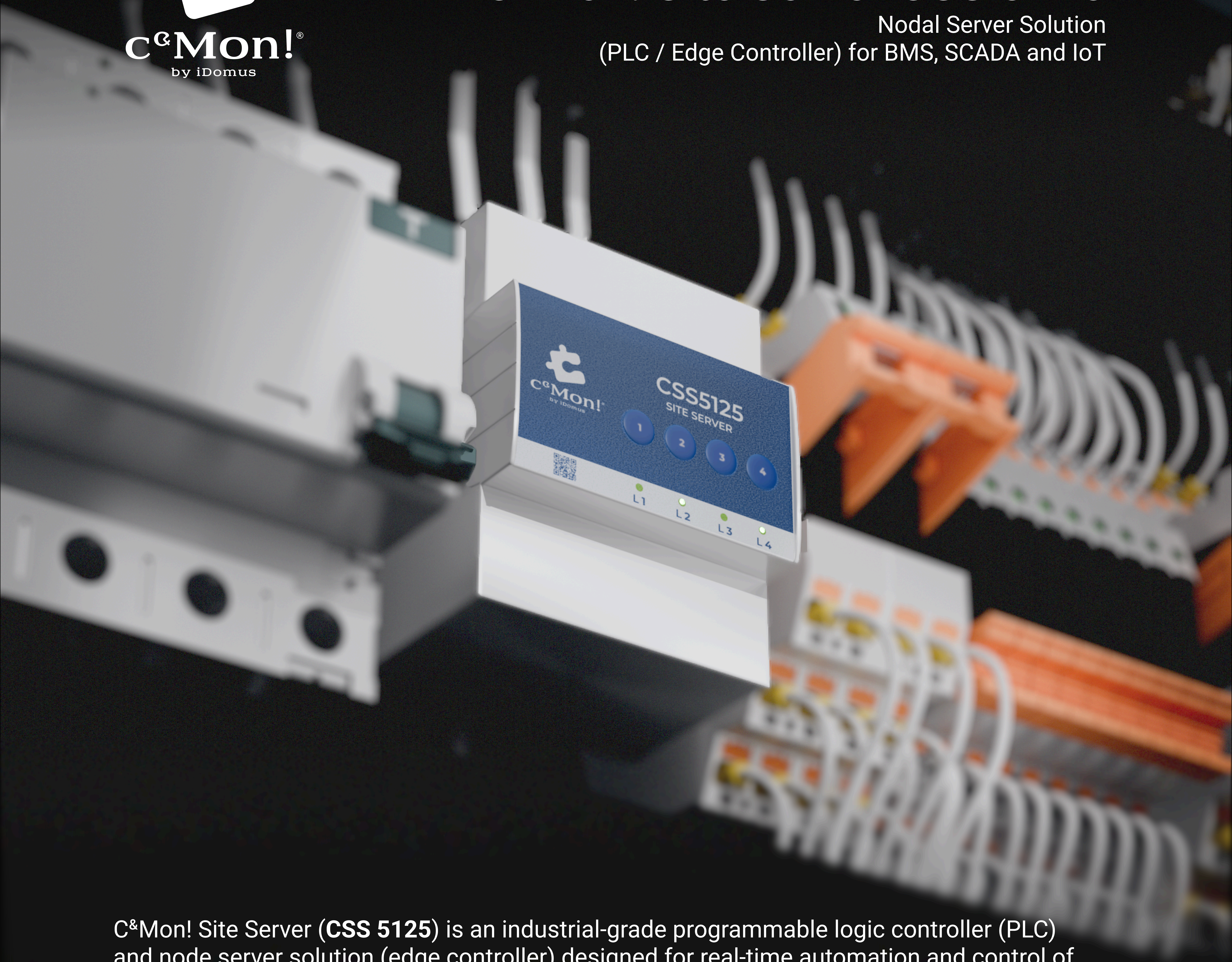




# C&Mon! Site Server CSS 5125

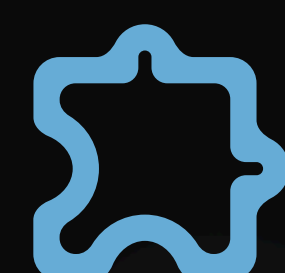
Nodal Server Solution  
(PLC / Edge Controller) for BMS, SCADA and IoT



C&Mon! Site Server (**CSS 5125**) is an industrial-grade programmable logic controller (PLC) and node server solution (edge controller) designed for real-time automation and control of **BMS, SCADA, IoT/IIoT** systems, as well as for the automated management of energy and industrial infrastructure.



versatile nodal solution for  
BMS, SCADA, IoT



high flexibility and  
scalability



support for a large variety  
of protocols



modern microservice  
architecture



high level of  
cyber security



ready for Smart City and  
Industrial IoT projects



# FEATURES

CSS 5125 is a client–server hardware-software platform built on the high-performance Raspberry Pi 5 single-board computer. The device integrates the functionality of an industrial controller, a communication gateway, and an edge node for edge computing applications.

