

# HOSPITAL



## LM MONITORING

### Modular Patient Monitoring

- LM5 – full modular patient monitoring
- LM7 – patient monitoring with standard hardware configuration and additional slots
- LM8 – full modular premium monitoring
- A2E – patient monitoring for inner hospital transportations

# LM5

Global Leading all-in-one modular patient monitor

**Standard Configuration:** 3/5 lead ECG, BLT digital SpO<sub>2</sub>, NIBP, 2-TEMP (EMS3), touch screen, rechargeable Lithium battery

**Optional modules:** 2-IBP module, 2-TEMP module, Nellcor SpO<sub>2</sub> module, Masimo SpO<sub>2</sub> module, SunTech NIBP module, RM module, Sidestream CO<sub>2</sub> module, MicroFlow CO<sub>2</sub> module, Mainstream CO<sub>2</sub> module, Mainstream AG module, Sidestream AG module, ICG module, CO module, EEG module, BIS module

**Other options:** 12 lead ECG, thermal printer, rolling stand, wall mount, external display, Wireless Lan (WiFi), analog output (ECG or IBP)

- 12.1" (800 x 600) anti-glare color TFT LCD display
- Powerful measurement, ergonomic and flexible design
- Rechargeable Lithium battery can work more than 3 hours
- Fanless cooling-down system keeps the monitor working quietly
- Supports various input ways (touch screen, prompt knob, keyboard, mouse), easy to operate
- Dozens parameters with various modules assembled as need, easy upgrade, save replacement cost



### Seamless transport solution, EMS can capture all monitoring information through post-operative care

- The simplest way to transport a patient: unplug and go. EMS with display, alarm, rechargeable battery and trend storage, provides fast and convenient monitoring during patient transfer
- Compact design, easily carried by patient, allowing patients the freedom to roam, provides the best quality of care
- 12 Lead ECG display in same screen
- Gravity sensor, automatically changes the display direction, touch screen, easy to operate
- Parameter: ECG, SpO<sub>2</sub>, PR, RESP, TEMP, NIBP (Standard), Masimo SpO<sub>2</sub> (optional), Masimo Rainbow SpO<sub>2</sub> (optional), Nellcor SpO<sub>2</sub> (optional), 12 lead ECG, IBP (optional)
- Inner Hospital transport adapter available

**3.5" (320 x 240):** Color TFT LCD display

**1 Hour:** Battery work time

**0.6 KGS:** Extremely Compact

**8 Hours:** Trend storage

**480 Groups:** NIBP data review



### Unique high end parameter module can monitor the critically ill patient

**Masimo rainbow SET Pulse CO-Oximetry module:** Oxygen saturation (SpO<sub>2</sub>), pulse rate (PR), perfusion index (PI), Total hemoglobin (SpHb), Oxygen content (SpOC), carboxyhemoglobin (SpCO), methemoglobin (SpMet), pleth variability index (PVI)

**Anesthesia gas module:** Sidestream or main stream, automatic agent ID, paramagnetic O<sub>2</sub> (only side stream)

**ICG module (Non invasive CO):** Non invasive method to measure patient's cardio output and hemodynamic status, safe and easy operation

**EtCO<sub>2</sub> module:** Mainstream/Microstream, various options can suit for intubated patients, ventilation relied patients and non intubated patients

**BIS (Bispectral Index) module:** BIS provides depth of consciousness and sedation monitoring for use in the OR, ICU and clinical settings, helps the anesthesiologist to be more confident, more accurate and more secure to achieve their treatment plan

# LM7

## Flexible Modular Design and Comprehensive Monitoring

The LM7 monitor provides the most frequently used vital parameters including 3/5 lead ECG, NIBP, SpO<sub>2</sub>, 2 TEMP and RESP.

