

*Press Release*

## Taikisha Develops **“Air Infection Block Plus,”** a Transportable High-performance Air Barrier Unit Can Be Easily Installed in Hospitals and Clinics without Special Isolation Wards, such as Negative Pressure Rooms

**--It Blocks Air Migration and Reduces the Potential Risk From Viral Infection among Healthcare Workers.--**

Taikisha Ltd. (Head Office: Shinjuku-ku, Tokyo, Japan; Representative Director, President: Koji Kato) has developed **“Air Infection Block Plus,”** which ensures Healthcare workers operability in medical activities while reducing the risk of droplet transmission while caring patients with COVID-19. **“Air Infection Block Plus”** drastically reduces the contamination concentration via micro-droplet and droplet nuclei by air-flow control technology. The air flow curtains covers healthcare professionals providing auxiliary jet and active induction air flow into air-inlets maintaining sufficient Airflow cutoff. **“Air Infection Block Plus”** also prevents the occurrence of secondary infection by adopting an additional aid of sterilization effect on HEPA filter.

### ■ Development Purpose

As the number of infections by Novel corona virus increases, several cluster infections in hospitals have also been found. Taikisha proposed a virus infection prevention system for Healthcare workers from the viewpoint of social contribution through innovative technology development focused in air-conditioning markets for many years. “Air Infection Block Plus,” a transportable high-performance air barrier unit that can reduce the risk of exposure to the virus infection simply through installation in a required place such as when Healthcare professional performs medical procedures with patients in face-to face or when medical examinations via specimen collection for PCR tests, etc. Air Infection Block Plus protects healthcare professionals with a "unidirectional air flow" that has a centralized configuration of the air curtain and the air inlet on the patient's side. It prevents the spread of virus by partial virus-removal dust collection system and recirculating filtered air in closed or crowded places.

<SDGs (Sustainable Development Goals) related to this subject>



### ■ Features and overview of Air Infection Block Plus

Air Infection Block Plus blocks bidirectional air migration with the air curtain positioned at the opening of the partition between patient and the healthcare worker. Combined air flow technology ; the auxiliary jet and active attraction to the air inlet-, Air Infection Block Plus blocks infected individual's exhaled breath and coughs coming thorough the partition to the upper bodies of healthcare workers who are managed to take care of patients in face-to-face. Moreover, by adopting the sterilization/enzyme HEPA filter PACMAN\*1, sterilization and virus inactivation\*2 by lytic enzymes can be expected from this partition-type air barrier unit. As one of the features of this unit, which has no hood, small and space saving. Easy to move and install. Active ventilation on the patient's side can reduce the potential risk of infection to 1/10 of the

recommended contamination concentration level even when a healthcare professional assists the patient on patient's side. The sliding function of the transparent resin panel in the central opening ensures the adjustment of the opening according to the treatment posture. The body of the unit is equipped with a pre-filter, which extends the longevity of the HEPA filter. It offers an additional advantage in increasing the ventilation frequency so the entire room air can be kept clean.

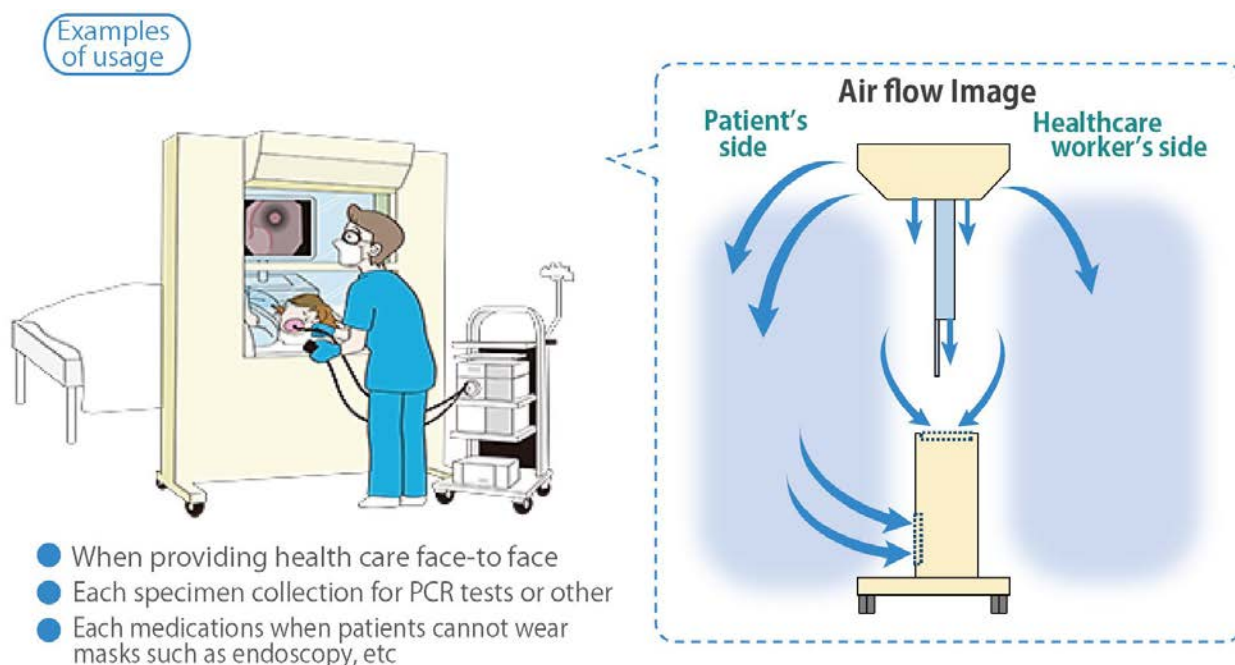
## ■ Specifications

<b>Filter</b>	ABSOLUTE FILTER PACMAN Model: N1-1LEA -620300 BS <Filter scan test Qualified> Filter Size: 620 x 300 x 150 Efficiency: PAO test (99.97% or higher on 0.3μm particles)
<b>Main Body</b>	<ul style="list-style-type: none"> <li>• Melamine plated copper</li> <li>• Transparent resin panel with adjustable transparent resin panel for opening</li> <li>• Equipped with casters</li> </ul>
<b>Size</b>	1800 (W) x 700 (L) x 2000 (H) or less
<b>Fan Volume</b>	9.9CMM x 250Pa 0.14kW x 0.7A
<b>Input Voltage</b>	Single-Phase AC 100V, 50Hz / 60HZ 0.14KW x 0.7A
<b>Product Weight</b>	Approx. 190 Kg

※1 ABSOLUTE FILTER PACMAN is provided by Kondoh Industries, Ltd.

※2 Proprietary enzyme technology enables the enzyme filter to dissolve the envelope shell of the virus and theoretically ensures the inactivation of virus having envelopes.

## ■ Sample Image



## ■About Taikisha Ltd.

Taikisha is an engineering group that creates an optimal environment and space for people's lives and manufacturing based on its advanced technologies related to energy, air and water. Backed by its history dating back more than 100 years since its foundation, Taikisha contributes to solving environmental issues faced by customers and handing down the rich global environment to future generations by capitalizing on its solution technologies centering on energy saving and environmental load reduction technologies, as well as its global networks around the world.

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