The Site Server provides acquisition, processing, and storage of data from a large number of sensors, controllers, meters, and actuators; supports simultaneous control of multiple distributed devices; and enables integration with higher-level systems and cloud IoT platforms, including Smart City projects.



## HARDWARE PLATFORM

Host platform	Raspberry Pi 5
Processor	ARM64 (ARMv8)
Operative memory	8 GB
Data storage	M.2 NVMe SSD
SSD connection	PCIe (slot PCI)
Application	local storage of data and operational artifacts

Support for stable container operation under intensive I/O workloads

## DIMENSIONS

Width	72 mm
Height	90 mm
Depth	62 mm
Weight (with housing)	110 g





## AREAS OF APPLICATION

- ✓ Building Management System (BMS)
- ✓ Smart Home / Smart Office
- ✓ Smart Housing Complexes
- ✓ Automation of residential and commercial complexes
- ✓ Industrial IoT (IIoT)
- ✓ Automation of industrial facilities
- ✓ Smart & Green City
- ✓ Energy management and environmental monitoring
- ✓ Smart Infrastructure
- ✓ Sensor networks and distributed systems



## FUNCTIONAL SUBSYSTEMS

- Security
- Lighting
- Climate Control and HVAC
- Telemetry
- Automation and Technological Processes
- Multimedia
- Access Control
- Energy Consumption Monitoring and Analysis

## PLATFORM FEATURES

- Cross-platform compatibility
- Support for multiple manufacturers and protocols
- Hybrid architecture (BMS + IoT + Industrial)
- Proto-neural multi-level logic system (IFTTT)
- Mobility: control from PCs, smartphones, and tablets
- Connectivity: event-based messaging and PUSH notifications

## TECHNOLOGIES AND SERVICES USED

- Docker
- gRPC
- MySQL Database
- RabbitMQ (message broker)
- JSON
- Java
- Python

## FUNCTIONAL CAPABILITIES

- Multisite support: centralized control of multiple facilities (house, apartment, office, store, warehouse, production site, etc.)
- Global access with DynDNS support
- PUSH notifications and event-based alerts
- Remote upgrade (software updates via internet)
- Scenarios: setup and save
- IFTTT logic: multi-level rule-based logic engine
- Calendar and scheduler: time- and date-based control
- High level of security: OpenPGP, TLS
- Integration with IoT Smart City platforms

## SUPPORTED INTERFACES AND PROTOCOLS

- Modbus RTU / Modbus TCP
- HDL BUS Pro
- MQTT
- DMX
- DALI
- M-Bus (Meter-Bus)
- DLMS
- LoRaWAN / LoRa Mesh
- Zigbee

## SOFTWARE

- Architecture: ARMv8 Instruction Set
- Operational system: Linux (mature software stack)

## SUPPORT

- Current Linux kernel versions
- Broad upstream driver support
- Stable, fully supported user-space environment





## KEY FUNCTIONS

- ✓ Real-time management of technological processes
- ✓ Centralized monitoring and supervision
- ✓ Edge computing
- ✓ Multisite management (unified control of multiple facilities)
- ✓ Integration of heterogeneous systems and protocols
- ✓ Local data storage and processing
- ✓ Flexible operation in both standalone and networked environments



# SYSTEM ARCHITECTURE

## MICROSERVICE ARCHITECTURE

- All components are deployed as independent Docker containers
- Each service performs a clearly defined function
- Containerization ensures isolation, scalability, and repeatable deployment
- Simplified system updates and maintenance

## OPERATIONAL SPECIFICATIONS

- 24/7 continuous operation
- Remote system administration
- Backup and restore capabilities
- Horizontal scalability (adding devices and services)

## FORM FACTOR

- Enclosure: PC/ABS self-extinguishing
- Mounting: 35 mm DIN rail
- Terminals: screw-type (power and command)
- Protection rating: IP20

## OPERATING CONDITIONS

- Operating temperature: 0...+50 °C
- Humidity: up to 92%, without condensation

## POWER SUPPLY

- Voltage: 5 V DC via USB-C
- Maximum power consumption: 15 W

Model designation CSS 5125

CSS	C&Mon! Site Server
5	Raspberry Pi 5 hardware platform
125	Performance class and configuration

## PACKAGE CONTENTS

- C&Mon! Site Server CSS 5125 controller
- SSD
- Datasheet / user manual
- Licensed software
- Packaging







**c°Mon!®**  
by iDomus

## CONTACTS

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The information contained in this document may be changed without prior notice.