



July 24, 2018

MinebeaMitsumi and Ricoh Start Sales of Bed Sensor System for Nursing Care Market

- MinebeaMitsumi and Ricoh will release the jointly developed "Ricoh Mimamori Bed Sensor System" on July 30, 2018
- High-precision sensors are placed on the bed legs, enabling no-contact/non-invasive (no pain) detection of information such as body movements and reference weight.
- Features various functions such as "Detection of Leaving Bed," "Activity History Report," "Simultaneous Monitoring," and "Reference Weight Report". IoT technology such as sensors and wireless contribute to improved user safety, stress relief, family peace of mind, and quality of care, and reduced workload for nursing care workers.

MINEBEA MITSUMI Inc. (Representative Director, Chairman & President (CEO & COO) Yoshihisa Kainuma, hereinafter "MinebeaMitsumi") and Ricoh Co., Ltd. (President and CEO: Yoshinori Yamashita, hereinafter "Ricoh") have jointly developed the "Ricoh Mimamori Bed Sensor System" which can monitor the vital information of a user such as body movements in the bed and reference weight with high precision. Ricoh will release the product on July 30, 2018 for the nursing care market.

The "Ricoh Mimamori Bed Sensor System" places high-precision sensors on the four casters of the bed, enabling monitoring of the user's activity with a PC or mobile device without touching the user on the bed and without the inconvenience of additional equipment.

With the increasingly aging society, greater social security costs and the lack of care workers are serious problems. Since the Mimamori Bed Sensor System can remotely detect when the user sits up, care workers can respond quickly, preventing falls, leading to maintaining ADL (Activities of Daily Living) and improving QOL (Quality Of Life). In addition, the record of body movement data enables care workers to understand the user's life rhythm, enabling efficient anticipatory rounds, reducing stress on the user, and at the same time contributing to reducing the workload of nursing care workers.

MinebeaMitsumi and Ricoh entered into a joint business development agreement to commercialize the bed sensor system in May 2017. They have incorporated the views of nursing care workers through efforts such as practical verifications at multiple nursing care facilities during development.

Ricoh Japan Co., Ltd., a domestic sales company of the Ricoh Group, is responsible for sales and will provide full support from installation and set up to monitoring, utilizing its customer base built up through sales of solutions to nursing care providers and its service structure of 428 locations nationwide. Initially, the nursing care market will be targeted, and in future the companies will jointly work on business development of products that meet the needs of various other customers, such as the home nursing care market.



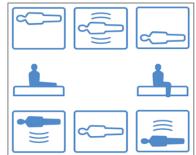


<Main Features of the New Product "Ricoh Mimamori Bed Sensor System">

1. "Detection of Leaving Bed Feature" that detects the activity of the user on the bed and displays eight patterns

-Detects minute movements of the user using highprecision load sensor technology and displays the activity of the user on the bed such as movement, sitting up, sitting position, and leaving the bed in eight patterns. Nursing care workers can see the status at a glance, leading to reduction of risks such as falling.

-Since carers can always check the status remotely using a PC or mobile device, they can visit the user at an appropriate timing, reducing the user's stress due to excessive visits and reducing the workload of carers.



2. "Activity History Report Feature" that displays a list of activity history reports for 24 hours x 14 days

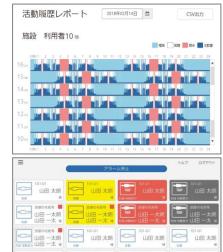
-By recording the users' sleep/waking/leaving the bed status over a day and listing it in a report format, carers can understand the user's life pattern. This feature can be used in various situations, such as explaining the user's living conditions to the family, creating and reviewing care plans and handing over between carers' shifts.

3. "Simultaneous Monitoring Feature" that allows carers to monitor up to 20 beds* simultaneously

-Carers can check the status of users on beds for up to 20 beds simultaneously.

-Thanks to the easy-to-understand color scheme and layout that is specialized for the monitoring point, nursing care staff can observe the state of residents efficiently even when there are few staff, such as at night, and prioritize according to the necessity of assistance.

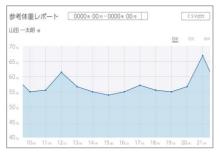
 $\ ^{\star}$ When setting up more than 21 beds, the server system must be expanded.



4. "Reference Weight Report Feature" that makes weight measurement work more efficient with sensor detection

-Sensor detection measures the weight of users efficiently, which is normally troublesome and time-consuming, supporting the understanding of the user's health condition through long-term management.

-Date and time, monthly, and long-term weight fluctuations can be provided in a report, facilitating information sharing with the user's family and cooperating with other medical institutions.



<New Product "Ricoh Mimamori Bed Sensor System" Standard Price (tax excluded)>

| Ricoh Mimamori Bed Sensor System Type C1 | 200,000 yen |
|--|-------------|
| Ricoh Mimamori Bed Sensor System Type C1 Expansion Kit | 180,000 yen |
| Service fee (1-4 units) Monthly/unit | 1,900 yen |
| Service fee (5-20 units) Monthly/unit | 1,800 yen |
| Service fee (more than 21 units) Monthly/unit | 1,700 yen |

^{*} First year free warranty included. Maintenance from the second year is chargeable.

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| About the MinebeaMitsumi Group |

On January 27, 2017, Minebea Co., Ltd., which mainly manufactures machined components such as bearings, motors, sensors, and other electronic devices, became a wholly owned subsidiary of Mitsumi Electric Co., Ltd., an electronic devices and components manufacturer. The two companies merged their management teams and made a new start with the company name MinebeaMitsumi.

This integration has resulted in the creation of a comprehensive manufacturer of high-precision components with 64 manufacturing bases in 17 countries and around 100,000 employees. (MinebeaMitsumi Group consolidated sales for the fiscal year ended March 31, 2018 was 879.1 billion yen).

MinebeaMitsumi contributes to the era of IoT (Internet of Things) as a provider of Electro Mechanics Solutions®*. The company combines a wide range of advanced technologies ranging from ultra precision machining technology such as bearings, to motors, sensors, semiconductors and wireless technologies to create value through "Difference" that goes beyond conventional ideas.

For more information, please click here: http://www.minebeamitsumi.com/

| About the Ricoh Group |

The Ricoh Group provides products, service solutions, production printing, industrial products, digital cameras and other products centered on imaging equipment for offices in approximately 200 countries and regions around the world. (Ricoh Group consolidated sales for the fiscal year ended March 31, 2018 was 2,063.3 billion yen).

Since its foundation over 80 years ago, Ricoh has been providing high technical capabilities and outstanding customer service and actively working towards a sustainable society.

EMPOWERING DIGITAL WORKPLACES The Ricoh Group empowers the transformation of various workplaces together with customers through innovation of technology and services.

For more information, please click here: http://jp.ricoh.com/

^{*} Separate installation fee, service registration fee, etc. required.

^{*} Electro Mechanics Solutions is a registered trademark of MinebeaMitsumi Inc. Registration number: 5322479.