

## ISRA unveils the first UHF RFID temperature sensor in a bankingcard format equipped with an ASYGN chip

**ISRA has printed the UHF antenna in the card, which is connected to an ASYGN chip enabling the device to integrate easily into a RAIN environment and provide information on the temperature at a given point.**

**Grenoble and Mours Saint Eusèbe, le 29 janvier 2023.** ISRA and ASYGN announce the launch of a temperature sensor based on RFID technology. This is the first development of devices intended for real-time environmental monitoring in an industrial context and in, for example, production, logistics or maintenance applications. Humidity or light sensors are already being studied.



### ***RFID at the service of industry 4.0***

ISRA has leveraged its expertise in smart cards and printed electronics to develop a product that is easily integrated into an existing RAIN RFID (UHF) environment and which, thanks to the ASYGN chip, enables real-time monitoring of temperature at sensitive points, for example, on a production line or a warehouse.

The bankingcard format offers a particularly practical device that can be easily stuck, inserted or hung in different places. From then on it can be interrogated by the RAIN RFID reader (UHF) up to a maximum of 7 metres. Thin, flexible, and robust, the sensor adapts easily to any type of environment.

ISRA ensures the printing of the antenna on the support with conductive ink, the positioning on the component supplied by ASYGN and the final assembly of the sensor using the same processes as a smart card or an RFID tag. The sensors can be enhanced by the printing and personalisation services offered by ISRA.

The manufacturing of the temperature sensor will be entirely carried out by ISRA on their production site in Mours Saint Eusèbe (Drôme, France).

This joint venture with ASYGN is an illustration of ISRA's desire to innovate and establish technological partnerships in short circuits to offer innovative and relevant solutions.

## About ASYGN

Asygn is the world's leading supplier of UHF RFID sensor chips for battery-free IoT applications.

Fully compliant with RAIN/UHF RFID infrastructures, the AS321X chips feature an analog interface for connection to external sensors and an embedded on-chip sensors.

ISRA, a manufacturer of high-value electronic cards and commercial media based in France, has embedded ICs from AS321X family with a temperature sensor into their inlays (AS3213T). AS3213T is a unique UHF RFID battery-free temperature sensor.

This sensor can monitor temperature and communicate data up to several meters away. AS3213T temperature sensors can be used in different applications including industrial temperature monitoring, the analysis of ambient atmospheres and in cold chain.

## About ISRA

ISRA designs, manufactures and prints commercial media that can be connected and personalised.

Whether it is cards or packaging; the products offered by ISRA are manufactured in France in the shortest possible supply chains and with the requirement of limiting their environmental impact as much as possible, in particular by favouring paper over plastic through the ISBIO range.

ISRA operates in many sectors such as luxury, retail, tourism, leisure, events and sport. Our products are used in loyalty, payment (gift card, virtual wallet), access control or ticketing applications as well as authentication and identity.

As an extension of its historical printing activities and the skills acquired in the field of smart cards, ISRA is investing in Printed Electronics and intends to play a major role in the years to come, particularly in Smart Packaging.

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