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INDUSTRIAL PRODUCT DATASHEET

US915 Mhz Smart Agriculture Kit using Ready-to-Use Private LoRaWAN-in-a-Box

The US915 Mhz Smart Agriculture Kit using Ready-to-Use Private LoRaWAN-in-a-Box integrates SenseCAP LoRaWAN hardware and Machinechat JEDI Pro software for rapid, long-range IoT deployment in agricultural and environmenta...

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Overview



The kit features Seeed Studio SenseCAP industrial-grade LoRaWAN gateways and sensors with ultra-wide-distance transmission up to 10 km, IP66 enclosure, and multi-band support. Machinechat JEDI Pro Seeed Studio Edition software delivers an all-in-one low-code platform for real-time data visualization, rules-based monitoring, and alerts, ideal for smart agriculture, greenhouse monitoring, and precision farming.

Key Features

- **Seeed Studio SenseCAP gateways and sensors**
  - Support LoRaWAN protocol Class A
  - Ultra-wide-distance transmission: up to 10 km line of sight
  - Support multiple ISM bands: EU868, US915, AU915, and AS923
  - Support Ethernet backhaul; cellular optional
  - Industrial grade protection:
    - IP66 enclosure
    - Suitable for outdoor applications
    - Operate in temperatures from -40°C to +70°C (up to +85°C for SenseCAP sensors)
  - High reliability and stability
  - Sensor battery life of 3+ years
  - Rapid installation and deployment
- **Machinechat JEDI Pro Seeed Studio Edition**
  - Affordable all-in-one low-code software designed specifically for commercial IoT deployments; focus on configuring not coding
  - Single application binary that runs as a service with integrated database and managed local data storage
  - Ingest data from Seeed Studio's SenseCAP LoRa sensors using the integrated Seeed Studio data collector (Chirpstack installation required)
  - Ingest data from virtually any device or sensor using integrated HTTP API server, TCP server, and MQTT broker
  - Configure dashboards to visualize real time and historical data with line, area, tile, radial, and data grid charts
  - Monitor data using integrated rules engine to trigger email notifications, SMS, or execute external scripts
  - Monitor whether devices and machines are online
  - Apply custom business logic to IoT data through data collector and action plug-ins
  - Modern browser-based user interface with SSL support and role-based user management
  - Supports up to 200 devices/sensors
  - Available for Windows, macOS, Linux, Raspberry Pi, and BeagleBone platforms
  - Virtual data sensor feature allows developers to simulate project deployment scenarios

Product Gallery



Applications

- **In-house or commercial IoT projects that require data logging and monitoring:** Smart agriculture, greenhouse monitoring, landscaping, irrigation, and precision farming use case scenarios
- **Environment-related applications, such as fire detection, cold storage monitoring, and animal husbandry**

Resource Links

- https://www.seeedstudio.com/US-915-Mhz-Smart-Agriculture-Kit-using-Ready-to-Use-Private-LoRaWAN-in-a-Box-p-5224.html

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