

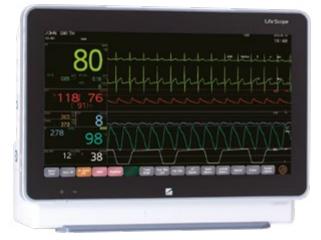
Bedside Monitors CSM-1500/1700 Series

## Patient Monitoring that matters to You









CSM-1501 (12.1 inch)

CSM-1502 (15.6 inch)

## Better Outcomes, better Future

#### Now, what is desired in Medical Practice?

Academic research reveals that it is an early recovery of patients, better prognosis and preventive medical care. Life Scope G5/G7 is designed to be a new platform to realize such medical care.

Nihon Kohden has been focused on the medical field over 60 years and we have been developing innovative Human Machine Interfaces, starting from our first electroencephalograph.

These breakthrough technologies make invisible patient information visible and support more accurate diagnosis.

The information obtained from various devices is connected to an integrated system through the Life Scope G5/G7. The data will be analyzed and used to select an optimal treatment for each patient and provide early preventive measures.

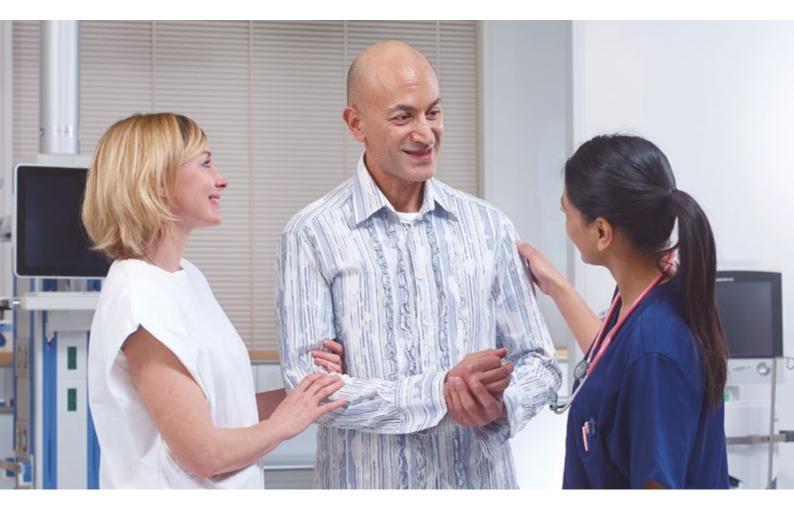
With Life Scope G5/G7, we would like to be your partner to realize the future of medical care Together.





CSM-1701 (15.6 inch)

CSM-1702 (19 inch)



## Holistic Care Platform

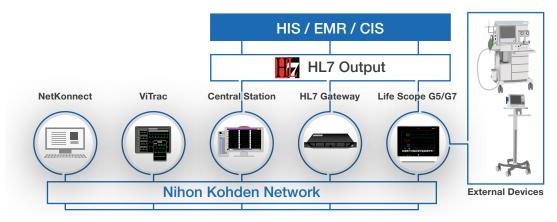
## Integrating information obtained from various devices



## Integrated Data

The importance of evidence-based practice increases day by day. Clinicians who are seeking more advanced treatment may be struggling to collect the data more efficiently.

Life Scope G5/G7 can send the patient vital sign data including the data from external devices to the hospital information system directly or through a gateway using the HL7 protocol. This helps you review the trends of patient vital sign data or perform statistical analysis of pathology.



The importance of data management has been increasing more and more in recent years. Life Scope G5/G7 can be interfaced with various devices and the data including data from external devices will be sent to an integrated system.

### Superior Transportability

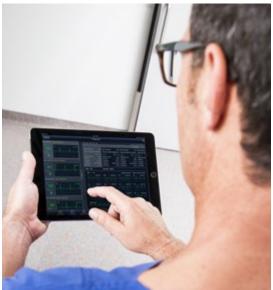
Using a Life Scope PT as an input box enables superior transportability. To transport the patient, just slide out the Life Scope PT. The patient information, including trends and waveforms, will be transferred to the destination monitor and central monitor to create one seamless patient record.



### Anywhere Anytime

ViTrac The ViTrac viewer software allows clinicians to access monitoring information on multiple patients anywhere anytime on their mobile devices.





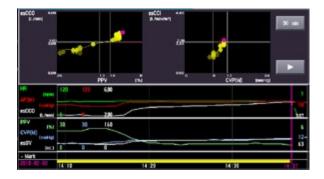
# Preventive Intervention

## **Better Outcomes**

Optimizing fluid administration during and post operation can lead to benefits such as a shorter length of stay and lower complications.

