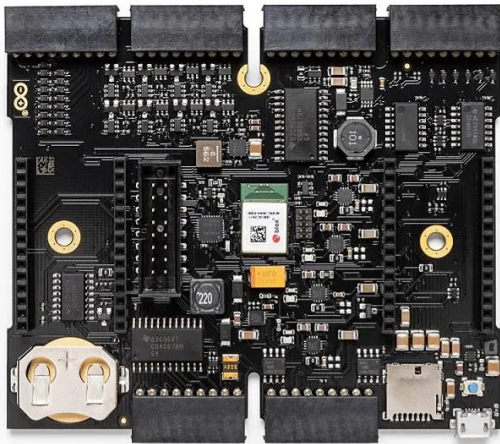**Item no.:** 353153
AKX00034 - Edge Control Monitoring Solution

from **212,26 EUR**

Item no.: 353153
shipping weight: 0.10 kg
Manufacturer: Arduino

📄 Product Description

AKX00034 - Arduino Edge Control Monitoring Solution

It can be positioned anywhere and is suitable for precision farming, smart agriculture, and other applications requiring intelligent control in remote locations. Power can be either supplied via solar panel or DC input.

Remotely control your application through the Arduino Cloud (or third-party services) using a choice of connectivity options suitable to the location. The Arduino Edge Control features built-in Bluetooth® and its connectivity can be expanded with 2G/3G/CatM1/NB-IoT modems, LoRa®, Sigfox, and WiFi by adding anyone of the MKR boards.

The Arduino Edge Control is capable of connecting sensors and drive actuators like latching valves (common in agriculture). Moreover, it has the capability to provide real-time monitoring over the entire process, thereby reducing production-related risks.

Particularly suited to smart agriculture, the sensors can collect real-time data such as weather conditions, soil quality, crop growth, amongst others. Once sent to the Arduino Cloud, the data value chain becomes valuable analytics that supports business processes at various levels (e.g. crop yield, equipment efficiency, staff performance, etc.). The Arduino Edge Control has the capability to improve crop quality and reduce human effort/error by automating processes like irrigation, fertilization, or pest control.

- Microcontroller: nRF52840 (64 MHz Arm® Cortex-M4F)
- Digital input: 6x edge sensitive wake up pins
- Digital output: 8x latching relay command outputs with drivers, 8x latching relay command outputs without drivers
- Relays: 4x 60 V/2.5 A galvanically isolated solid state relays
- Analog input: 4x 4-20 mA inputs, 8x 0-5 V analog inputs, 16x hydrostatic watermark sensor input
- Terminal block connectors: 6x 18-pin plug-in terminal block connectors
- Power supply: 12 V acid/lead SLA battery supply (recharged via solar panels)
- Power consumption: Low power (up to 34 months on a 12 V/5 Ah battery), 200 uA Sleep current
- Memory: 1 MB onboard Flash memory, 2 MB onboard QSPI Flash memory
- SD card: Interface for SD card connector (through expansion port only)
- Connectivity: Bluetooth, WiFi*, 3G* NB-IoT*, LoRaWAN®*
- Peripherals: Full-speed 12 Mbps USB, Arm CryptoCell CC310 security subsystem, QSPI/SPI/TWI/I²S/PDM/QDEC, High speed 32 MHz SPI, Quad SPI interface 32 MHz, 12-bit 200 ksps ADC, 128 bit AES/ECB/CCM/AAR co-processor
- Operational temperature: -40°C to +85°C (-40°F to 185°F)
- Length: 104 mm
- Width: 86 mm

* requires Arduino MKR board

📄 Specifications

Scan this QR code to view the product
All details, up-to-date prices and availability