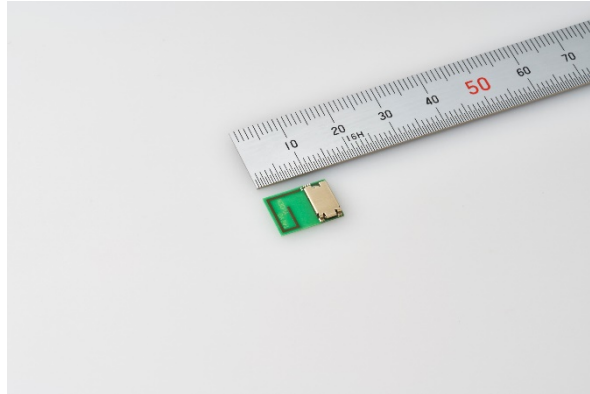


For immediate release

TAIYO YUDEN Approximately Triples the Communications Range of *Bluetooth*[®] 5 Compatible Wireless Communications Module

Contributing to implementing IoT devices in large areas such as factories by making full use of its proprietary antenna technology



TOKYO, October 8, 2019—TAIYO YUDEN CO., LTD. announced today the launch of the new *Bluetooth*[®]*1 5 compatible wireless communications module, EYSKDNZWB (9.6×12.9×1.4 mm). This product is best suited for outdoor-use security devices, IoT devices used in large factories, and IoT-related devices that require long-distance communications capability such as physical distribution terminals.

EYSKDNZWB can support a communication range that is three times*2 as long as our existing product EYSKBNZWB (15.4×10.0×2.0 mm), which supports the long-range function newly added in *Bluetooth*[®] 5, by combining our proprietary advanced antenna technology, small-devices design technique, and high-density design technique.

Mass production of the products will commence in November 2019, with a sample price of 3,000 yen per unit*3.

Technology Background

IoT-related devices are required to operate at extremely low power consumption when used in, for example, sensor networks. Most such devices use *Bluetooth*[®] technology as a wireless communications standard with low power consumption. In addition, implementing IoT devices used in factories or outdoor areas requires wireless communications modules that support a long communication range due to the long distance between sensor nodes and hubs and the existence of many obstacles such as walls. In wireless communications that utilize radio waves, however, there is a trade-off between communications range and power consumption. The difficulty in improving these factors simultaneously has been an ongoing issue.

The newly launched EYSKDNZWB is approximately three times longer than the existing EYSKBNZWB in the wireless communications range, with the same power consumption maintained, but made approximately 40% smaller by combining TAIYO YUDEN's proprietary advanced antenna technology, small-devices design technique, and high-density design technique. This product will contribute to expanding communication range with the benefit of *Bluetooth*[®] 5 low power consumption, which will allow IoT devices to be implemented in sensor networks in large areas such as factories.

TAIYO YUDEN will continue to develop more multifunctional and reliable products to expand its 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 Measured under our measurement conditions.

*3 The sample price mentioned in this release is our direct sales price. When considering purchasing via a sales agency, please contact the agency for the sample price.

■Applications

Wireless communications module for outdoor-use security devices, IoT devices used in large factories, and IoT-related devices that are required to be capable of long-distance communications such as physical distribution terminals.

■Characteristics

Part Number	Size (L×W×H)	RAM (kB)	Specification	I/F	Certification	Temperature
EYSKDNZWB	9.6×12.9× 1.4 mm	256	V5.0 BLE Single 2Mbps Long Range	UART SPI I ² C PDM I2S USB	Japan U.S.A. Canada CE*4	-40 to +85°C

*4 The ETSI EN 300 328 v2.1.1 test report can be provided.