



Industrial Shields

**Open Source Mind!**

# Our Company

Industrial Shields was born in 2011 when a design engineer, Albert Prieto (Industrial Shields CEO), installing market PLCs in different machines was looking for lower cost and flexible PLCs. Then he decided to develop his own solutions, PLCs using Open Hardware.

Today Industrial Shields is a reality with a wide range of PLCs and Panel PCs that keeps growing. Industrial Shields is present in more than 30 countries.

Main office (with Financial, R&D and logistics) and production are located close to Barcelona.

Our company develops and produce the 100% of the product range, including all aspects involved on the hardware and software.



# Why?

Our company's goal is to provide **low cost solutions** for automation, not only in the **Universities and Hobbyist** markets but also in **Industrial environments**.

The Open Source Hardware solutions are still not widely introduced in Industrial environments, it is a **growing market** and we are its pioneers.

The balance between **quality and cost is very important** for us and so for the market, using Open Source solutions we can provide more specifications at a better price.

Even more, the Open Source solutions are **more flexible and accessible** than the standard industrial solutions.



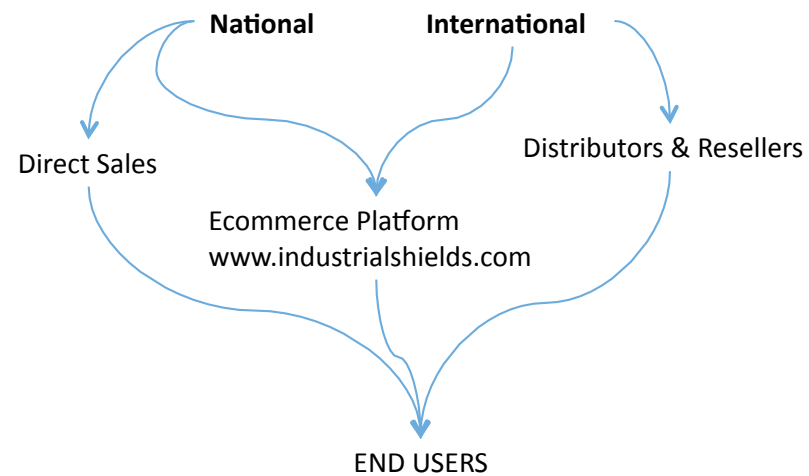
# Our Customers

- Arduino Users, Universities and other training centers, hobbyist, robotic shops
- Industrial users looking for a low cost and flexible solution.
- Integrators and Engineering companies providing turnkey solutions.



# Our Sales Channels

- Distributors and resellers.
- Industrial Shields online shop and web site (Google Adwords activity).



# Applications

Manufacturing / Machining

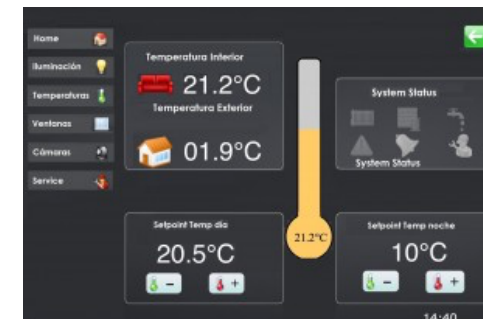
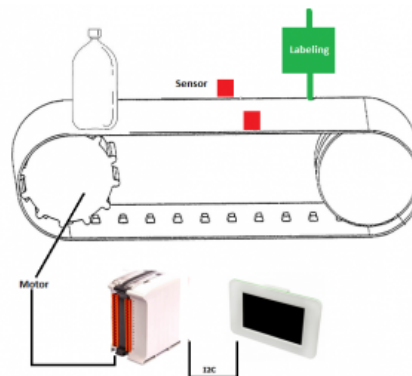
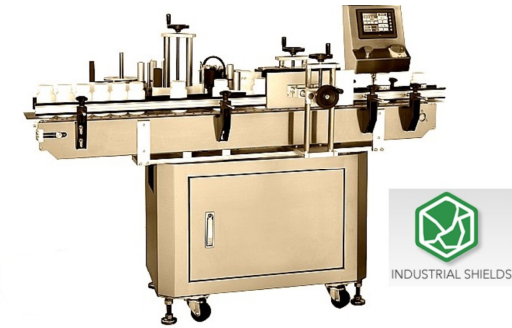
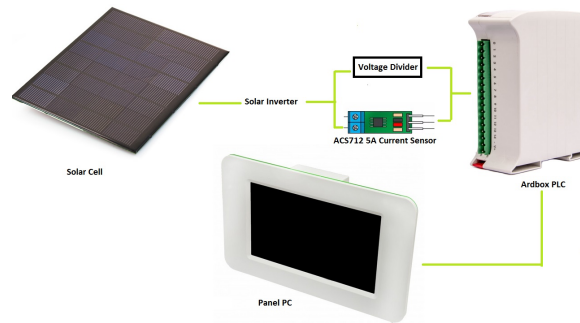
Food / Beverage