Thanks to plug-and-play modular structure, advanced monitoring functions such as Masimo SpO<sub>2</sub>, Nellcor SpO<sub>2</sub>, SunTech NIBP, 2-IBP, C. O. EtCO<sub>2</sub> or Multi-gas it can be flexibly added according to specific clinical requirements. Additionally, modules with advanced parameters can be shared among beds and are compatible with the modular monitor LM5, which offers a flexible and efficient solution and allows hospitals to make the most of their monitoring investment by sharing modules and reducing the total cost of ownership.

- 15" (768 × 1024) TFT LCD display, 3 module slots
- The LM7 monitor is designed to meet the requirements of various hospital environment. The parameters of the main unit fit every standard monitoring demand. The optional modules upgrade the LM7 monitor to suit acute care monitoring.
- The LM7 monitor's built-in recorder and automatic event recording function guarantee the integrity of monitoring data.
- The LM7 monitor's intuitive interface includes mass alarm set up, large font, and view-other bed functions. This interface together with the touch screen, rotary knob and customized quick keys, makes the LM7 monitor exceptionally user friendly.
- The LM7 monitor is applicable for the emergency room, general ward, operation room, ICU, etc.
- Low power consumption and fanless design, can achieve high requirements of dust-off, without noise and pollution-free in clinical departments
- Optimized circuit design, reduced energy consumption, battery run time increase 25%
- Various expandable interfaces: VGA output, ethernet, USB × 2, defib sync, nurse call, rack for extension module
- The LM7 monitor achieves long time monitoring of vital sign stably by using BM100 A all-in-one-module engine

New streamlined appearance design possesses modernized style and beautiful shape

360 degrees visible three-level alarm for physiological values and technology

It is effective to avoid liquid moistening equipment with IPX1 waterproof level

Brand new user operation software, unlimited upgrade functions, perfect user experience

Plug-and-play design and multi-parameter module design, which can be upgraded easily

High resolution color LCD touch screen and user friendly display interface meets clinical requirements to operate and observe



## Best Choice for Acute Care Monitoring

**Standard configuration:** 3/5 lead ECG, RESP, SpO<sub>2</sub>, PR, NIBP, 2-TEMP, Lithium battery, touch screen

**Optional modules:** 2-IBP, Masimo SpO<sub>2</sub>, Nellcor SpO<sub>2</sub>, SunTech NIBP; Sidestream/MicroFlow/Mainstream EtCO<sub>2</sub>, Mainstream/Sidestream AG, CO

**Other options:** 12 lead ECG, printer, rolling stand, wall mount, VGA, external display, WiFi, SD memory card, analog output (ECG or IBP)

The LM7 modular monitor has been designed to meet everyday clinical requirements, integrated seamlessly into the hospital workflow.

In acute care, a patient monitor must be reliable, easy to use and upgradeable with advanced parameters, while allowing data access when and where needed. In case of patient transport, the device should be easy to carry.

With its lightweight and plug-and-play modular design, its powerful functions and intuitive user interface, the LM7 patient monitor is therefore the best choice for acute care.

## Advanced parameters through easy upgrades

<b>Masimo SpO<sub>2</sub> / Nellcor SpO<sub>2</sub>:</b>	Fastest response time at the highest sensitivity, unmatched reliability during challenging conditions of motion and low perfusion.
<b>SunTech Advantage NIBP:</b>	Developed based on more than 25 years medical research of BP measurement, according to clinical test results SunTech Advantage NIBP technology shows highly accurate.
<b>Microstream/Mainstream EtCO<sub>2</sub> / Sidestream EtCO<sub>2</sub>:</b>	Sidestream/Microstream/Mainstream EtCO <sub>2</sub> are optional. Various options can be suitable for intubated patients, ventilation relied patients and non-intubated patients.
<b>Mainstream AG / Sidestream AG:</b>	Anesthesia gas module, measures the concentration of Et and FiCO <sub>2</sub> , O <sub>2</sub> , N <sub>2</sub> O and ISO, ENF, DES, SEV, HAL
<b>2-IBP:</b>	Max. 8 IBP measurements with waveform, Systolic, Diastolic, Mean Pressure on ART, CVP, ICP, PA, LAP etc. to fulfill different positions of invasive blood pressure measuring demands.
<b>CO:</b>	Enables hemodynamic monitoring using thermo dilution method. Provides an important measurement of the blood flow and oxygen delivery to the tissues.

