

EdgeLogix-RPi-1000

Raspberry Pi CM4-powered High-performance Modular Industry Controller

A high performance PLC/PAC, IPC, HMI, IIoT gateway all in one device with rich scalability and high-speed fieldbus communication capability



High Performance All-in-one Industrial Controller

A high performance PLC/PAC, IPC, lightweight HMI, IIoT gateway, OPC UA Server and Industry PC all in one device.

Powerful Processors and Flexible OS

Powered by Raspberry Pi Compute Module 4 (CM4), up to 8GB RAM and 32GB eMMC, support Debian, Linux, Ubuntu OS.

Rich IO Resources and Robust Scalability

Up to 24 optoisolated DI, DO along with RS485, RS232, CAN-FD and 3 Gigabit Ethernet ports. High-speed local BUS extension, supporting additional DIO, ADC, Relay expansion modules.*

Multiple Wireless Capabilities and IT Connectivity

Build-in 2.4G/5G Wifi, BLE, mini-PCIe slot for 4G LTE and LoRaWAN modules. Built-in IT connectivity: DHCP/DNS, OPC UA and Web service

Industrial Software and Cloud Services Support

Support IEC 61131-3 with CODESYS, Node-RED, MQTT. Support AWS, Azure cloud services.*

* Expansion modules and the adaptation of CodeSYS, AWS, and Azure Cloud Services will be available in early 2023.

Applications



Specifications

Specification	Details
CPU	Quad-core Cortex-A72 CM4 Core @ 1.5GHz
Memory	2GB/4GB/8GB RAM optional
Storage	32GB eMMC
Display	4.3 inches 480 x 800 IPS touch screen
Input/Output	
Digital IO	12 x DI (Optoisolated), 12 x DO (Optoisolated)
Wireless	
WiFi	2.4 GHz, 5.0 GHz IEEE 802.11 b/g/n/ac
Bluetooth	Bluetooth 5.0, BLE
Cellular	1 x mini-PCIe socket for 4G/LTE with SIM*
LoRaWAN	1 x mini-PCIe socket for LoRaWAN Module*
Interfaces	
Ethernet	3 x 1000M RJ45 Ethernet Port
HDMI	HDMI 2.0 up to 4K@60fps
USB	2 x USB2.0 Type A, 1 x USB2.0 Type C
RS BUS	5 x RS485 (Optoisolated), 2 x RS232 (Optoisolated), 1 x RS232
CAN BUS	2 x CAN BUS with CAN-FD (Optoisolated)
Extensibility	
Expansion Modules	DIO/AIO/ADC Modules (in development, estimated to be available in 2023)
Other Information	
Extra Features	RTC, Stand alone Watch dog timer, Atecc608a (optional)
Certifications	CE, FCC, *UKCA, TELEC, RoHS
Dimensions	140 (W) x 124 (H) x 376 (T) mm
Power Supply	DC 10.8-36 V
Operating Temperature	-20°C to +60°C
Storage Temperature	-40 ~ +70 °C

* 4G and LoRaWAN modules not included.

* In Progress



EdgeLogix-RPI-1000
Industrial Controller

EdgeLogix -RPI-1000-CM4102032

2GB RAM, 32GB eMMC

SKU 102110779

model
1

EdgeLogix-RPI-1000-CM4108032

8GB RAM, 32GB eMMC

SKU 102110773

model
2