



Welcome

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EUROICC : 22 years of R&D (Founder : 35 years of R&D)



- EUROICC focused on applied automation since 1998
- R&D and production of **devices** and **systems**
- In-house development of hardware, software and solutions
- More than 90% of production is exported to USA, EU, CH, Singapore ...

EUROICC Devices & Systems

(PLC = Programmable Logical Controller)

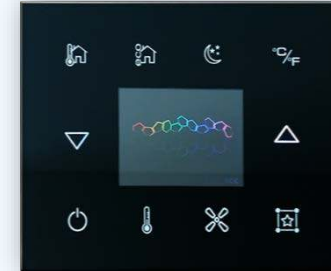
Modular PLC



Compact PLC



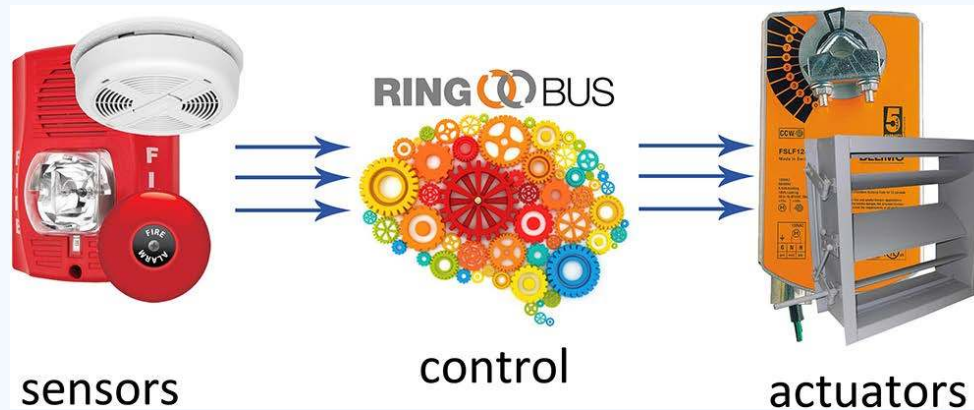
Room PLC



EST – IoT device



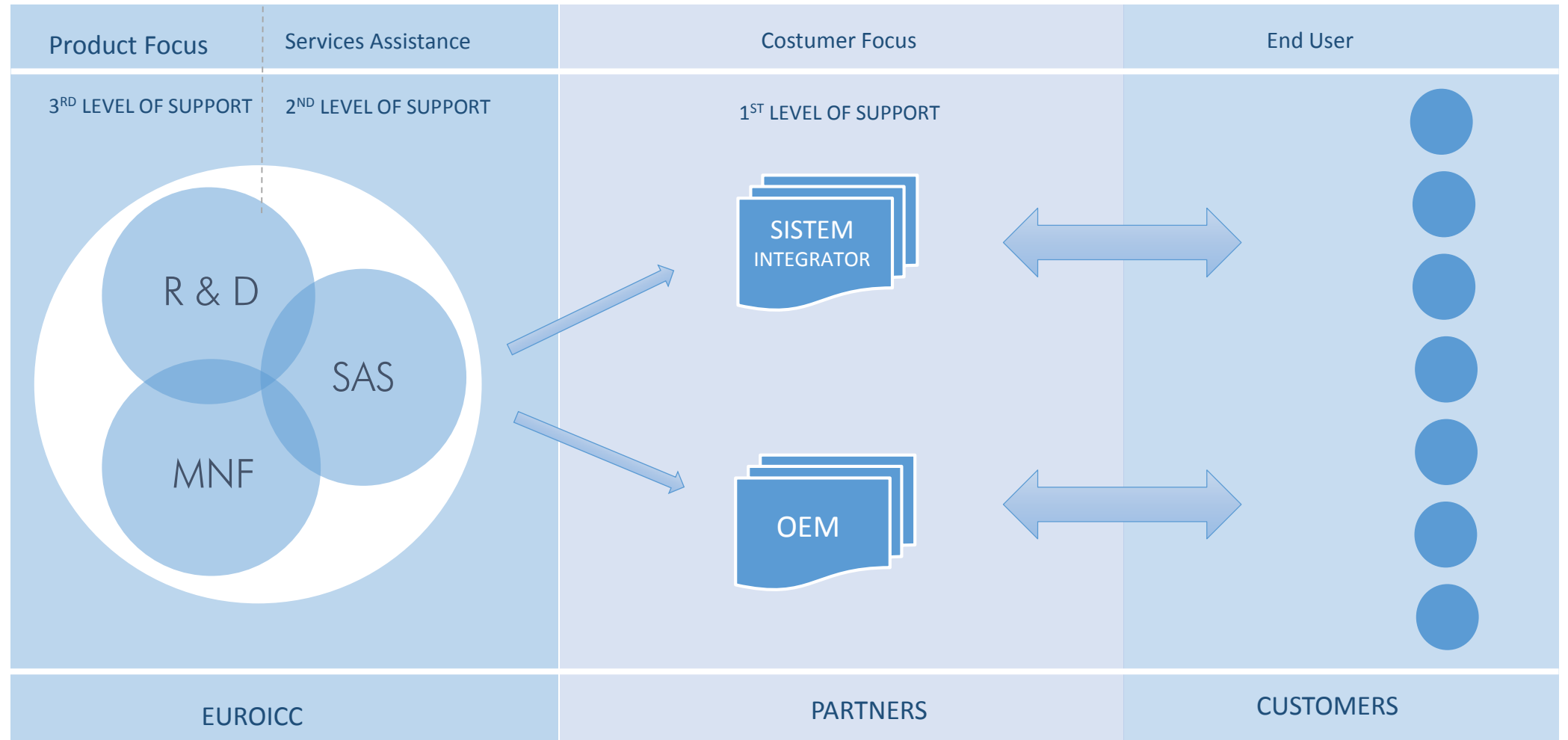
RingBus System (fire protection)



