



# Your Smart IoT Transformation

Easily integrate IoT into any device with our all-in-one hardware and software platform. Featuring built-in inputs, outputs, and connectivity, plus a SaaS monitoring service and API for custom app development. Simplify your IoT journey with ActFact.

# The Software. Don't code, configure live



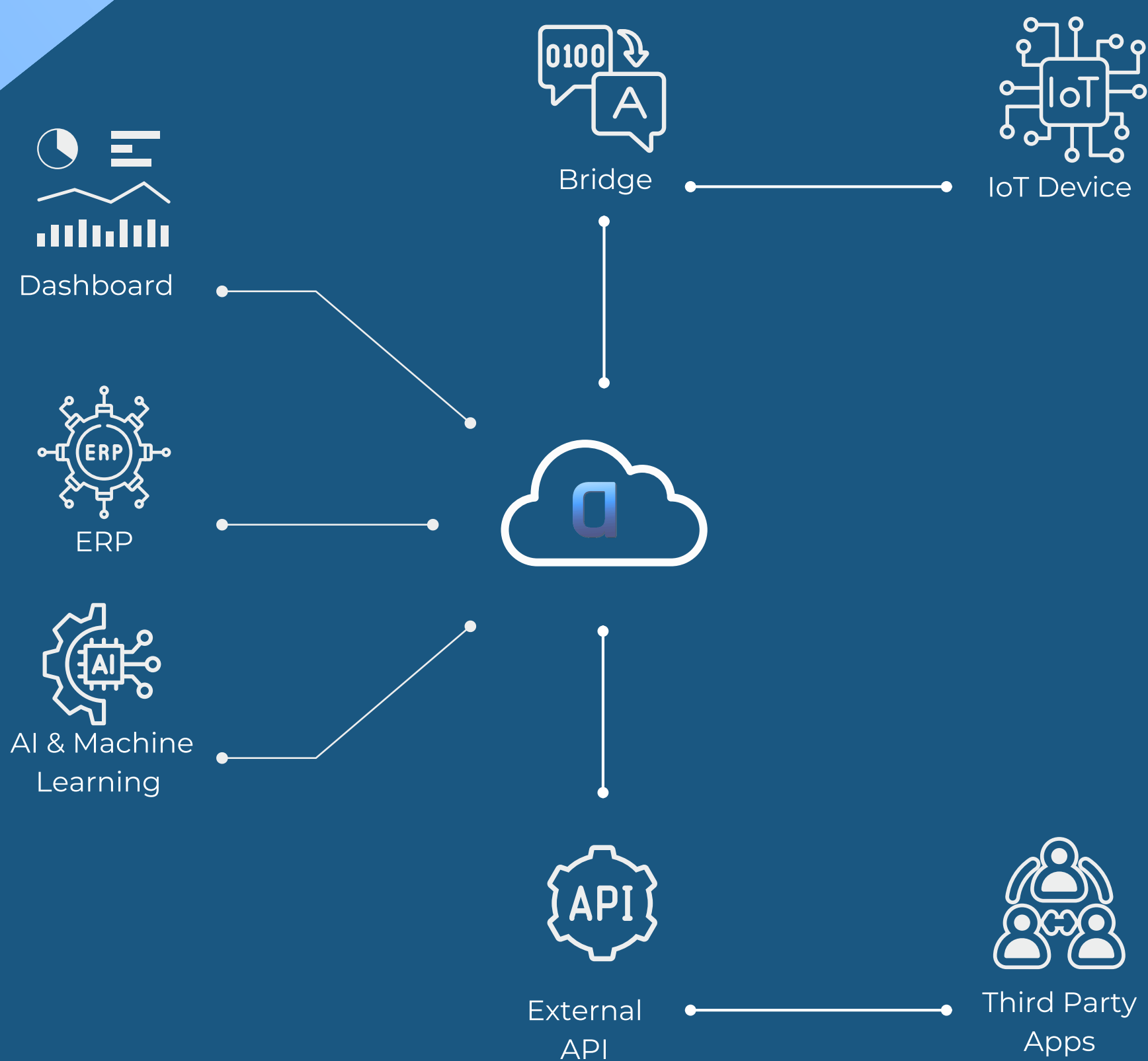
The system is fully configurable via a web UI. Configure firmware settings intuitively, control outputs based on inputs and timers, and run multiple configurations simultaneously.

The graphical interface includes choice boards for components and system states, and a monitor for real-time input/output evaluation. Configurations can be easily uploaded or downloaded for bulk device setup.



Connect via WiFi in Access Point Mode for setup. Once online (WiFi/Ethernet), the device sends data to the ActFact cloud for remote configuration, data review, and real-time access. If offline, it records data and uploads it when online. Alarms and data priorities are configurable, with remote management through apps.

