

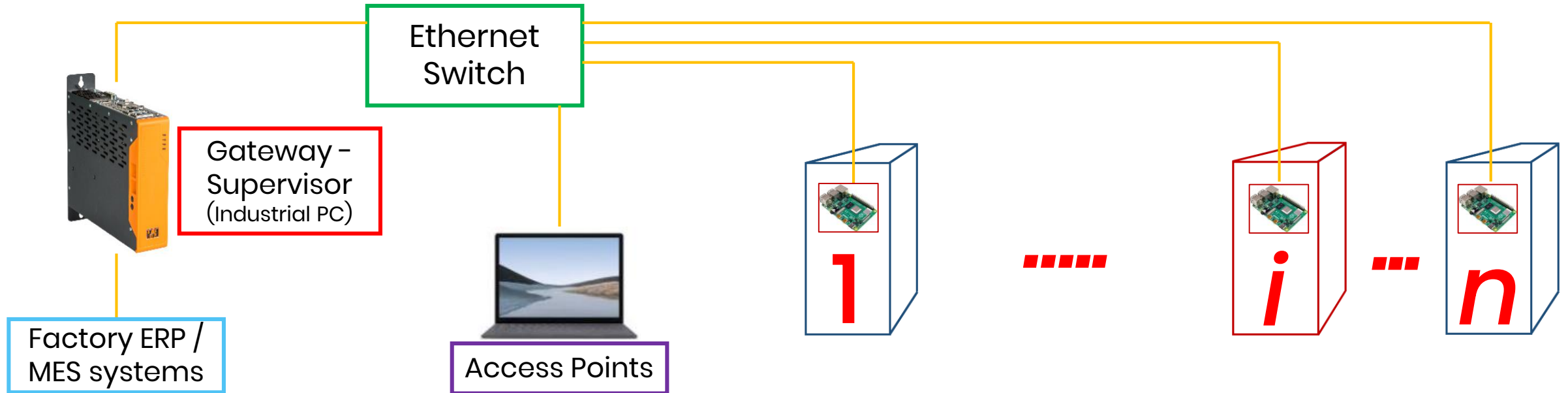
# eText4.0

# Digital Yarn Factory

## System Characteristics



## System Architecture



Wired LAN network connecting all the devices:

- **Controllers**, placed on each machine (manufacturer independent);
- **Access Points**, with which the users set all production data and monitor status;
- **Gateway**, collecting data from machines and exchanging them with factory management softwares;

### Machine Controller

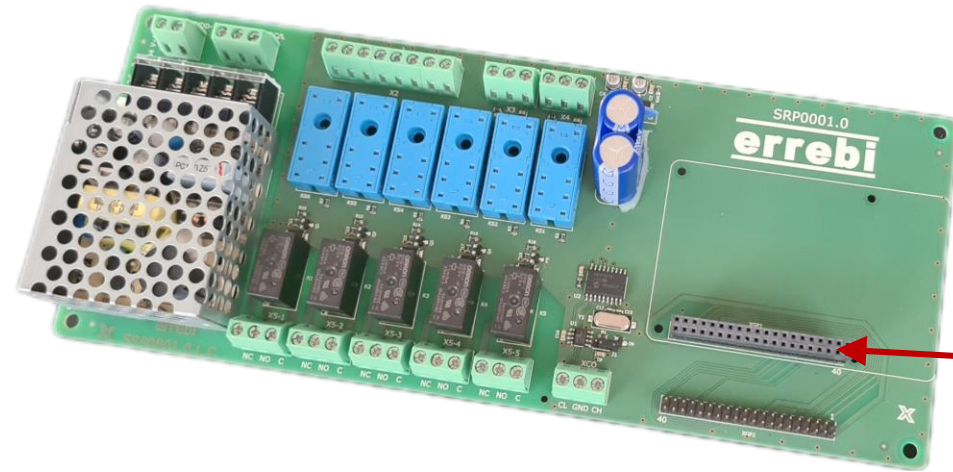
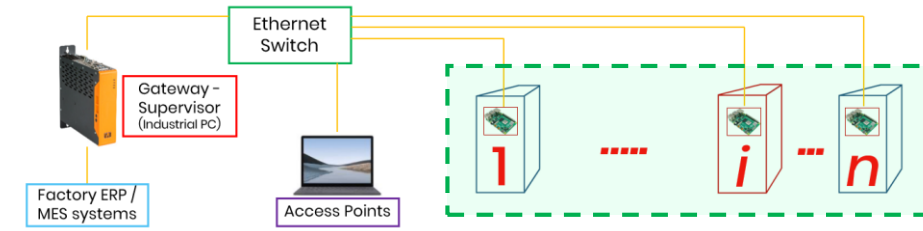
#### Industrial I/O SRP0001 + Raspberry Pi

