

Advantech Releases the WISE-4210 Series IoT Wireless Sensor Nodes for Streamlined Private LPWAN Network Deployment

Taipei, Taiwan, December 2018 - The flourishing development of IoT applications has created a bright future for the highly competitive field of low-power wide-area networks (LPWAN). Mainstream LPWAN technologies, including NB-IoT, eMTC, and LoRa, are rapidly maturing, increasing market demands for such networks. Leveraging its domain expertise, Advantech developed its WISE-4210 series of IoT wireless sensor products - including a wireless LPWAN-to-Ethernet AP and three wireless sensor nodes (the WISE-4210-S231 internal temperature and humidity sensor, WISE-4210-S251 sensor node with 6-channel digital input and a serial port, and WISE-4210-S214 sensor node with 4-channel analog input and 4-channel digital input). The device-to-cloud total solution provided by this series of LPWAN products allows IT, OT, and cloud platform system developers to easily implement a private LPWAN, acquire field site data, and achieve seamless integration with both public cloud, such as Microsoft Azure, and private enterprise clouds.

Based on proprietary LPWAN technology, the new WISE-4210 series products minimize frequency band interference, support a wider data transmission range, are compatible with lithium batteries, and enable cloud platform integration. By locking the sub-GHz frequency band, WISE-4210 series products significantly reduce susceptibility to interference for 2.4 GHz wireless communication technologies such as Wi-Fi, Bluetooth, and Zigbee. By supporting a network transmission distance of up to 5 km, the WISE-4210 series meets the requirements of large scale interior environments such as data centers, factories, and warehouses for collecting and applying a wide range of interior data. With LPWAN technology, only three 3.6V lithium batteries are required to operate the WISE-4210 sensor nodes for up to five years, eliminating the need for additional wiring and frequent recharging. Additionally, the WISE-4210 series supports multiple transfer protocols, including MQTT, RESTful, Modbus/TCP, and Modbus/RTU, for simple device-to-cloud connections.

The WISE-4210-S231 sensor node with built-in temperature and humidity sensor collects relevant data from factories, data centers or warehouse management without requiring the installation of additional sensors or gateways, making it ideal for indoor temperature and humidity control applications. Meanwhile, the WISE-4210-S251 sensor node, which provides 6-channel digital input and a single RS-485 port, and the WISE-4210-S214 sensor node, which provides four-channel analog input and

4-channel digital input, can be used to collect electricity meter, pressure gauge, thermometer, and power consumption data from factory facilities. The three wireless nodes support direct data transmissions to SCADA and cloud platforms through a WISE-4210-AP, eliminating the need for a separate data conversion device. The WISE-4210-AP access point is capable of managing up to 64 nodes simultaneously, and thus can simplify overall infrastructure and save installation space.

Advantech's latest WISE-4210 series of LPWAN IoT wireless AP and sensor nodes provides the necessary device-to-cloud integration functions for conventional automation and emerging IoT applications. The WISE-4210 series allows users to easily deploy private networks and quickly develop systems. To learn more about Advantech's new WISE-4210 series, contact your local sales representative or visit the Advantech website at <http://www.advantech.com/>