

NEWS RELEASE

NSG Group to Drive New Business Development - Launches Mobile Real-time PCR Device -

Tokyo, JAPAN (April 10, 2019) – NSG Group (NSG) today outlined an initiative by its Business Innovation Center (BIC) to drive new business development and announced the launch of the mobile real-time PCR device.

Established in July 2018 to lead new business development, BIC is focused on commercializing NSG's promising glass technologies in the new glass business areas, including "Life Science" (safety of water and food, environment and academia), "IoT, Cloud" (5G, sensors, filters), "Energy Conversion" (functional material) and "Industry 4.0" (digital manufacturing).

BIC's first new product is *PicoGene*®*PCR1100*. This PCR* device enables DNA tests such as the analysis of gene expression, single nucleotide polymorphism, genetic modification and the detection of bacteria and virus in a mobile setting. Only the large PCR devices placed in specialized laboratories have been able to perform. PCR devices test DNAs by repeatedly cooling and heating polymerase, a DNA enzyme, to accelerate the synthesis of the targeted DNA.

Equipped with a compact fluorescence detector utilizing NSG's proprietary SELFOC® micro lens *PicoGene*®*PCR1100* enables rapid, high-precision DNA testing anywhere. Its unique features include compact size (can be carried by one hand), light weight (about 560g), high speed measurement (about 10 minutes**), high accuracy (as accurate as a large PCR device) and energy saving (powered by the external DC5V-3A battery).

PicoGene®*PCR1100* is expected to be useful in a variety of areas, such as environmental testing (ecological survey, alien species identification, etc.), water quality inspection (dialysis water, drinking water, pure water, warm bath water etc.), food hygiene (detection of bacteria/virus, ingredients, allergens, genetically modified food, etc.) and education (academic research, science education etc.). Under the initiative by BIC, NSG will actively pursue the development of new businesses.

*PCR: Polymerase Chain Reaction

** Subject to change with the targeted DNA and testing environment

NSG Group (TSE 5202) is one of the world's largest manufacturers of glass and glazing products for the architectural, automotive industry and technical glass sectors. With around 27,000 employees, NSG Group has principal operations worldwide and sales in over 100 countries. <http://www.nsg.com>

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Mobile real-time PCR device *PicoGene[®]PCR1100*



- Size : 200×100×50 mm
- Weight : approx. 560 g
- Measuring time : approx. 10 min.*
- Power : DC 5V-3A battery
- Measurement accuracy : equivalent to a large-scale PCR equipment
- Base price : 798,000 JPY (excl. tax)**
- Measurement chip : 39,800 JPY (50 chips)
(excl. tax)
(Suggested retail price)

*Subject to change with the target DNA and testing environment.

**This product is for sale in Japan only. Price and specifications are subject to change without notice. The models for overseas use are currently under development.

For Research Use Only

This product is not a medical device and sold only for testing and research use. Not for use in medical diagnosis or treatment under any circumstances.

For more detail about the product, please visit:

<https://pcr-nsg.jp/>