

B30 Patient Monitor

Flexible, affordable patient monitoring using patient side module, (E-PSM(P)W*) together with extension modules (N-FREC, N-FCREC, N-FC)

The B30 Patient Monitor includes a comprehensive set of parameters and the latest GE measurement technologies for accurate and reliable patient monitoring. The B30 Patient Monitor offers flexible monitoring from transportation monitoring to PACU, ICU and OR monitoring in settings where Anesthesia gas monitoring is not required.

The B30 Patient Monitor is a reliable, economical, portable monitoring solution that keeps you connected to the clinical intelligence you need to make informed care decisions.



- ECG, hemodynamic and CO₂ monitoring for a more complete picture of your patient. Up to six waveforms and four numerical digit fields can be displayed on the bright, large 10.4 inch color screen.
- Intelligent alarm system offers preset alarm limits for different parameters, and adjusts alarms in critical situations by sensing the duration, severity and the combination of different alarms.
- The detachable Patient Side Module and a battery life of up to 4.5 hours helps ensure constant power for continuous monitoring during intra-hospital transport.

- Connectivity to the iCentral central station gives you flexibility to monitor patients virtually anywhere.
- Multiple mounting solutions and accessories allow you to flexibly configure the workspace to meet your needs.
- Quick access keys to commonly used features give you fast access to relevant clinical details. You can also display 72-hour graphical and numerical trends for a retrospective review of your patient's progress.

*E-PSM(P)W includes E-PSMW and E-PSMPW



Technical data (Frame)

Display

Size	10.4 in
Type	Active matrix color TFT LCD
Resolution	SVGA (800 x 600)
Number of traces	Up to 6
Number of digit fields	Up to 4
Display layout and colors	User-configurable

Controls

ComWheel™, 7 function keys and 10 menu keys

Frame

Patient Side Module	E-PSMW or E-PSMPW
Extension Module	N-FC or N-FCREC or N-FREC
I/O connections	RS-232 computer serial output, Defibrillation synch, ECG and IBP analog outputs, Nurse call
Network	Compatible with S/5 Network and iCentral for centralized viewing and remote alarm management
Printing work	Laser printing capabilities: with net printer (serial/parallel converter, additional accessory)
Mounting options	Wall mount, roll stand, bedmount and table top, GCX compatible

Trends

Graphical	All parameters, selectable times from 20 minutes to 72 hours
Numerical	All parameters, sampled every 5 min, after NIBP measurement and with marker generated by user
Trend cursor	In both graphical and numerical trends
Minitrends	5 or 30 minute minitrends can be displayed for a continuous historical view

Alarms

Classification	Alarm system classified into three categories according to priority in critical care; color and audio tone coded
Adjustment	Central alarm display and adjustment page
Trending	10 min graphical minitrends referenced to set alarm limits

Power

Power requirement	100 to 240V ±10%, 50/60 Hz
Protection class	Class I
Battery	
Type	Exchangeable lithium-Ion, 2 pcs (max.)
Operation time	Up to 4.5 hours
Charging time	2 hours per battery

Environmental specifications

Temperature	
Normal	5°C to 40°C (41°F to 104°F)
Charging batteries	5°C to 35°C (41°F to 95°F)
Relative humidity	10% to 90% non-condensing

Physical specifications

Dimensions (HxWxD)	
with E-PSM(P)W	28 x 31 x 16 cm (11 x 12.2 x 6.3 in)
with E-PSM(P)W and N-FREC	28 x 35 x 21 cm (11 x 13.8 x 8.3 in)
Weight	
Frame only	5 kg (10.6 lb)
with E-PSM(P)W	5.8 kg (11.9 lb)
with E-PSM(P)W and N-FREC	6.8 kg (14.1 lb)

Certifications

IEC 60601-1 passed
CE marking according to Directive 93/42/EEC

Technical data (Module)