Nihon Kohden's hemodynamics graph provides a more intuitive approach to diagnostic and therapeutic decision making in hemodynamic management. This new tool provides a visual Frank-Staring curve to help the clinician easily see the direction and trend of hemodynamic change.

You can select appropriate hemodynamic parameters from invasive to non-invasive depending on the patient's condition.



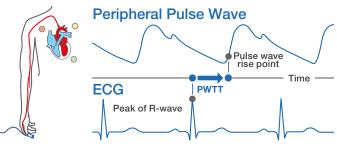


The Hemodynamic Unit supports PiCCO, ProAQT and CeVOX technologies with one module.

## Non-invasive Hemodynamics Monitoring

ESCCO (estimated continuous cardiac output) determines the cardiac output using Pulse Wave Transit Time (PWTT) and standard monitoring parameters – ECG, SpO<sub>2</sub> and NIBP.

EsCCO provides real-time, continuous and non-invasive cardiac output measurement alongside the familiar vitals sign parameters. With no additional running costs or accessories, esCCO is a very effective and cost-saving solution.

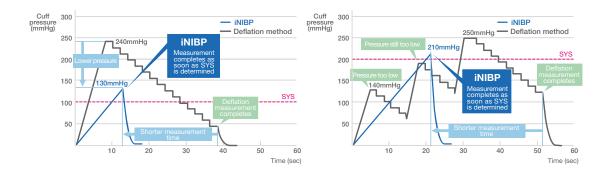


PWTT derived from ECG and pulse oximetry signal.

### Improving Patient Safety in Hemodynamics Management



Our iNIBP technology detects systolic and diastolic pressure during cuff inflation. Moreover, with our PWTT (Pulse Wave Transit Time) you can trigger non-invasive blood pressure measurements whenever required.



**PWTT** (Pulse Wave Transit Time) triggered NIBP measurement increases the chance of detecting a sudden change in blood pressure. When PWTT is set to ON, the monitor calculates the estimated NIBP systolic pressure using PWTT and, if it exceeds the alarm limit of NIBP systolic pressure, NIBP is subsequently measured automatically during periodic NIBP measurement.

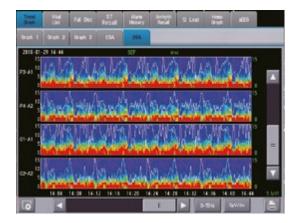


## Human Machine Interface

## See More, Act Fast

**Cereb**Air Continuous NeuroMonitoring is a highly valuable tool in the ER and ICU, giving you a better indication of the brain's state for comatose patients and helping you identify when the brain is at risk or when neuronal injury is occurring.

Simply connect our compact EEG module to the Life Scope G5/G7 monitor to examine up to eight channels in real time. This enables quick data review with various trends including Density Spectral Array (DSA), Compressed Spectral Array (CSA) and amplitude-integrated EEG (aEEG).



The combination of CerebAir and innovative gel type EEG electrodes enables you to prepare the patient for EEG monitoring within 5 minutes, a process which usually takes more than 30 minutes.





## **ESICM** recommendations on the use of **EEG** monitoring in critically ill patients for:

- Non-convulsive status epilepticus
- Comatose patients with unexplained and persistent altered consciousness
- Comatose patients after cardiac arrest

Consensus statement from the neurointensive care section of the ESICM: Intensive Care Med (2013)

## ERC recommendations for post-resuscitation care:

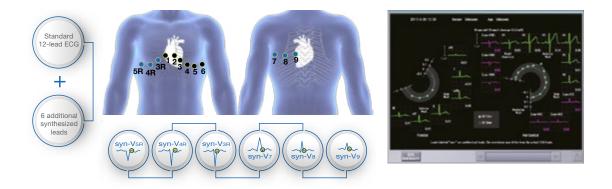
- Continuous electroencephalography (EEG) is recommended to detect seizures after cardiac arrest
- Consider continuous EEG to monitor patients with a diagnosed status epilepticus and effects of treatment

Section 5 of the European Resuscitation Council Guidelines for Resuscitation 2015.

#### Identify Invisible Ischemia

**SUFEC**<sup>18</sup> When Acute Myocardial Infarction is suspected, the measurements of a 12-lead electrocardiogram are not always enough. Our exclusive technology synECi18, has 6 additional synthesized leads to provide more information for right ventricular and posterior wall.

With synECi18, you can take advanced care decisions to reduce the time to reperfusion without adding any additional procedure.



#### Ensuring Quality of Care during sedation

Recommended by current clinical guidelines\*, capnography is one of the most reliable non-invasive methods to continuously monitor the patient's respiratory condition.