Hotel Guest Room Management System

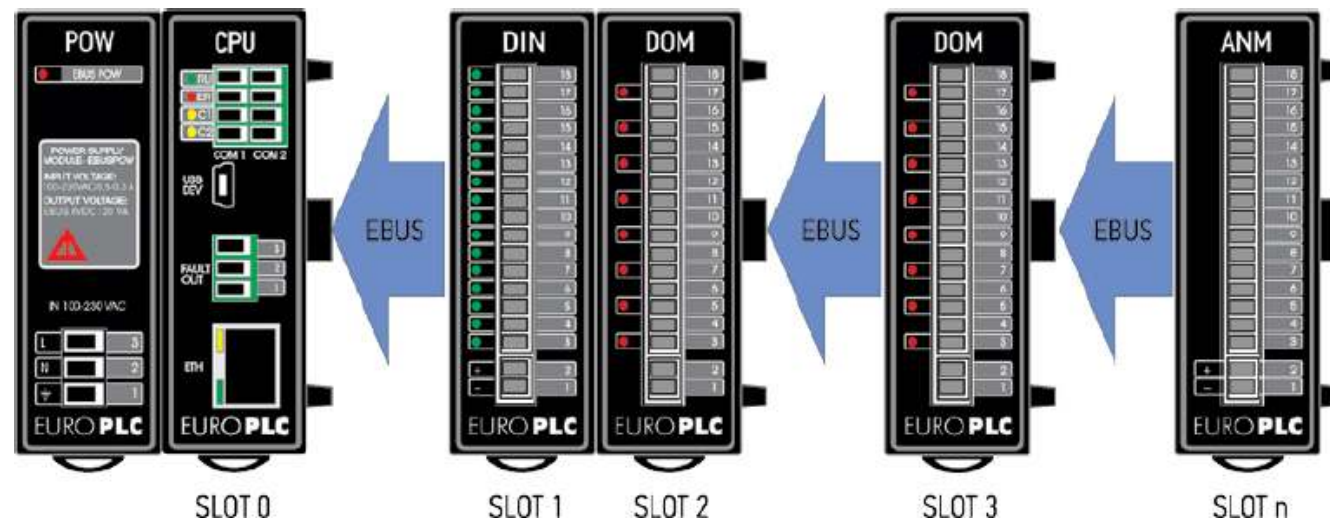


Business Model



M Series : Industrial PLC

- Modular solution for industrial automation
- Developed in 1999. One of the first PLC solutions with serial BUS
- Highly reliable and flexible construction
- Each module is a microprocessor device
- Easy transition to new technology with kept compatibility (from 5V to 3.3V, from 8b to 32b uC)
- Suitable for OEM
- Linux + Hard real time



Modules of M Series of Controllers



M1.POW.01
Power supply module



M4.CPU.21
Processor module



M2.DIN.01
Digital input module
16 digital inputs 24 VDC



M2.DIO.01
Digital input-output
module
16 digital inputs 24 VAC
8 digital inputs 24 VDC
8 transistor outputs



M2.DOM.01
Digital output module
8 NO relay outputs



M2.FNM.10
4 digital inputs 24VDC
4 digital transistor outputs
1 encoder input



M2.ANM.10
Analog input module
4 analog inputs



M2.ANM.15
Analog input-output
module
4 analog inputs
4 analog outputs



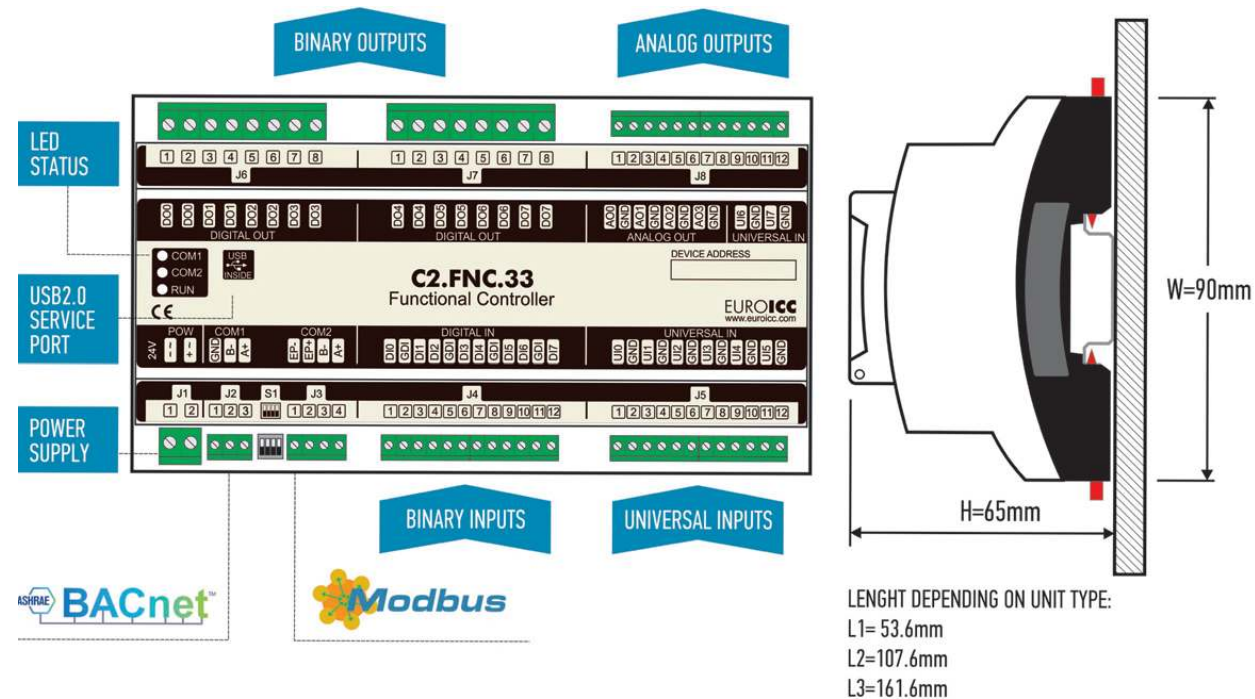
M2.FNM.02
4 digital inputs 24VDC
4 digital transistor outputs
3 analog inputs,
1 analog output



