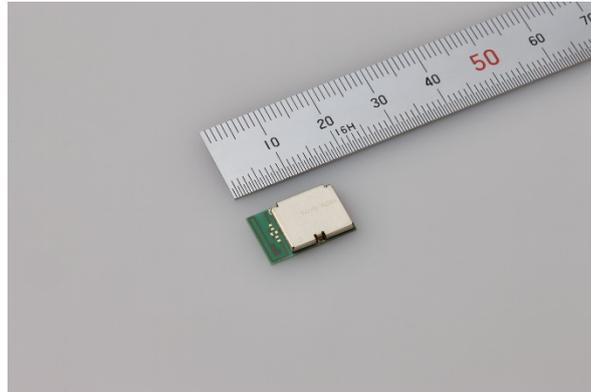For immediate release

TAIYO YUDEN Improves Operating Temperature of Bluetooth® 5 Compatible Wireless Communications Modules to +105°C

Contributing to the proliferation of IoT-related devices under high-temperature environments, such as in factories or outdoors

TOKYO, August 5, 2020 — TAIYO YUDEN CO., LTD., announced today the launch of a wireless communications module, EYSPBNZUA (10.0x15.4x2.0 mm). This module is compatible with Core Specification version 5.2, which is the latest version of Bluetooth®[1] 5.

The upper limit of the operating temperature range has been improved to +105°C, which is 20 degrees higher than that of our existing products at +85°C. This product is most suitable for IoT-related devices such as sensor nodes placed in factories or outdoors, as well as office- or home-automation-related devices such as LED lighting fixtures.

Mass production of the products will commence in August 2020, with a sample price of 3,000 yen per module[2].

Technology Background

IoT-related devices, such as sensor nodes, are very small and therefore equipped with a small-capacity battery, which necessitates that the devices have extremely low power consumption. Most such devices use Bluetooth® technology, which is a wireless communications standard with low power consumption. However, thermal resistance sometimes causes a problem when such devices are used under high-temperature environments such as in factories or outdoors, or when the devices themselves produce heat, like LED lighting fixtures.

We have now successfully commercialized a new wireless communications module, EYSPBNZUA, which is capable of operating at up to +105°C thanks to improving the upper limit of the operating temperature range by 20 degrees from that of our existing products.

TAIYO YUDEN will continue to develop smaller and more multifunctional products to expand our product lineup in response to market needs.

*1. The Bluetooth® word mark and logos are owned by Bluetooth SIG, Inc., and the use of such marks by TAIYO YUDEN CO., LTD. is under license.
*2. The sample price mentioned in this release is TAIYO YUDEN's direct sales price. When considering purchasing via a sales agency, please contact the agency for the sample price.

■Applications

Wireless communication modules for IoT-related devices such as sensor nodes placed in factories or outdoors, as well as office- or home-automation-related devices such as LED lighting fixtures

■Characteristics

Part Number	Size (L×W×H) [mm]	RAM [kB]	Specification	I/F	Certification	Temperature [°C]
EYSPBNZUA	10.0x15.4x2.0	128	V5.2 BLE Single 2Mbps Long Range Direction Finding	USB UART SPI I2C I2S PDM	Japan U.S.A. Canada CE*3	-40～+105°C

*3. The ETSI EN 300 328 v2.2.2 test report can be provided.