## Connectivity





# HARDWARE

D25 INPUT CONNECTOR | 5 C13 PLUGS  
USB | ETHERNET CONNECTOR



Lower Board: 8 relays | Output  
Upper Board: CPU | Input/Output

*Can be updated to over the air (OTA) and is connected to our monitoring environment when connected to a network*



## OUTPUTS

- 3 NO/NC Relays
- 5 NO Relays
- 7 Digital I/O Ports
- 1 5V Neopixel Output Connector
- 1 24V Piezoelectric Buzzer
- 1 Status LED



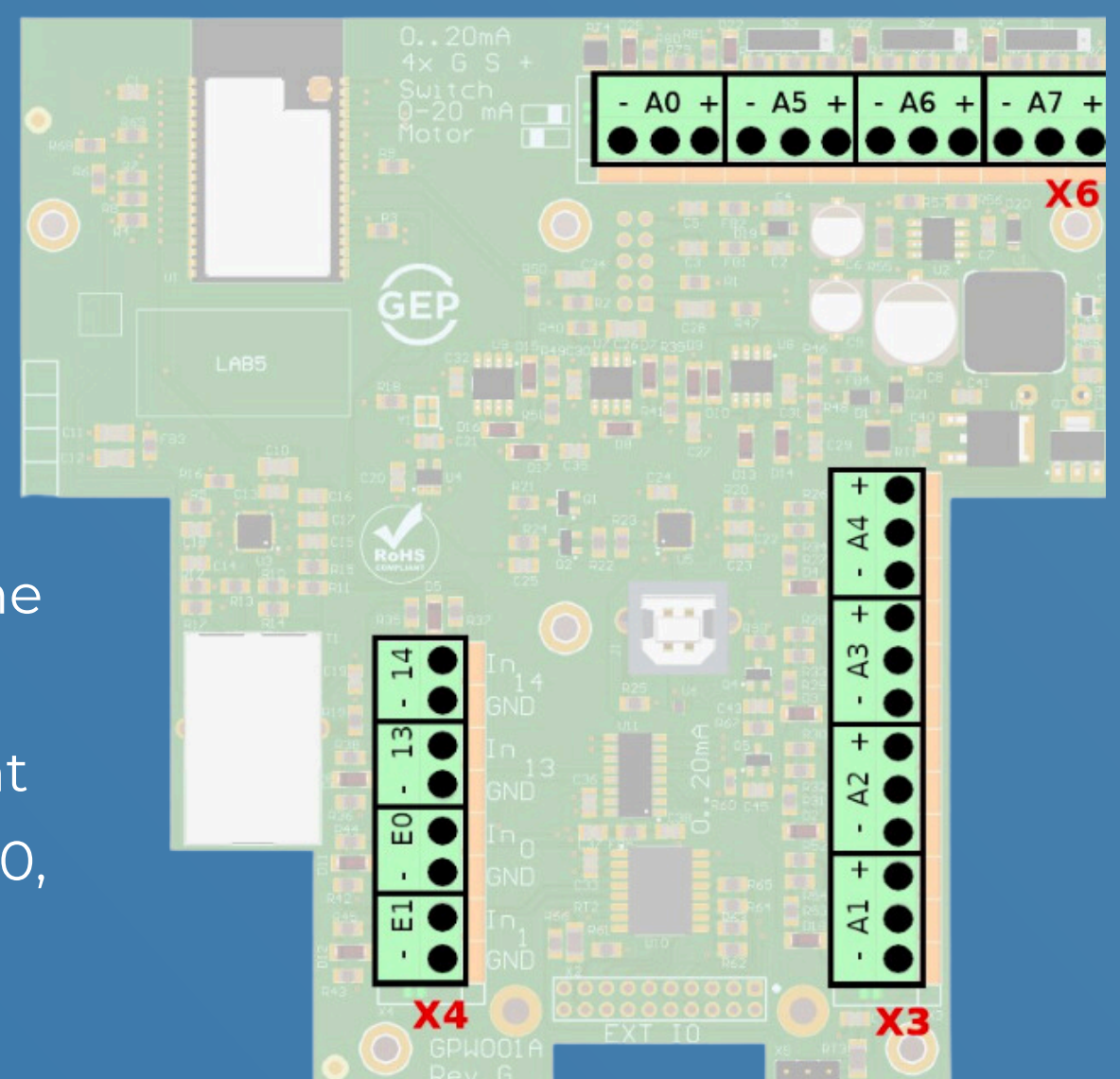
## INPUTS

- 4 Digital Inputs Pull-up Resistors
- 8 Analog Inputs up to 24V
- 2 Current Transformers
- Optional external API's
- Modbus I/O: With onboard SPI and I2C buses, the board can be extended with additional IO expanders and AD Converters

## ANALOG INPUTS

- X3 | X6 blocks
- Signal up to 24V
- A5, A6, A7 switches
- MCP3008 A/D Converter

On top of the inputs A5, A6 and A7 are switches. When the switch is put to the left position then then you cannot connect a sensor to it because it is then used for a current meter on the relay board. In this case A5 measures Relay 0, A6 measures relay 3 and A7 measures relay 4. The analog inputs are read using an MCP3008 A/D Converter.





# DIGITAL I/O

1 Upper (E1) Input | 1 Lower board (E2) Output

PCF8574 I/O Expander

## X4 BLOCK (DIGITAL I/O)

Port 13 & 14 connected to ESP32

E0 & E1 connected to upper I/O Expander | Pins 0 & Pins 1

## PINOUT EXT IO

1	GND	11	E 1.3 (pulled up)
2	GND	12	I2C SDA (IO5)
3	E1.7 (pulled up)	13	SENSOR_VN (IO39)
4	3.3V	14	I2C SCL (IO33)
5	E1.6 (pulled up)	15	SENSOR_VP (IO36)
6	SPI CLK (IO12)	16	NC
7	E1.5 (pulled up)	17	IO35 (Menu button)
8	SPI MISO (IO4)	18	IO32 (NeoPixel)
9	E1.4 (pulled up)	19	NC
10	SPI MOSI (IO2)	20	NC



# Pinout EXT IO