Ringbus master controller

C Series : PLC for Building Automation

- Developed for building automation purposes
- Contemporary solution for HVAC, lighting control, etc.
- BACnet/Modbus
- Unique design, Master/Slave is a function and not a device
- Programmable with predefined solutions



C series of Controllers



C1.POW.01
Power supply module



C4.WBR.02
Web BACnet Router
1x 100BASE-TX Bacnet IP
/ Modbus IP
4x RS485 BACnet MSTP /
Modbus RTU or ACSII



C2.FCC.02
3 relay binary outputs
2 relay valve outputs
4 binary inputs
2 NTC analog inputs



C2.FNC.11
4 relay outputs
8 digital inputs
6 universal inputs (voltage
/ current / resistance)



C2.FNC.34
12 relay outputs
2 triac outputs
12 digital inputs
3 universal inputs (voltage
/ current / resistance)



C2.DIO.12
4 relay outputs
16 digital inputs



C2.DIO.34
12 relay outputs
16 digital inputs



C2.DIN.33
40 digital inputs



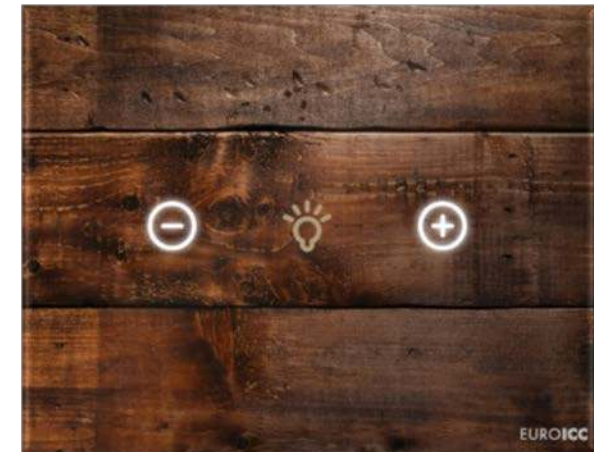
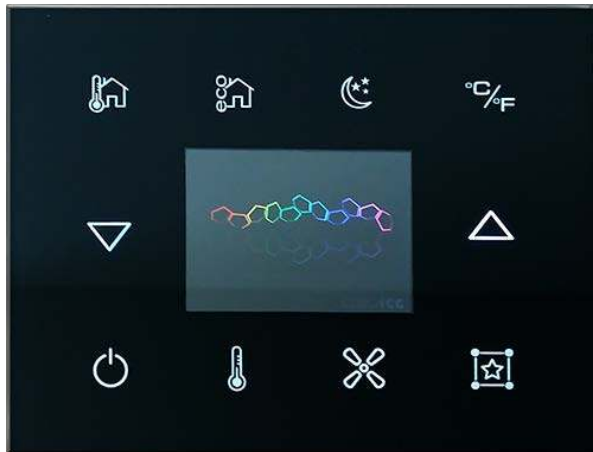
C2.DOM.12
12 relay outputs