ECG

Lead type	3-lead (I, II, III) 5-lead (I, II, III, aVL, aVF, aVR, V)
Sweep speed	12.5, 25 or 50 mm/s
Gain range	0.2 to 5.0 cm/mV
Heart rate range	30 to 250 bpm
Filter	Monitor: 0.5 to 30/40 Hz ST: 0.05 to 30/40 Hz Diagnostic: 0.05 to 150 Hz (50/60 Hz power supply, 3dB)
Defibrillation protection	5000 V, 360 J
Pacemaker detection	
Range	2 to 700 mV
Pulse width	0.5 to 2 ms
Arrhythmia analysis	Severe arrhythmia
ST segment analysis	
ST segment range	-9 to +9 mm (-0.9 to +0.9 mV)
Display resolution	0.1 mm (0.01 mV)
ST Trends	Up to 72 hours

Respiration

Method	Transthoracic impedance
Respiration range	4 to 120 resp/min
Accuracy	±5% or ±5 breath/min whichever is greater
Sweep speed	slow 0.62 mm/s, fast 6.25 mm/s
Gain range	0.1 to 5 cm/Ohm

Note: Impedance respiration measurement is intended for patients over three years old.

Invasive blood pressure

Number of channels	2
Measurement range	-40 to 320 mmHg
Measurement accuracy	±5% or ±2 mmHg, whichever is greater
Transducer sensitivity	5 µV/V/mmHg, 5 VDC, max. 20 mA
Display resolution	1 mmHg
Waveform display	
Range	-30 to 300 mmHg
Scales	Adjustable in 10 mmHg increments
Pulse rate	
Measurement range	30 to 250 bpm
Accuracy	±5% or ±5 bpm, whichever is greater
Resolution	1 bpm

NIBP

Display parameters	Systolic, diastolic and mean arterial pressure
Operation mode	Manual, Auto, STAT
Measurement principle	Oscillometric with linear deflation
Measurement range	Adult 25 to 260 mmHg Child 25 to 190 mmHg Infant 15 to 140 mmHg
Pulse rate range	30 to 250 bpm
Accuracy	±5 mmHg
Display resolution	1 mmHg

Note: NIBP measurement is intended for patients weighing over 5 kg (11 lb).

SpO₂

Technology	GE Datex-Ohmeda
Display range	0 to 100%
Measurement accuracy	100 to 70%, ±2 digits, ±3 digits during clinical patient motion; 69 to 0%, unspecified
Display resolution	1 digit (1% of SpO ₂)

Pulse rate	
Display range	30 to 250 bpm
Display resolution	1 digit (1 bpm)
Accuracy	±5% or ±5 bpm

Temperature

Numerical display	T1, T2, T2-T1
Measurement range	10° to 45°C (50° to 113°F)
Measurement accuracy	±0.1°C (without probe)
Display resolution	0.1°C (0.2°F) (at 25 to 45°C with reusable probes)
Probe	Defibrillator-proof YSI 400 series probes or GE approved probes

Carbon dioxide (CO₂)

Measurement range	0 to 20% (0 to 20 kPa, 0 to 150 mmHg) CO ₂ concentration 0 to 15% ±0.2 vol% + 2% of reading CO ₂ concentration 15 to 20% ±0.7 vol% + 2% of reading
Resolution	0.01%
Rise time	< 300 ms
Sampling line length	6 m (max.)
Warm-up time	1 min for operation 30 min for full specification
Respiration Rate (RR)	
Breath detection	1% variation in CO ₂ level
Measurement range	4 to 80 breaths per minute
Accuracy	±1 bpm in the range 4 to 20 bpm ±5% in the range 20 to 80 bpm
Resolution	1/min

Note: CO₂ measurement is intended for use with patients weighing over 5 kg (11 lb) only.

Recorder

Operating principle	Thermal array
Waveform printout	Selectable 1, 2 or 3 waveforms
Numerical printout	HR, NIBP, P1, P2, T1, T2, Et/FiCO ₂ , RR
Tabular trend printout	HR, SpO ₂ , P1, NIBP and EtCO ₂
Paper speed	1, 6.25, 12.5, 25 mm/s
Paper width	50 mm
Print resolution	
Vertical	8 dots/mm
Horizontal	24 dots/mm

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and technology. Our expertise in medical imaging
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biopharmaceutical manufacturing technologies is
enabling healthcare professionals around the world
to discover new ways to predict, diagnose and treat
disease earlier. We call this model of care “Early Health.”
The goal: to help clinicians detect disease earlier,
access more information and intervene earlier with
more targeted treatments, so they can help their
patients live their lives to the fullest. Re-think,
Re-discover, Re-invent, Re-imagine.

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