

## PRESS RELEASE

April 25, 2023  
Alps Alpine Co., Ltd.

---

High environment-resistance performance that allows detection even under rainfall,  
vapor, and dust floating conditions

**A compact multi-use milli-wave radar sensor of wireless setting,  
"Type 1A1M" will be released from IDEC ALPS Technologies Co., Ltd.**

---

Alps Alpine Co., Ltd. (TSE: 6770; President & CEO: Toshihiro Kuriyama, Headquarters: Tokyo) has established a joint company, IDEC ALPS Technologies Co., Ltd. (Representative Director & President: Tomonori Nishiki, Headquarters: Osaka) with IDEC Corporation (TSE: 6652; Representative Director & President: Toshiyuki Funaki, Headquarters: Osaka) in September 2021 and been developing products aiming for "contributing to a safe and secure society through the provision of new HMI value." We here announce the release of our first product, a compact multi-use millimeter-wave radar sensor of wireless setting, "Type 1A1M." The release date is scheduled to be Tuesday, May 16, 2023.

### Product Overview

Multi-use millimeter-wave radar sensors can detect the presence or absence of the object up to a distance of approximately 10 meters, the distance to the object, the reflection intensity of the object, and the designated object only, by sensing through irradiating high-frequency radar (60 GHz for this product) onto it. By using the method of millimeter-wave radar sensing, the product has low power consumption and excellent environmental resistance and can be used outdoors in the afternoon sun, rainfall, or snow, and under vapor or powdery dust floating conditions, where detection is difficult when using optical types, and has higher environmental resistance than ultrasonic types.



Type 1A1M

Unlike the products using millimeter-wave radar commercialized so far for industrial equipment, here we developed the product, which would match to customers' needs in the industry market, by making full use of Alps Alpine's technology cultivated for consumer and automotive markets and HMI technology and know-how for industrial equipment that IDEC possess, and by accumulating steady know-how through demonstration tests. The product is being developed through collaboration and cooperation of both companies' domestic and overseas bases under remote settings and is an embodiment of innovation through diversity, which has gathered the strengths of both companies with different corporate cultures, values, and ways of thinking.

### Main Features



#### Realized IoT by Bluetooth® integration

- Setting and monitoring of the sensor units are available from various terminals via wireless operation
- Provides easy and convenient setting and monitoring tools for laptops, smartphones, and tablets



#### Hardware configuration employing a millimeter wave technology

- The unrivaled beam-forming technology realized the beam range of fewer false positives

- The radio wave certification was obtained for the interference-preventing and radio wave emission-controlling functions installed, which was the first case in Japan, and realized high radio wave output
- Expanded applications by making use of the exclusive reflector that is patent-pending



### Algorithms applicable to various applications

- By developing various algorithms to be implemented on the firmware (FW), flexible adaptation depending on the applications is possible on the same hardware by rewriting the FW

### Usage Scenarios

#### Presence/absence detection

- Detection of vehicles in parking lots (vehicle/person identification algorithm will be installed)
- Light-absorbing materials (detection of rubbers and blackish color workpieces, etc.)



#### Distance detection

- Detection of vehicle widths when entering car wash equipment
- Detection of liquid level in tanks from outside through a resin window
- Prevention of pinching for high-place work vehicles, etc.

\*Detailed information is available on the website of IDEC ALPS Technologies Co., Ltd. Refer to the link below.

(URL : <https://iat.idec.com/>)

### Future Development

We will further expand our product lineup such as application-specific output functions and various beam-forming lenses, to meet a variety of industry needs including special vehicles, parking lots, stations, and infrastructure, in addition to the FA industry.

We are currently developing two product series, other than the multi-use millimeter-wave radar sensor "Type 1A1M." By launching these three series, we aim to realize a business scale of one billion JPY in the next three years.

#### \*Reference: Standard price

Open price

#### \*Reference: Overview of IDEC ALPS Technologies Co., Ltd.

Company Name	IDEC ALPS Technologies Co., Ltd.
Headquarters Location	2-6-64 Nishimiyahara, Yodogawa-ku, Osaka-shi
Capital amount	One hundred million JPY
Representative	Tomonori Nishiki: Representative Director and President (Managing Executive Officer of IDEC Corporation, in charge of Technology Development and Environment)

Establishment	September 1st, 2021
Capital contribution ratio	IDEC 51%, Alps Alpine 49%
Business lineup	Business drafting and product planning, product development, and manufacturing and sales of sensing products for industrial use, HMI products, safety products, and wireless/communication technologies

<Inquiries>

IR Section, Corporate Communication Department

<https://www.alpsalpine.com/e/common/inquiry.html>

e-mail : [alpsalpine-pr@alpsalpine.com](mailto:alpsalpine-pr@alpsalpine.com)