Life Scope J is based on our more than half a century of experience manufacturing medical equipment

More flexible, more user-friendly, higher reliability

*Nihon Kohden continues to evolve the patient monitor*
OR

**Easy to review the necessary information**

Various parameter modules and units, from basic parameters to multi-gas and Flow/Paw. Also you can review the data from external units on the same screen.

Dual displays provide different sets of information for the surgeon and anesthesiologist.

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**ICU/CCU**

**High performance for intensive monitoring and easy operation for medical care staff**

Enhanced ECG monitoring and variety of review displays for intensive care.

Flexible components and easy operation by touch screen, mouse, keyboard and remote controller.

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**NICU**

**Consideration for neonates**

An OCRG (Oxygen-Cardio-Respirogram) screen allows monitoring of respiration wave, real-time heart rate and SpO2 trends on one screen.

Various sensors, probes and cuffs are designed especially for neonatal monitoring.
1. SMART Cable™ System (MULTI Connector)

Nihon Kohden’s proprietary SMART Cable™ technology miniaturizes circuitry found in conventional modules, and embeds that capability into the cable. With the SMART Cable™ system, you get complete modular flexibility at a significantly reduced cost and without the inconvenience associated with typical modular systems!

The module is in the cable!

All conventional technology of module system is integrated into SMART Cable™ System, which allows you to add parameters without modules.

*with 19-inch display (optional)
Configured Parameters:
ECG, Respiration (Impedance), SpO₂, NIBP, Temperature (2 channel)

SMART Cable™ System Parameters:
SMART Cable™ technology is available for Blood Pressure, Cardiac Output, ETCO₂, FIO₂, temperature and thermistor respiration monitoring. As new parameters are developed, Nihon Kohden will continue to develop additional SMART Cable™ modules, guaranteeing your monitoring investment against obsolescence.

* SMART Screen Builder
With SMART Screen Builder, when you plug SMART Cable™ into the main unit, the monitor automatically detects the parameter and adjusts the screen layout. You can start measuring instantly without inconvenient screen setup.

2. Configurable Display
15-inch display is standard. Locally purchased display can also be configured.

You can choose whatever display size you want. With an optional video board, you can use a non-mirroring dual display. For example, during operation, the surgeon can see all vital signs on one display and the anesthesiologist can see dedicated anesthetic parameters on another display with a different screen layout.

An optional video splitter lets you have a mirroring screen.
High Flexibility

3. Customized Screen Layout

10 screen layouts can be customized for different monitoring sites.

4. Module Expansion and External Devices

With optional units you can add other parameters such as CO₂ (sidestream) and anesthetic gases. With optional modules you can add BIS, CO₂ (sidestream), EEG and Flow/Paw. Furthermore, with an optional interface, external devices such as a ventilator, BIS and CCO monitor can be connected.
1. SMART Data Review

Review screens can be synchronized with each other.

**Full Disclosure Waveforms**
Up to 24 hours of selected 5 waveforms

**Graphic and Tabular Trends/NIBP Trends**
- Up to five 24-hour trendgraphs of selected 4 parameters
- Up to two 24-hour 2 trend tables of all measured parameters
- 120 sets of NIBP data

**Multi-template Arrhythmia Analysis**
100 eight-second arrhythmia episodes.
Multi-template arrhythmia analysis provides more reliable arrhythmia information.

**ST Recall**
1,440 ST-change files of 12-lead ST.

**Alarm History**
2,000 numeric data of alarm occurrences.

**Hemodynamics Trend**
300 hemodynamics data items.
2. Calculation and Analysis

12-lead ECG Measurement and Analysis
Simultaneous 12-lead ECG with 10 electrode measurement provides highly-reliable ECG analysis.

Drug Calculation
The drug calculation screen calculates the infusion rate required to give a drug to a patient during infusion.

Respiration Calculation
To calculate dynamics, a calculation value used as the respiration dynamics index is calculated based on input data.

3. Short Trend
A Short Trend shows a 30-minute trendgraph for a selected parameter. This is especially useful for unstable patient condition such as during anesthesia introduction and awaking. You can change the width of the trendgraph by touching it with your finger.
4. User Friendly Interface
You can operate the monitor by touch screen, keyboard, mouse or remote controller.

5. Effective Alarm System
The alarm indicator on top of the monitor can be clearly seen at a distance. The alarm indicator is also synchronized with heart rate, blood pressure or SpO₂.

6. PWTT Triggered NIBP Measurement (Nihon Kohden patented)
PWTT (Pulse Wave Transit Time) triggered NIBP measurement increases the chance to detect a sudden change in blood pressure. PWTT can be calculated from ECG and SpO₂ non-invasively. If PWTT exceeds a threshold during periodic NIBP measurement, it triggers NIBP measurement.

* Nihon Kohden patented PWTT technology. (US Patent No. 5564427)
7. Monitoring System Network

**Interbed**
Patient data of 16 Life Scope bedside monitors in an LS-NET monitoring network can be monitored on this bedside monitor. You can view numeric data and 2 waveforms of any one patient, or numeric data of 8 patients on one window.

*LS-NET (Life Scope Network)*
Nihon Kohden central and bedside monitors can be connected via Ethernet LAN and TCP/IP (LS-NET).

**Net Konnect**
With optional NetKonnect, you can review real-time patient data anytime and anywhere from your PC with a web browser.

**HL7 Gateway**
An HL7 gateway connects the LS-NET monitor network to the HIS (Hospital Information System). With the HL7 gateway, vital sign data in the bedside monitor can be transferred using HL7 protocol.

**Life Scope Network**
Support patient care with unique sensing technology

**BluPRO® SpO₂ probes**

<table>
<thead>
<tr>
<th>Reusable type (water resistant and durable)</th>
<th>Disposable type</th>
</tr>
</thead>
<tbody>
<tr>
<td>P225F finger</td>
<td>P203A adult finger</td>
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<tr>
<td>P225G multi-site</td>
<td>P203B child finger</td>
</tr>
<tr>
<td>P311G finger-tip</td>
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</tbody>
</table>

**CO₂ Sensor kit (mainstream)**

For non-intubated and intubated patients

- CO₂ sensor kit, semi-quantitative method: P907
- Disposable naso-oral adapter, for oxygen cannula adjustment, 30 pcs: V923
- Airway adapter for intubated patients, 30 pcs: R804

For intubated patients

- CO₂ sensor kit, quantitative method: P905
- Airway adaptor, adult, 30 pcs: R802
- Airway adaptor, child, 30 pcs: R803

For a full list of options and consumables, see the technical data separately available.