# que sensing technology

## User-friendly

### ★ Easy-to-view display

Easy to view crisp TFT color LCD screen with 10 traces display. One ECG waveform and numeric data are always displayed even with review windows.

### ★ Touch screen

A touch screen allows easy and intuitive operation. Just touch the place on the screen you want to see or change. A Home key takes you to the main screen from any screen.

### ★ Short trend

You can view 30-minute short trend with real time waveform, and change the length of the short trend display with your finger.

## Innovative technology

### ★ PWTT triggered NIBP measurement

PWTT triggered NIBP measurement increases the chance to detect sudden change in blood pressure.

**PWTT**

- Peak of R-wave
- ECG
- Peripheral pulse wave
- PWTT
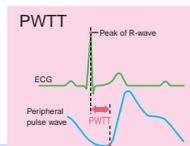
**PWTT**

PWTT (Pulse Wave Transit Time) has a correlation to blood pressure in most cases. PWTT is calculated from ECG and SpO₂ non-invasively.

| Blood pressure | PWTT |
|---|---|
| UP ↗ | Shorter ↔ |
| DOWN ↘ | Longer ↔ |

During periodic NIBP measurement, if PWTT exceeds a threshold it triggers NIBP measurement.
(uses Nihon Kohden patented technology)

### ★ Enlarged numeric display

An enlarged numeric display lets you see the patient condition from a distance.

### ★ Free-writing patient name

You can directly write the patient name on screen with your finger or an optional touch pen. Any characters and figures can be displayed. (not available on the network)

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# Life Scope A

## Bedside Monitor

## BSM-5105K
## BSM-5135K
### (with built-in multigas unit)

# Meets all your needs
## Flexible parameters & User-friendly

*Fighting Disease with Electronics*

**NIHON KOHDEN**

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# Nihon Kohden Monitoring System NetworK

### ★ LS-NET (LifeScope Networking)

You can connect to Nihon Kohden central and bedside monitors using Ethernet and TCP/IP (LS-NET). (An optional QI-101P network card is required.)

### ★ Wireless Networking

By attaching an optional ZS-900PK transmitter (optional holder DI-590P required) to the monitor, you can transmit waveforms and parameter data to a Nihon Kohden telemetry central monitor or multi-patient receiver.

## Major options

For full list of options and consumables, see the Technical Data separately available

**Recorder module, WS-510P**

**Cart, KC-005P**

Wall mount, KG-951P
Network card, QI-101P
Network printer card, QI-111P
Battery, X060

**SpO₂ probe, BluPRO®**

**Reusable type,** P225F Washable

**Disposable type,**
P201A (adult finger or toe)
P201B (child finger or toe)
P201C (neonate instep)

**CO₂ sensor**

P903 for Semi-quantitative method
P801 Airway adaptor, 50 pcs

P905 for Quantitative method
R802 Airway adaptor, adult, 30 pcs
R803 Airway adaptor, child, 30 pcs

This brochure may be revised or replaced by Nihon Kohden at any time without notice.

**NIHON KOHDEN**

# Supports patient care with unique sensing technology

## Flexible parameters with MULTI connectors

### ★5 MULTI connectors for flexible monitoring

Five MULTI connectors are provided to give high flexibility in the selection of parameters. When you plug the sensor cable into a MULTI connector, it automatically detects the type of parameter and starts measuring.

**Configured parameters:**
ECG, respiration (impedance), $SpO_2$, NIBP, temperature (2ch), $CO_2$[*1], $O_2$[*1], $N_2O$[*1], anesthetic agents[*1]

**MULTI connector parameters:**
blood pressure (max 5ch), temperature (2ch), cardiac output, respiration (thermistor), $FiO_2$[*2], $CO_2$[*2](mainstream),
*1: With optional Multi Gas Unit for BSM-5105K
*2: Cannot be measured with Multigas parameters

### *ICU/CCU*

For intensive monitoring, BSM-5105K

**Intensive monitoring**
5 MULTI connectors allow high flexibility in parameters for each patient's unique conditions.

### *OR*

with Anesthesia Gas parameters, BSM-5135K

**Built-in anesthetic gas measurement**
Anesthetic gas measurement is provided as standard.

• Short warm-up time
• Flexible sampling flow rate (70 mL/min to 200 mL/min)

**Parameters:** $CO_2$, $O_2$, $N_2O$, anesthetic agents (Halothane, Isoflurane, Enflurane, Sevoflurane, Desflurane)

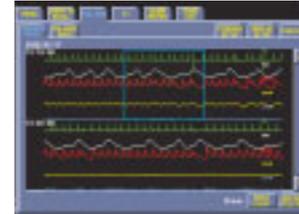Anesthetic gas window

## Large data storage and powerful review

### ★Alarm history

You can review the numeric data of alarm occurrences from the alarm history table. You can also review the wave by jumping to the full disclosure screen from the alarm history table.

### ★Multi parameter full disclosure

Max 30 hours of ECG and other 4 traces can be filed and reviewed.

### ★Multi-template arrhythmia analysis

100 arrhythmia episodes for 8 seconds each can be stored using an editable multi-template arrhythmia analysis method which provides more reliable arrhythmia information.

### ★Trendgraph/trend list

Up to 36 hours of trendgraphs of all parameters, and 120 sets of trend list data and 120 sets of NIBP list data can be stored and reviewed.
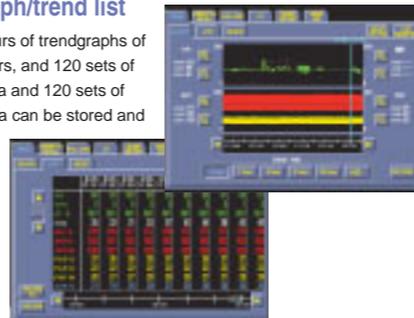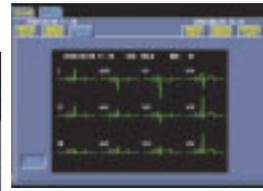
### ★ST recall

In order to easily review ST change, 500 files of 12-lead ST can be recalled.

## High performance

### ★12-lead ECG measurement and analysis

Simultaneous 12-lead ECG with 10 electrode measurement provides highly reliable ECG data. 12-lead ECG analysis is also provided.

### ★Interbed

You can view some information of other LifeScope series bedside monitors in the Ethernet network (LS-NET). The Interbed screen displays two waveform, numeric data and alarm of each bed or 8 patients numeric data.
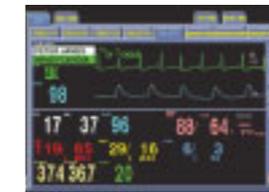
Note: Interbed display does not replace the central monitor's function.

### ★3 alarm level indicator

A wide-viewing alarm indicator at the top of the monitor can be seen clearly from a distance. It lights in red or yellow to indicate the severity of the alarm.
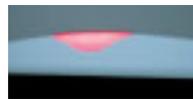
### ★Data from external monitor (option)

With an optional interface, external equipment such as a ventilator or BIS monitor can be connected and data can be displayed with other parameters.

with BIS monitor          with ventilator