## Various software functions meet clinical requirements

<b>Short trend:</b>	Maximum 168 hour graphic and tabular trends
<b>Other bed:</b>	Displays other bedside monitor's all parameters and one waveform, supports user defined parameter display
<b>12 lead ECG:</b>	Captures and reviews the diagnostic waveforms of 12-lead ECG
<b>Oxy-CRG-Screen:</b>	Oxy-cardiorespirographyscreen combines the compressed trends of heart rate, respiration, and oxygenation levels in an easy to interpret display. Oxy-CRG is an indicator of breathing efficiency and brain maturity



# LM8

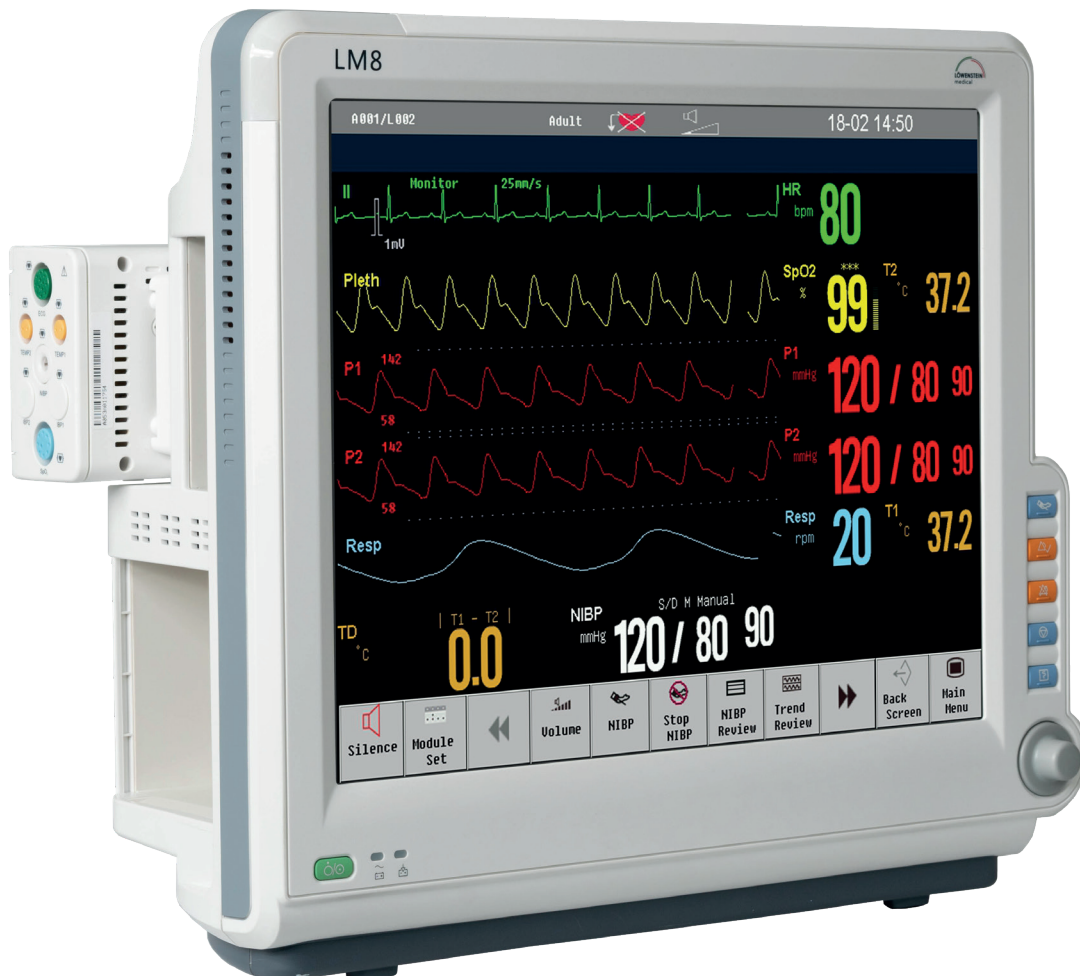
## Global Leading all-in-one modular patient monitor – Premium Product