C2.DOM.31
20 relay outputs

R Series : Room Units as a PLC

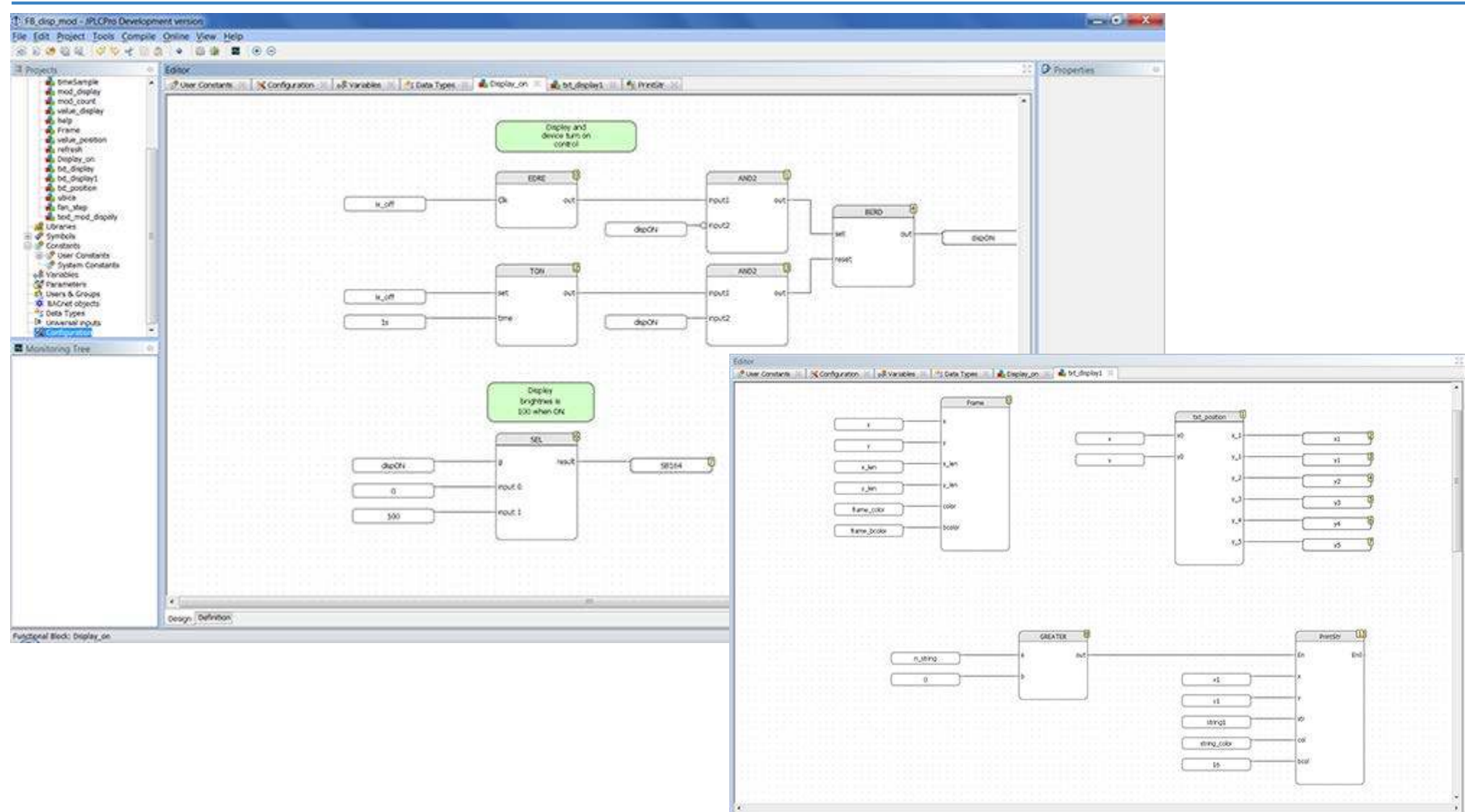
- Derived from C series user interface
- Programmable controller with display
- Need for different types of inputs/outputs, programs, communication...
- Can be used as FCC, switch, shutters controller, light controller...
- Adjustable to different manufacturers of electrical goods
- Good ground for OEM solutions



