monitors, enabling users to confidently and efficiently transition from one monitor to the next, throughout your facility.

Plus, the DASH 3000's smart battery management system incorporates up to two user-accessible batteries. They feature a 4-5 hour run time and recharge in 2-4 hours, either internally or with a charger. Because the batteries can be changed

one at a time without loss of function, the DASH 3000 is specifically designed to help you maintain monitoring continuity.

- 8.4" Display, Transport with GE Ohmeda SpO2, stand alone, non-networked patient monitor.
  - English – U.S. 6ft. 1 (one) Lithium-Ion internally or externally rechargeable battery.
  - 4-Channel Integrated Thermal Printer.
  - Standard Handle.
  - Basic Software.
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## GE Dash 4000

### GE Dash 4000

By combining modularity and portability, the DASH 4000 Pro takes the flexible bed concept to a new level, allowing clinicians to bring the ICU to any patient or easily adapt to specific department needs.

### Features

- 10.4" large-format, full-color active matrix display provides convenient viewing from a distance
- The best selection of algorithms to reduce false arrhythmia alarms – Dash leads the industry in rejecting artifact from pacemakers
- GE Healthcare's exclusive blood pressure algorithms, DINAMAP classic and SuperSTAT improve speed, comfort and artifact rejection while retaining superior accuracy
- The SuperSTAT algorithm, available with the Masimo SpO2 option, assesses motion artifact to effectively distinguish signal noise
- Easy-to-use interface and color-coded patient cables

- Dash Monitors are lightweight, durable and ergonomic - Dash can be used wherever you need reliable patient monitor
  - Color-coded connectors simplify set-up
  - The optional wireless LAN ensures seamless transitions between hard-wired and wireless networking
  - Long-lasting batteries power Dash 4000 for extended use and help support facility-wide portability
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## Philips (HP) IntelliVue MP20 Junior

### Philips (HP) IntelliVue MP20 Junior

The IntelliVue family of networked patient monitors gives care teams throughout the hospital more of the information they need right at the patient's side. The Philips IntelliVue MP20 provides powerful monitoring capability and essential measurements in a compact package to match the pace and unique needs of intermediate care, ambulatory surgery, post-operative care, special procedures, lower acuity environments, and patient transfer. featuring highly flexible screen configurations designed to suit patient acuity, department protocols, or specific procedure requirements.

The IntelliVue MP20 monitor is easy to use and operate on a networked platform via wireless or wired connections. Through Philips intuitive Multi-Measurement Server and extensions, the MP20 and MP30 deliver the best-in-class clinical measurements including capnography, conventional diagnostic 12-lead ECG, non-invasive and invasive blood pressure, respiration, FAST-SpO2, temperature, BIS, and cardiac output.

For the same with features with touchscreen capabilities check out the Philips IntelliVue MP30.

### KEY ADVANTAGES

- Powerful monitoring and essential measurements in a compact package for a variety of care settings

- Highly flexible screen configurations for a range of patient acuity levels, protocols, and procedures
- Easy to use and operate on a networked platform that can span the hospital enterprise
- Multi-Measurement Server includes a collection of the most consistently required parameters in a single unit, which saves valuable space
- For patient transport and transfer, the MMS detaches and inserts into any other Philips IntelliVue monitor. Upon return to patient bed, it reconnects to IntelliVue and uploads stored transfer data without recabling or reconfiguring.
- Stores up to 8 hours of data
- Lightweight, only 13lbs. including Multi-Measurement Server and one battery
- Up to five hours battery operation with dual lithium-ion batteries
- Microstream CO2 extension includes optional invasive blood pressure/temperature port
- Capnography Extension choice of mainstream or Sidestream CO2 measurement in a variety of configurations
- Hemodynamic Extension includes cardiac output, continuous cardiac output using PiCCO technology, invasive blood pressure, and temperature. Additional invasive blood pressure port is optional.
- Touchscreen operation makes many functions accessible through simple, one-touch commands
- Wired and wireless connectivity with easy switching from one mode to another
- Navigation Point operation designed for easy information input and onscreen navigation
- Optional integrated recorder offers convenient documentation whenever

it's needed.

## **SPECIFICATIONS**

- Waveforms: Three (four, six optional)
  - Monitor screen display: one integrated 26 cm (10.4") color SVGA
  - Screen Navigation: Touchscreen, navigation point compatible (Touchscreen is available on MP30 only.)
  - Multi-Measurement Server (MMS): Compatible
  - Battery Operation: Optional
  - Networking Capability: Standard
  - Patient Population: Adult, pediatric, and neonates
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# **Welch Allyn Propaq CS**

## **Product Description**

Features a bright, full-color touchscreen display for continuous vital signs monitoring in hospital environments, during conscious sedation, and pre- and post-operative care.

## **Features**

- 3- or 5-lead ECG
- SpO2
- NIBP
- Pulse rate

- Respiration
- Temperature
- Continuous vital signs monitoring
- Optional features include: Sidestream, mainstream or dual stream capnography
- 1 or 2 invasive blood pressure channels
- Integrated printer
- Connectivity to Acuity Central Station (hospital)
- Neonatal, pediatric and adult modes
- Full patient alarms and apnea alarming
- Trending on all parameters