**Standard Configuration:** 3 / 5 lead ECG, BLT digital SpO<sub>2</sub>, NIBP, 2-TEMP (EMS3), touch screen

**Optional modules:** 2-IBP module, 2-Temp module, Nellcor SpO<sub>2</sub> module, Masimo SpO<sub>2</sub> module, SunTech NIBP module, RM module, Sidestream CO<sub>2</sub> module, MicroFlow CO<sub>2</sub> module, Mainstream CO<sub>2</sub> module, Mainstream AG module, Sidestream AG module, ICG module, CO module, EEG module, BIS module.

**Other options:** 12 lead ECG, thermal printer, rolling stand, wall mount, external display, Wireless Lan (WiFi), analog output (ECG or IBP), rechargeable Lithium battery

- 17" anti-glare color TFT LCD display
- Powerful measurement, ergonomic and flexible design
- Two rechargeable Lithium batteries can work more than 2 hours
- Fanless cooling-down system, keep the monitor working quietly
- Support various input ways (touch screen, prompt knob, keyboard, mouse), easy to operate
- Dozens parameters with various modules assembled as need, easy upgrade, save replacement cost



## Combined transport monitor and multi-measurement module

**Standard configuration:** 3/5 lead ECG, NIBP, BLT Digital SpO<sub>2</sub>, 2-TEMP, touch screen, rechargeable Lithium ion battery

**Optional:** 12 lead ECG, 2-IBP, Masimo Rainbow Set SpO<sub>2</sub> (SpHb, SpCO, SpMet, SpOC, PVI), Nellcor SpO<sub>2</sub>

### Key Features

- High resolution color LCD screen, full screen touch control
- Gravity sensor, automatic adjustment of the display angle
- Compact and lightweight to ensure that patients are free to move and provides the best service
- Rechargeable Lithium battery, 12V DC input
- Provides fast and easy patient care during the patient's transport
- Optional waterproof first aid transport carry bag, special designed accessory pockets, perfect for outdoor use
- EMS is an all-in-one module, compatible for the LM5 and LM8 monitor; it can upload patient's monitoring data to bedside LM5 and LM8 monitor to realize seamless transport monitor
- OR, intra-hospital transportations, ICU and general ward



### Powerful, accurate measurement

- 7/12 lead ECG waveform display in one screen
- Dual alarm light, independent physiological alarm and technology alarm
- Precise arrhythmia analysis, ST analysis
- 8 hours trend storage, 480 group NIBP review
- Gold standard Masimo SpO<sub>2</sub> is accurate during low perfusion and patient movement



LM5 with Leon plus



LM7 with Leon plus



# LÖWENSTEIN medical

**Sales and Service:**

Löwenstein Medical  
Arzbacher Straße 80  
56130 Bad Ems  
Germany  
T: +49 2603 9600-0  
F: +49 2603 9600-50  
info@hul.de  
www.hul.de

*The images contain optional accessories which can be ordered in addition. Please inquire further information.*