Metals

Power

Mining

Petrochemical / Chemical



# Products

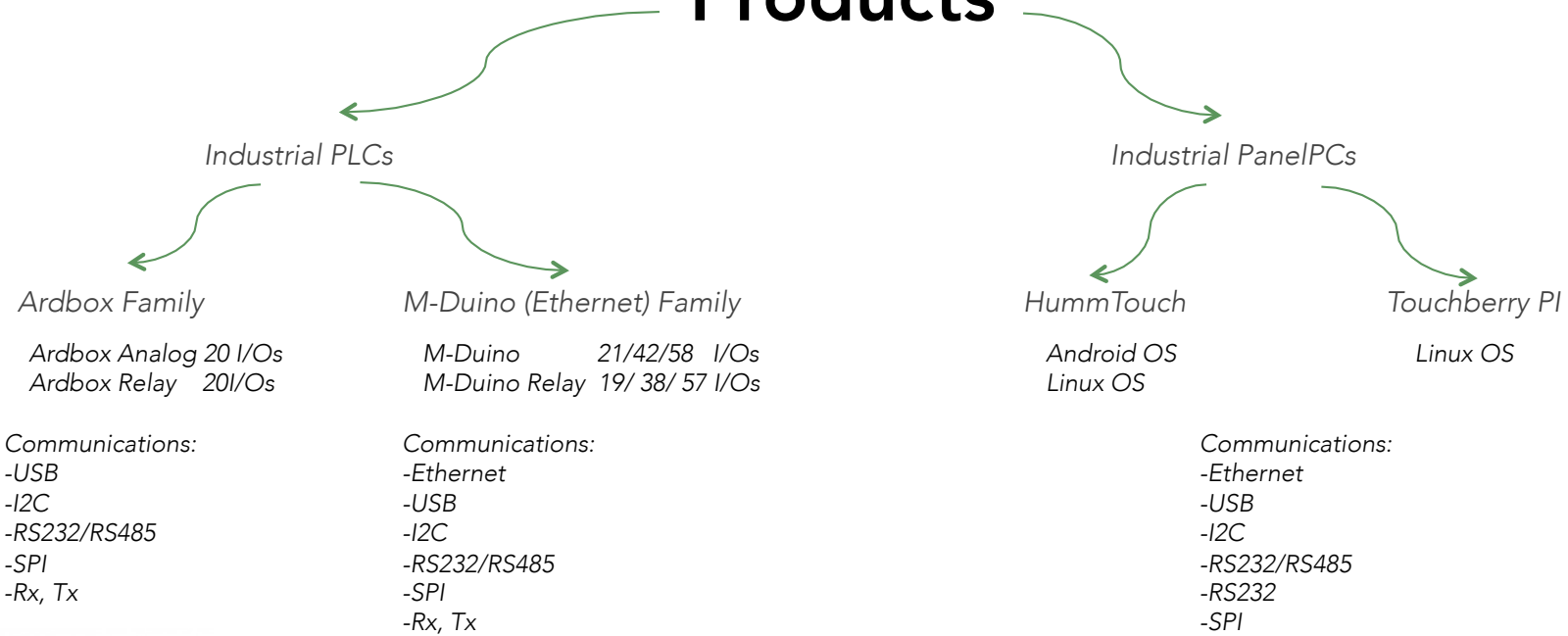
## ARDBOX Range - 2 Models - PLCs

PLC Arduino ARDBOX 20 I/Os Analog  
10 In / 10 Out

PLC Arduino ARDBOX PLC 20 I/Os RELAY  
10 In / 10 Out



# Products



# Products

## M-DUINO Range - 6 Models -Ethernet PLCs

M-DUINO PLC Arduino 19R I/Os Rele / Analog / Digital  
7 In / 12 Out

M-DUINO PLC Arduino 21 I/Os Analog/Digital  
13 In / 8 Out

M-DUINO PLC Arduino 38R I/Os Rele / Analog / Digital  
14 In / 24 Out

M-DUINO PLC Arduino 42 I/Os Analog/Digital  
26 In / 16 Out

M-DUINO PLC Arduino 57R I/Os Rele / Analog / Digital  
21 In / 36 Out

M-DUINO PLC Arduino 58 I/Os Analog/Digital  
36 In / 22 Out



# Products

## Panel PCs – 3 Models

**HummTOUCH 10.1" Android**  
64Bit, dual core  
With digital inputs and outputs

**HummTOUCH 10.1" Linux**  
64Bit, dual core  
With digital inputs and outputs

**TOUCHBERRY PI 10.1"**  
Linux OS  
With digital inputs and outputs



# Products

## Programming environment

### Arduino IDE

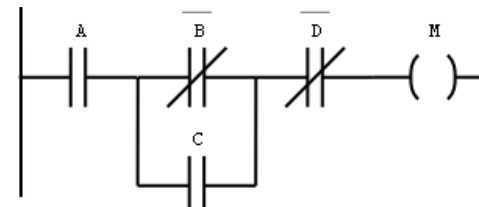
<https://www.arduino.cc/en/main/software>

### Ladder/KOP (available soon)

```
exampleMduino_RelayV4_1
void loop() {

  if (op_state == true) {
    digitalWrite(R01, HIGH); //reproduce the same sketch for R11, R21

    int inputStateI00 = digitalRead(I00);
    if (inputStateI00 == HIGH) {
      // turn LED on:
      digitalWrite(R02, HIGH);
    }
    else {
      // turn LED off:
      digitalWrite(R02, LOW);
    }
  }
  //I01+R03
  int inputStateI01 = digitalRead(I01);
  if (inputStateI01 == HIGH) {
    // turn LED on:
    digitalWrite(R03, HIGH);
  }
}
```



# A Worldwide Reference for Open Source Industrial Equipment





**Thanks!**  
Open Source Mind

[www.industrialshields.com](http://www.industrialshields.com)