jPLCPro™ : One Software tool for all devices

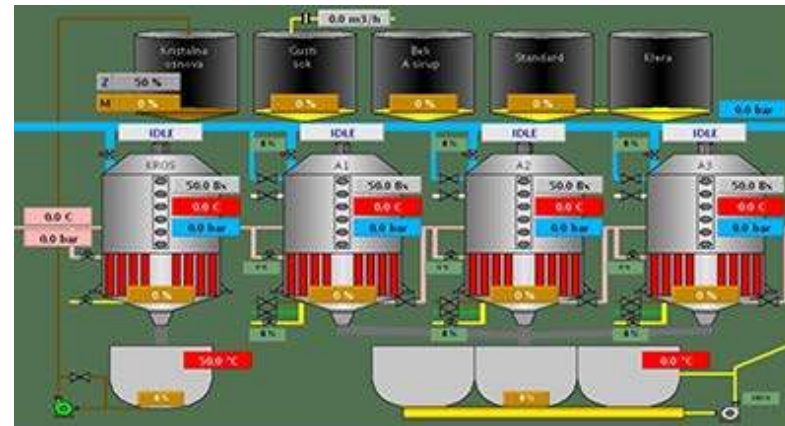


Graphical programming tool and IDE

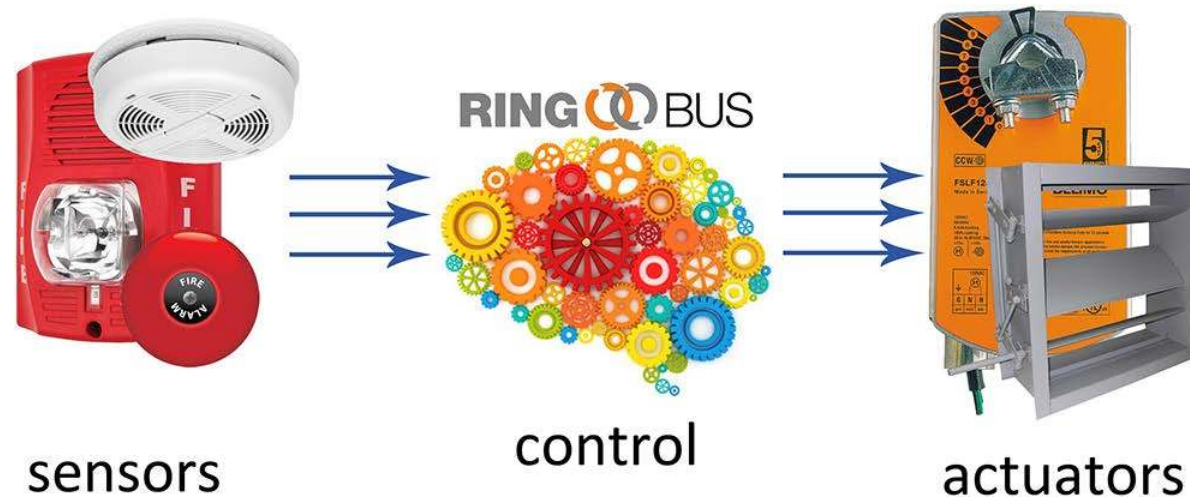


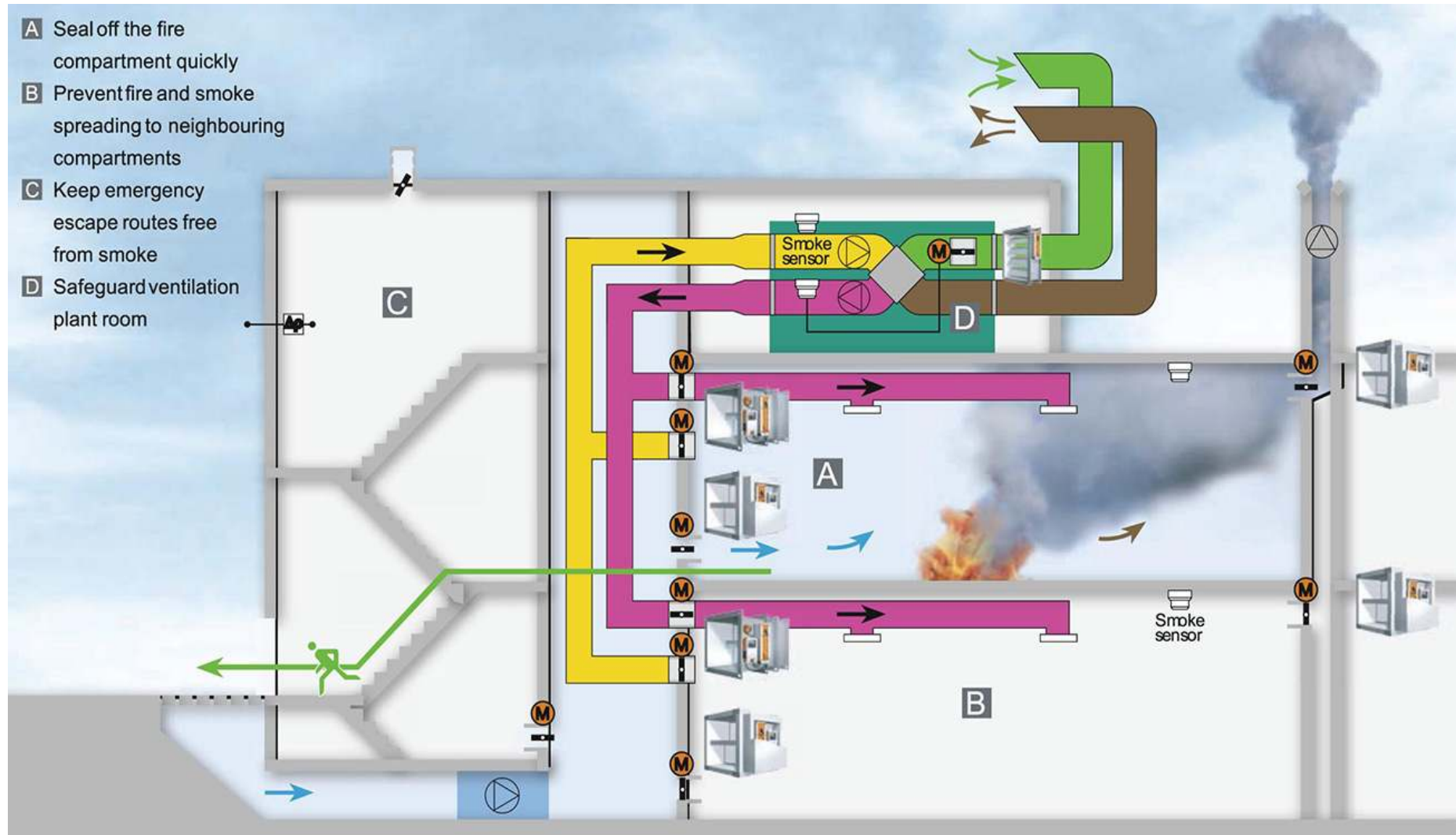
Industrial Automation

- 1998 - 2006 Automation of industrial processes and machines in Serbia
- SCADA + PLC systems, original development, use in different technologies
- Factory plants: energy plants, sugar factories, rubber industry, HVAC,
- Automation of machines for: plastics injection, tin cutting, packing, sterilization...
- Focus on export since 2006
- Today export is more than 90% of production

