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EdgeBox-ESP-100

ESP32-based Industrial Controller Designed for Lightweight Automation Solutions A PLC and IIoT Gateway that carries wireless capabilities and supports multiple Fieldbus

Multi-Fieldbus Support

CAN, RS485, EtherNet

Multi-wireless Capability

Built-in Wifi, BLE connectivity; built-in Cellular 4G LTE module

Reliable Hardware Design

Rugged, maintenance-reduced structure

Reliable Electrical Design

High isolation, high surge, and short circuit protection

IEC 61131-3 Compliant Programs Support

Support IEC61131-3 standard with third-party industrial software Codesys (under development)



Applications



EdgeBox-ESP-100 Industrial Edge Controller

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Specifications

Parameters	Details
Basic	
CPU	ESP32S3
Memory	512KB + 8MB RAM
Storage	16MB Flash
Wireless	
WiFi	onchip 2.4 GHz
Bluetooth	onchip Bluetooth 5.0, BLE
Cellular	Built-in 4G - SIMCom LTE Cat 1 module
LoRa	Supported*(optional)
Interface	
Ethernet	1 x 100M RJ45
USB	1 x USB2.0 A
CAN BUS	1 x CAN BUS (isolated)
RS485	1 x RS485 (isolated)
Digital Input	4 (isolated) onboard 是非成败转头空
	DC input Voltage - 24V
Digital Output	6 (isolated)
	Recommended Voltage - 24V
Analog Input	4 (isolated)
	Input: 0 ~ 20 mA default, 0-10V optional
Analog Output	2 (isolated)
	Output: 0 ~ 5 V
Power Supply	10.8 ~ 36 V
Extra Features	
RTC	RTC
Encryption Chip	Atecc608a (optional)
Operation Temperature	-20 to +60 °C
Certification	RoHS, CE, FCC, UKCA
Warranty	2-year warranty
Mounting	DIN Rail, Wall Mount

*This box supports LoRaWAN communcation, but requires soldering to replace the 4G module. If you want to customize it in LoRaWAN communcating, you can email us with produce@seeed.cc.



EdgeBox-ESP-100 ESP32-based Industrial Edge Controller

512KB + 8MB RAM SKU 102991735