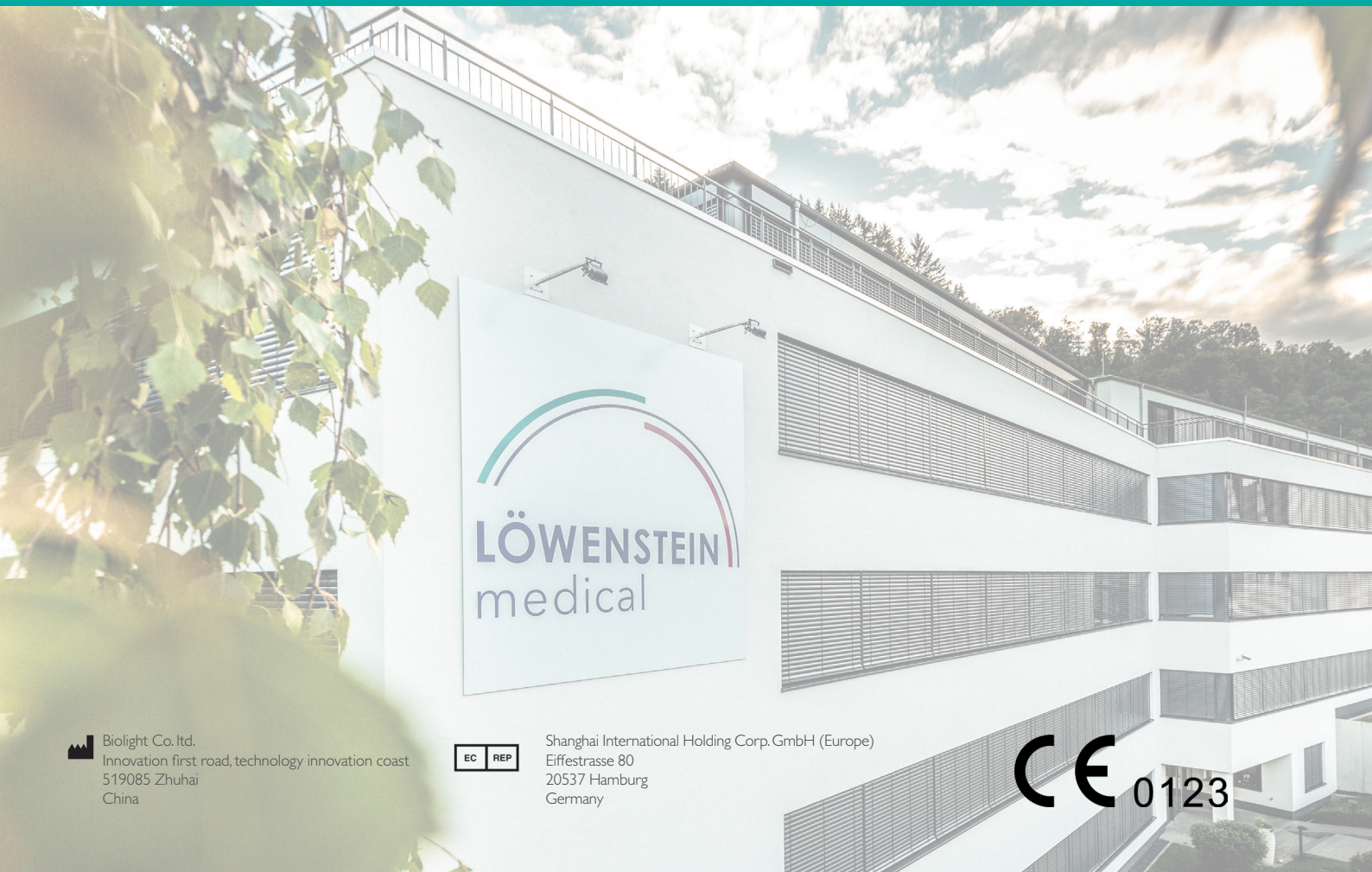


p10372en2006

To the website:



All rights reserved. Subject to technical changes.



Biolight Co. Ltd.  
Innovation first road, technology innovation coast  
519085 Zhuhai  
China



Shanghai International Holding Corp. GmbH (Europe)  
Eiffestrasse 80  
20537 Hamburg  
Germany

CE 0123