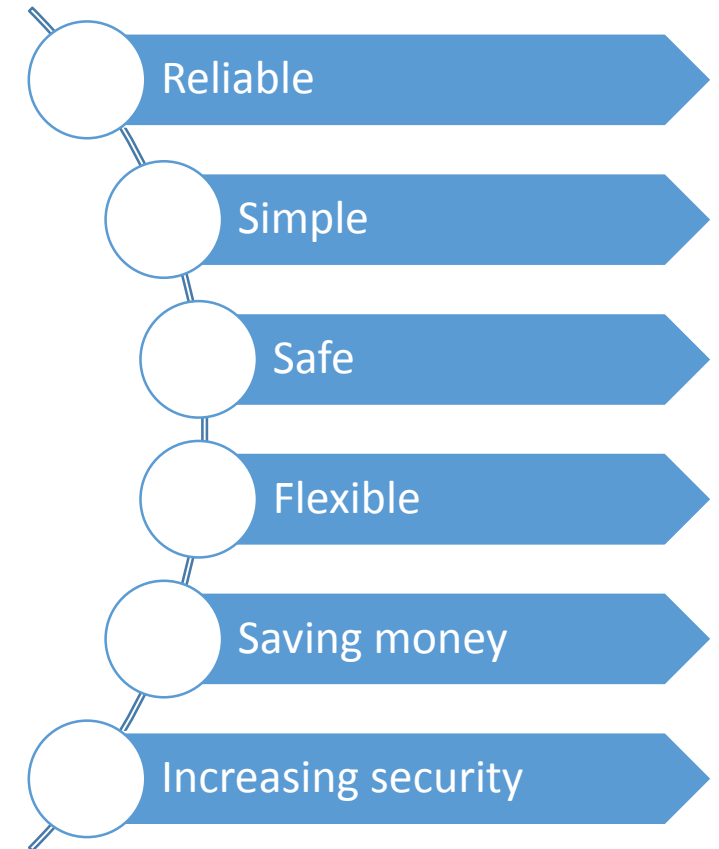
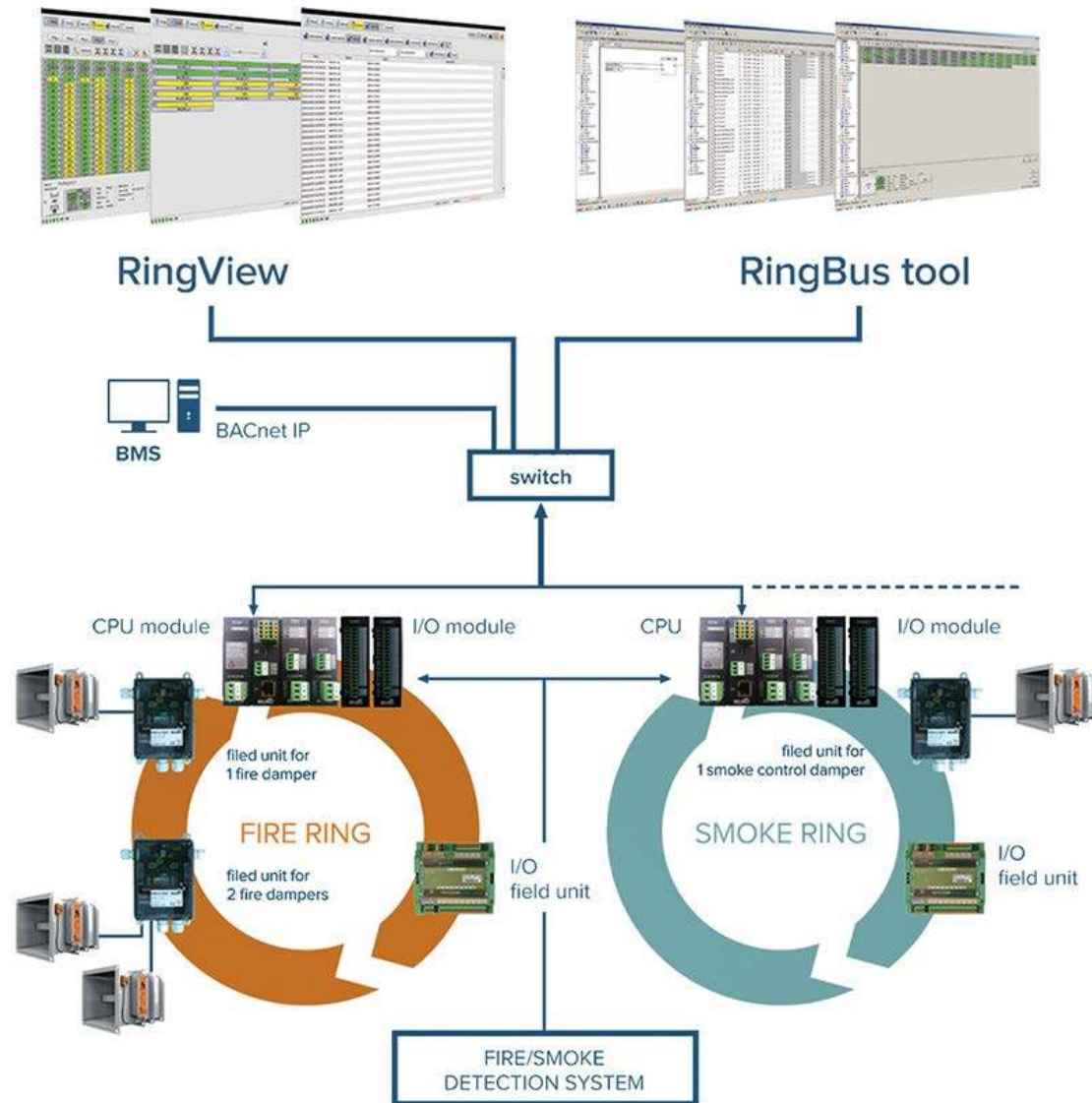


- Based on M series PLC, first application in 2006
- Part of the fire protection system for large public facilities
- Original Patent. Saves money, increases security
- Over 60.000 units installed in Austria, Switzerland, Italy, Germany, Slovenia, Croatia, Montenegro ...
- Example of vertical integration (uC, RTOS, Comms, Linux, web, BACnet, tools, SCADA, BMS connection)





RingBus – OEM Solution



Skylink Vienna Airport



Vienna Central Train Station



Donau City Tower, Austria



Shopping City Süd, Austria



Bürogebäude Rivergate Vienna



Vienna University



Crystal Palace, Ljubljana

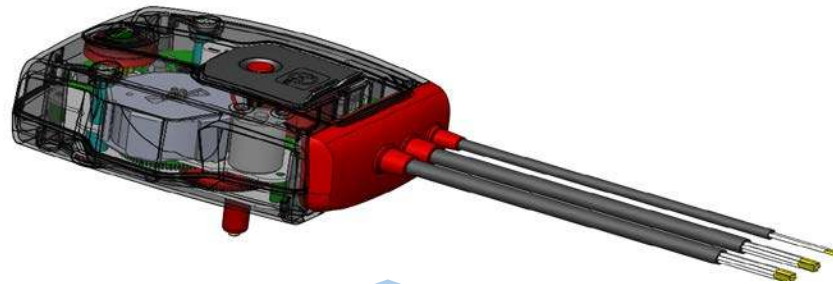


Hotel Splendid, Montenegro



- Ring Bus solution for small systems
- New markets (class & states)
- 750 systems per year, 50k devices
- License business

