

## China's RAKwireless partners with Ambiq to expand precision agriculture solutions

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China's RAKwireless, a trusted IoT solution innovator, and Ambiq, a leading energy-efficient semiconductor provider, demonstrated the real-world impact of technology on agriculture by implementing WiseConn's precision irrigation systems using the RAK11720 hybrid LoRaWAN + BLE module enabled by the Ambiq Apollo3 Blue MCU.

WiseConn, notable for its precise irrigation solutions used across the diverse agricultural regions in the US, Europe, Latin America, and Australia, has launched its latest innovation with an integration for RAKwireless's RAK11720 to address its need for extensive signal reach and robust connectivity.

The RAK11720's combination of LoRa® and Bluetooth® capabilities, enabled by Apollo3 Blue, not only overcame limitations seen with previous communication protocols but also introduced new, user-friendly features together with NFC, that made system installation and management more convenient for farmers.

Some of the notable features are, Enhanced Agricultural Sensor Technology; Comprehensive IoT Solutions with RAK11720; WiseConn's Selection of RAK's One-Stop Service for Antenna Design and Certification; and Expanding IoT Applications Beyond Agriculture.

Constructing sensors that can withstand farming environments while providing essential insights into resource management was a complex task. By leveraging the mixed-technology features of the RAK11720 module, WiseConn succeeded in producing devices that gather crucial data on soil and weather conditions. Importantly, these devices are more than mere data collectors; they are critical tools in operational robustness and data-driven farming strategies.

The introduction of the RAK11720 module into our cloud-based automation solution enhances our ability to provide detailed insights from initial water source analysis to final agronomic implementation. This advancement allows us to support a wider range of farmers in implementing effective irrigation programs that optimize water usage and significantly reduce operational costs, including those for fertilizer, energy, and labor.

This collaboration between RAKwireless and Ambiq, showcased through WiseConn's story, is advancing agriculture and transforming industries with IoT. Focusing on practical benefits and real-world applications, RAKwireless and WiseConn's success demonstrates how innovative technology can solve pressing problems, paving the way for a smarter, more connected world.