Older generation machines (with no controllers ON-Board) can be updated with our simple and cost-effective solution:

- Each machine will be equipped with a set of Raspberry Pi + SRP0001;
- Raspberry Pi affordable PC is connected to our custom developed industrial I/O card (SRP0001);

The main features of our SRP0001 + Rpi include:

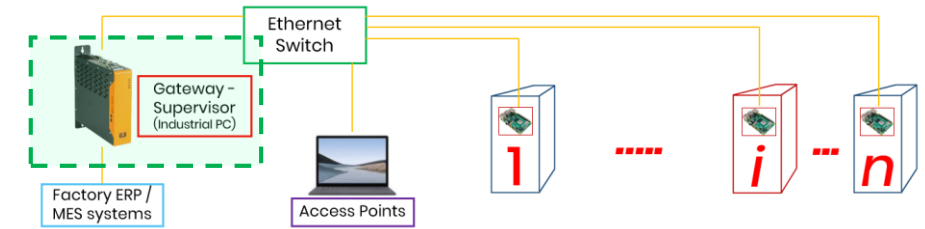
- Power Supply: 115-230VAC
- 2 x Fast Inputs for speed sensors (meter counters);
- 6 x Inputs, configurable 5VDC – 230 VAC;
- 5 x Outputs (max 230 VAC);
- CanOpen Industrial fieldBUS port;
- Ethernet based protocols using Rpi RJ45 port (Modbus TCP/IP, OPC-UA ...);



### Gateway – Supervisor

The **Gateway** is the core of the system, it manages:

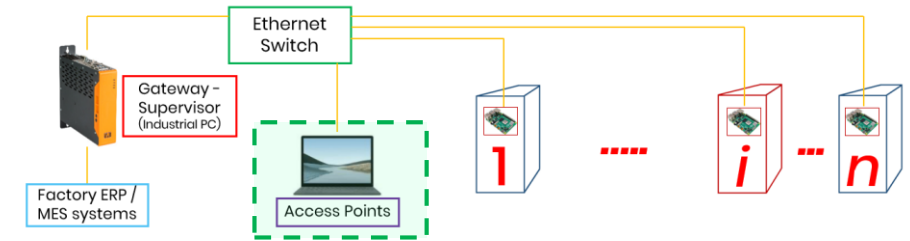
- The graphic user interface (distributed on the various access points);
- Data stream between machines and factory management system;
- Access to the machine «Maintenance» database



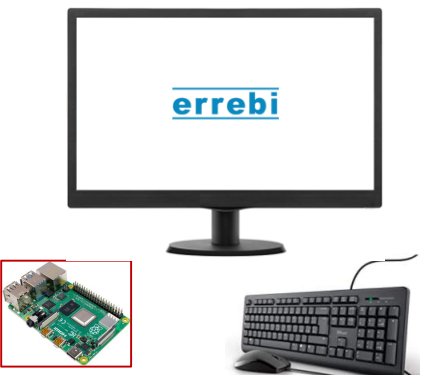
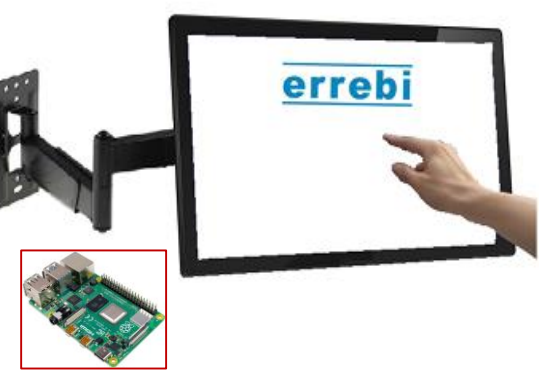

### Access Points

Access points are needed to interact with the user interface: monitor machine status, enter data or configure etc.

- An Access Point, can be any device with the following specs:
- It can be connected to the same Gateway LAN (wired or WiFi);
  - With standard OS: Windows (>= 10), Linux-like, Android (>= 10);



errebi's solutions:

| AP.1 – Traditional PC   | AP.2 – Touchscreen PC  | AP.3 – Rugged Tablet  |
|---|--|---|
|  <ul style="list-style-type: none"> <li>• Raspberry Pi</li> <li>• 19" desktop</li> <li>• Mouse &amp; keyboard;</li> </ul> |  <ul style="list-style-type: none"> <li>• Raspberry Pi</li> <li>• Touch-screen (min. 13");</li> <li>• «VESA» fitting (adjustable) for wall installation;</li> <li>• Protective casing;</li> </ul> |  <ul style="list-style-type: none"> <li>• «rugged», design;</li> <li>• Water, dust, shock resistant;</li> <li>• Minimum 10";</li> </ul> |