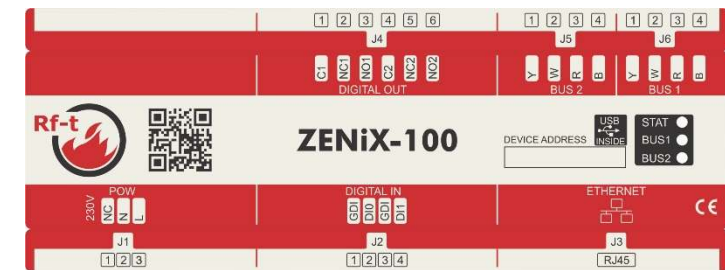
RBONE - RingBus ready actuator



RBONE

Actuator with integrated RingBus Field Unit
3 wire : RB Left, RB Right, Power
Redundant RingBus communication
Auto addressing
Automatic wiring error detection
Short circuit resistant

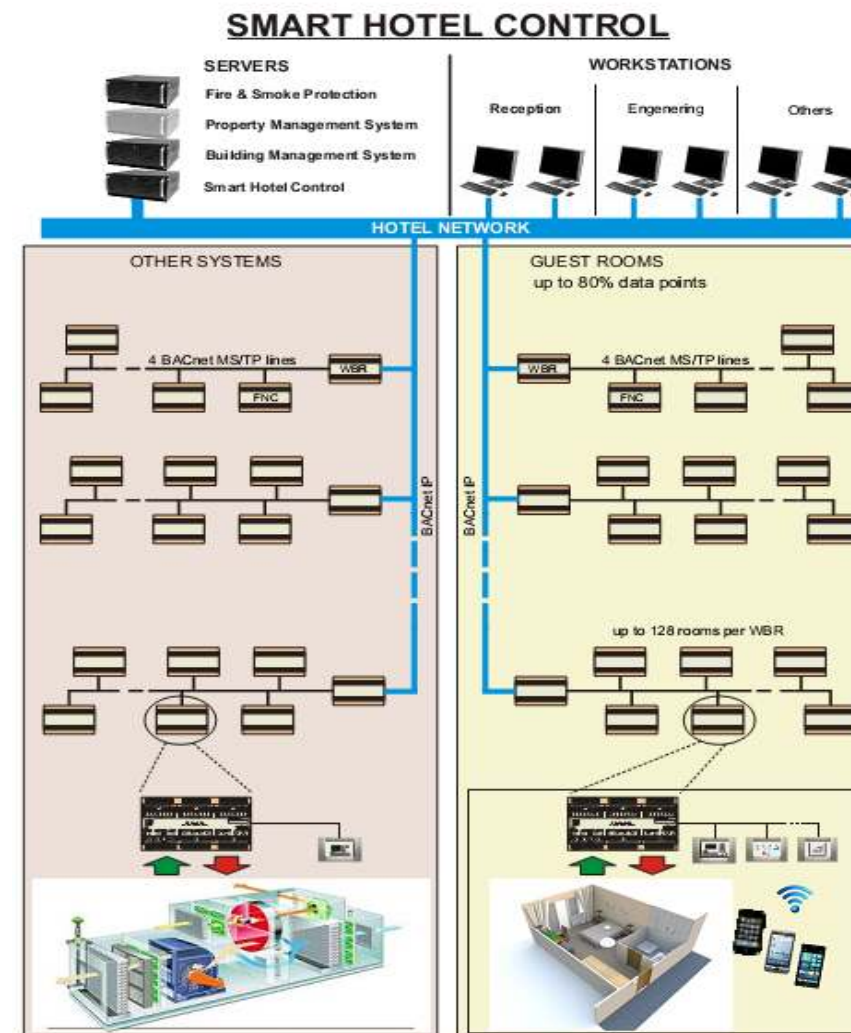
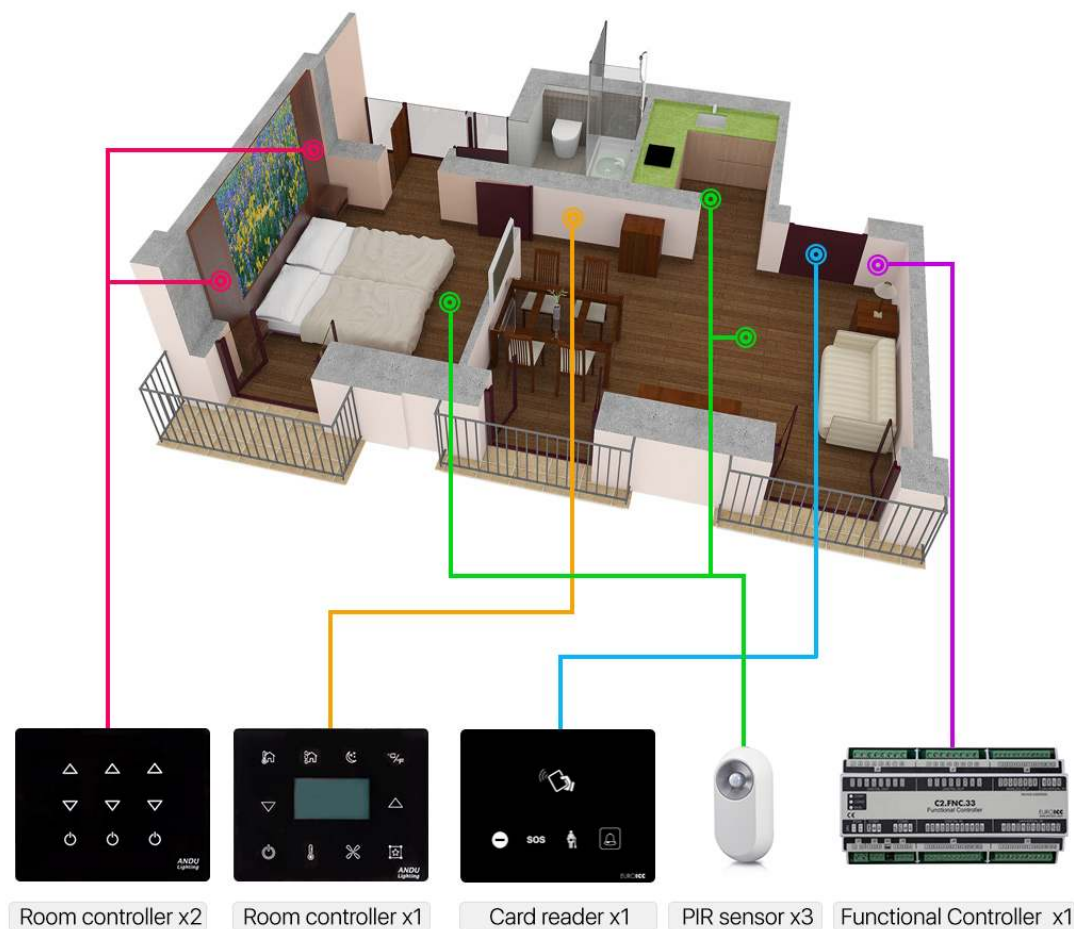
Compact RingBus CPU



