

Raspberry Pi

# MONITORING SOLUTIONS IN PETROCHEMICAL INDUSTRY



Monitoring in petrochemical facilities is a key element. A correct configuration of the elements to be monitored will allow us to:



see in real time the key indicators of the production that is being carried out, so that we can make decisions quickly and efficiently. Decisions driven by data.

filter by production line, machine, process or installation, and see the current status according to the detail and types of configured events (stop, breakdown, gear, change, maintenance, etc.).



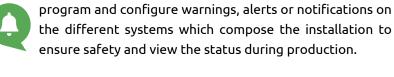
ECURITY

REDICTION

NTENANCE

anticipate stoppages and incidents in the different productive elements thanks to a vision of the materials or products involved, or the state of equipment or facilities.

make the key security elements visible to reduce the critical parts in operations and facilities and thus be able to guarantee the safety of the installation and the operators working there.



prevent errors, low efficiency and delays due to manual data entry into the system, as opposed to automated entry.



get relevant data for each level of responsibility and thus facilitate the creation of dashboards adapted to the user's requirements. Otherwise, when there is a lack of information, decision making is slow and lacking in arguments.

contain and control the inestability caused by impurities or other reasons that could jeopardize the process, as the processes of the petrochemical sector work with elements in exact values and measurements.

The sum of the benefits that can be obtained will result in a cost and resource optimization, and a greater benefit at all levels, including a justification for future investments.



# PERSONALIZE YOUR DASHBOARDS



## INDUSTRIAL AUTOMATION

#### INSTANT CONNECTION

Industrial Shields PLCs are programmed through the USB ports or through the Ethernet port, remotely. This offers immediate access to the program. You can also continuously monitor the status of all variables, inputs, outputs, etc.

RANGES DEPENDING ON NEEDS

Ardbox | Ethernet | GPRS | WiFi

- Up to 36 Inputs: · (16x) Analog Inputs (0-10Vdc)
- Digital Inputs (7-24Vdc) configurable by software. • (20x) Isolated digital inputs (7-24Vdc)
- Up to 22 Outputs:
- · (22x) Isolated digital Outputs (5-24Vdc) (8 of them) PWM configurable by software. (8 of them) Analog Outputs (0-10Vdc)

## COMMUNICATIONS

(1x) Ethernet port (1x) USB port (type B) (1x) I2C port. (Communication with Industrial Shields devices, sensors, E/S modules) (3x) TTL ports (1x) RS-232 (1x) HALF/FULL Duplex RS-485 port (1x) External SPI port (Usa MOSI, MISO, SS pins from Arduino) TCP IP / Modbus TCP / Modbus RTU WebServer Capacity Industrial Protocols



**ARDUINO PLC** 

#### **OPEN SOURCE SOFTWARE PROGRAMMING**

Arduino automata can be programmed using any platform allowing to program an Arduino device, such as Arduino IDE, which can be downloaded for free.

# TOUCHBERRY PANEL PC RANGE



Industrial Solution with Raspberry Pi 4 Model B PC panel based on the GNU / Linux operating system installed on an SD card. It has several integrated interfaces: Ethernet, USB, WiFi ...





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