Cap-ONE is Nihon Kohden's unique mainstream  $CO_2$ sensor that monitors both intubated and non-intubated patients. As the world's most durable, smallest, lightest, and fastest mainstream  $CO_2$  sensor for oral and nasal breathers, cap-ONE offers easy airway management.

Cap-ONE mask is an originally designed open-face oxygen mask for patients who are receiving supplemental oxygen. In combination with our Cap-ONE sensor, it can detect respiratory depression, reduce the cost of repeated arterial-blood-pressure gas (ABG) tests and avoid serious complications in all care levels.



\*American Society of Anaesthesiologists (ASA) and Anesthesia Patient Safety Foundation (APSF)

# Efficient Operation Throughout the Hospital

## Smart Cable System – Unique Modular Technology



When you plug a Smart Cable<sup>™</sup> into a MULTI socket, it automatically detects the parameter and starts measuring. The combination of fixed and flexible MULTI socket parameters\* allows flexible monitoring for different patient conditions.

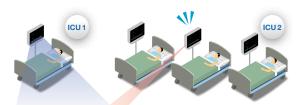
Get complete modular flexibility at a significantly reduced cost, and avoid inconveniences associated with traditional modular systems.



\*Available parameters depend on the unit

## Solution for Staff Shortage

Do you have a situation where you have to manage multiple patients? The interbed function will support such an environment. You can use any bedside monitor to check the patients' vital information and the alarm status of other monitors in the network, even if there without a central monitor. Numeric data for 20 patients or numeric data and 2 waveforms for one patient can be displayed on the interbed screen.



Multiple beds window



When an alarm occurs in ICU 2, a monitor in ICU 1 alarms and indicates the alarm on the Interbed window.

Individual bed window

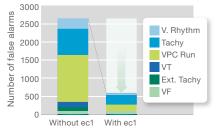


Touch the screen of the patient to display detailed data.

## High Accuracy ec1 Arrhythmia Analysis



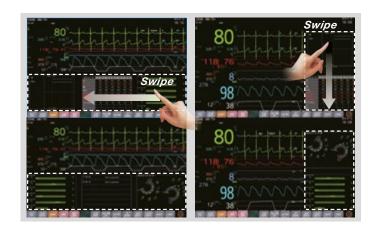
If there are too many false alarms, you may miss noticing when a patient's condition becomes critical. Our ec1 arrhythmia analysis has been evaluated against public arrhythmia databases as well as Nihon Kohden's own ECG database, providing an 80% reduction of false alarms. Afib detection and QTc/QRSd measurement are also available.



Life Scope G5/G7 contributes to efficient operation throughout your hospital. Increasing efficiency gives you more time for your patients.

### Vital Signs always on sight

Life Scope G5/G7 allows reviewing previous data without hiding the current vital signs and waveforms. Just swap the side or bottom of the screen and select from three pre-assigned review screen.



### Quick Access to change settings

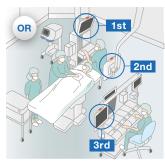
You can customize the frequently used settings such as alarms and sensitivity directly on the home screen. There is no need to open setting windows that will hide current patient data.



## Flexible Installation for Your Needs

The flexible configuration of the Life Scope G5/G7 meets a variety of hospital needs. For example, in the open heart surgery room, with Life Scope G5/G7, while the surgeon is watching the basic vital parameters, the anesthesiologists can review all

parameters including anesthetic parameters on the other screen with another screen layout. A heart-lung machine operator can see other vital information on a separate third screen.





 Interactive
 2nd
 Non-interactive
 Brd
 Interactive, Sound/Alarm indicator

 Configuration
 example



## Improving Healthcare with Advanced Technology

Since its foundation back in 1951, Nihon Kohden's mission has been to improve the quality of life with advanced technology. We provide solutions for diagnosis, critical care, clinical information, and in vitro diagnostics - and we are dedicated to collaborate with you to meet the challenges of healthcare today and tomorrow.

Visit www.nihonkohden.com to find out more.

NIHON KOHDEN EUROPE GmbH Raiffeisenstrasse 10, 61191 Rosbach, Germany Phone: +49 6003 827 0, Fax: +49 6003 827 599 Internet: https://eu.nihonkohden.com, E-mail: info@nke.de

NIHON KOHDEN CORPORATION

1-31-4 Nishiochiai, Shinjuku-ku, Tokyo 161-8560, Japan Phone: +81 (3) 59 96-80 36, Fax: +81 (3) 59 96-81 00 Internet: www.nihonkohden.com