ZENiX - 100

Compact RingBus CPU
3 x 230V power supply
2 x RingBus Master
2 x digital Inputs
2 relay outputs
Up to 100 RBFU

Smart Hotel Control – GRMS Solutions for System Integrators



Smart Hotel Control – Solutions for System Integrators

Hotel Amsterdam
Belgrade
Serbia



Hotel Karisma
Ulcinj
Montenegro



Blium Centrall Hotel
Marbella
Spain



Epos Hotel
Crete
Greece



Sunrise Jade
Protaras
Cyprus



Grand Hotel
Brno
Czech Republic

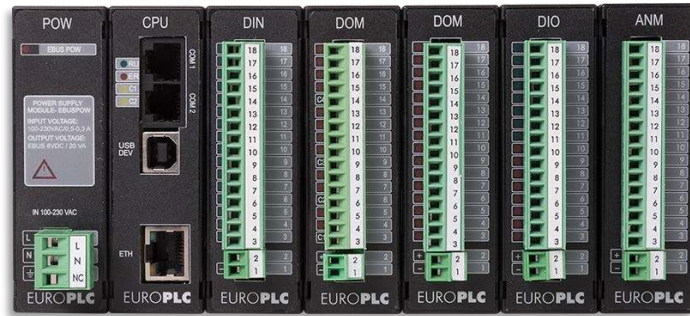


Porto Platanias Beach Resort
Crete
Greece



Mare Monte Beach
Crete
Greece





PLC OEM Business

- Based on standard devices
- Customization
 - Front Design
 - IO types
 - Control algorithm
 - Communications
- Fixed
 - PLC type
 - Board dimension
 - Mechanics enclosure
- OEM Sales channels

OEM Control System for CT scanners
(www.xorantech.com)



Control System based on PLC M series

MiniCAT™



XCAT™





- EUROICC



- GERMAN company
- BUSTEC as AT+CH sales
- Based on RG.RDA.01 device
- Customization
 - IO adjustment
 - Control algorithm
 - Wi-Fi communication
 - iOS, Android app
 - Support for Alexa
 - Front panel design
- Direct sales to BUSTEC

OEM Room Controller (www.foppa.ch)



- SWISS company
- EST 1958
- Based on RG.RDA.01 device
- Customization
 - IO adjustment
 - Control algorithm
 - Front panel design
- Direct sales to FOPPA

Electric storage water heaters – the major energy consumers

European Commission expectations for 2020 (Directive 2009/125/EC)



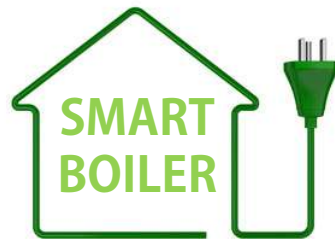
Projected energy consumption
623.000 GWh



38 Serbian power plants
yearly production



Increased energy efficiency
=
Less polluted Mother Nature



GREEN TECHNOLOGY

EST – EUROICC Smart Thermostat



Mechanical
components &
Electronics



TFT LCD 1.44" + WiFi



Mobile App + Cloud



IoT Ready Solution



IoT Ready Solution



A Leading Engineering Consulting Firm

M2E is one of the most trusted full-service engineering firms in the USA. With expertise in the fields of residential, commercial, and hospitality institutional markets, our firm's multi-disciplinary engineering talent and skill has delivered industry-leading creative and technical services to a variety of national and international clients including building owners, architects, developers, property managers, law firms, and general contractors.

RAST = Robotically Assisted Sonic Therapy

RAST uses histotripsy and the mechanical properties of focused ultrasound to destroy targeted tissues without damaging surrounding tissue or structures.

This non-invasive, non-thermal platform can be used to safely, precisely and effectively destroy unwanted tissue throughout the body, reducing patient trauma and healthcare costs.



NON-INVASIVE

No incisions or needles



NON-THERMAL

Predictable and controllable



UNIQUE

No other technology combines
all of these attributes

Thank you for your attention.
Any questions?

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