



## An Intelligent BEMS Application from OT to Cloud SaaS

The NexAIoT CPS200M is an easy-to-use IoT gateway. Its pre-installed HiveX system supports various industrial protocols which enable seamless connection of PLCs, drag-and-drop operations, and dashboards. It's also equipped with AWS Greengrass, which transfers data to AWS IoT Core with just one click. This IoT gateway solution is the cornerstone in helping manufacturers quickly accomplish their digital transformation goals.

### ◆ Support technology and function of cloud service development

- Container development platform
- Node-Red datapath development platform
- Integrate AWS IoT Greengrass and IoT Greengrass ML Inference
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- One-click to Edge
- One-click to Cloud

### ◆ High efficiency computing

- CPS200-M\_Intel® Celeron® J1900
- Security storage (SD, SSD, mSATA)
- Support 4G, Wifi & NB-IoT

### Seamless and flexible IIoT protocol

- ◆ - Support Industrial EtherCat and PLC protocol

- › PROFINET, EtherNet/IP, Modbus TCP/Siemens ISO-on-TCP, MCProtocol

- Fieldbus

- › PROFIBUS, Modbus RTU

- IoT communication protocol

- ◆ › OPC UA, MQTT, AMQP, RESTful API, HTTPS

### Practicability application of OT/IT/IoT

- Data Node

- › csv, json, XML, MYSQL

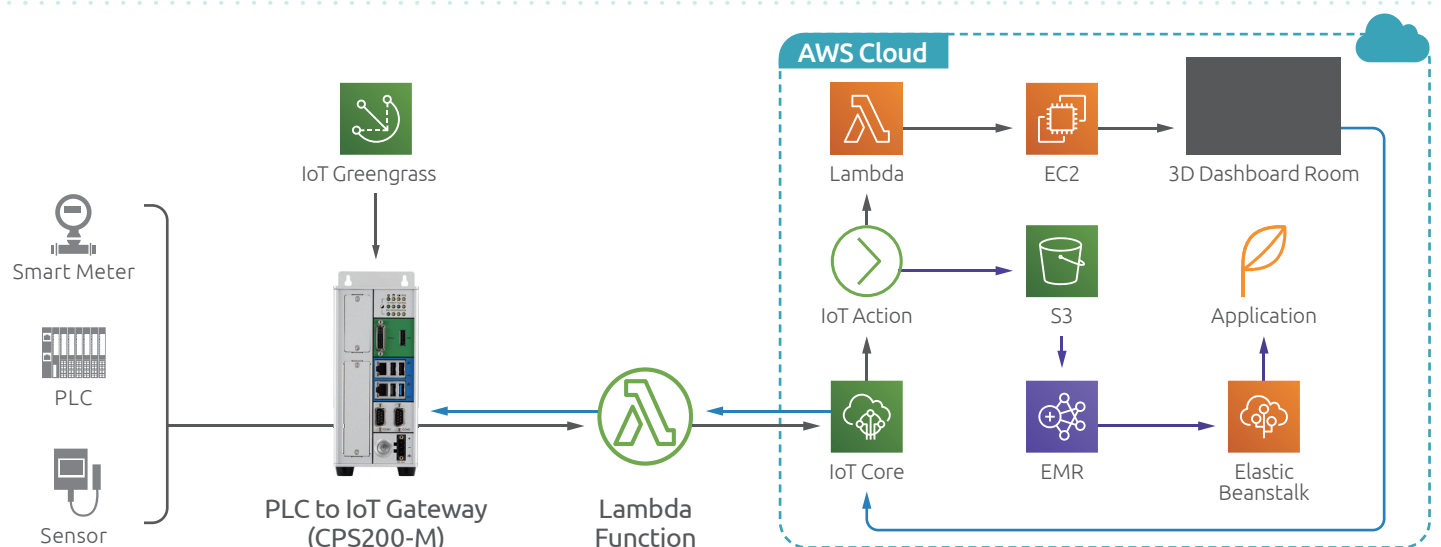
- ◆ - Support Internet/Mail/IoT/library...etc

### Install dashboard widget

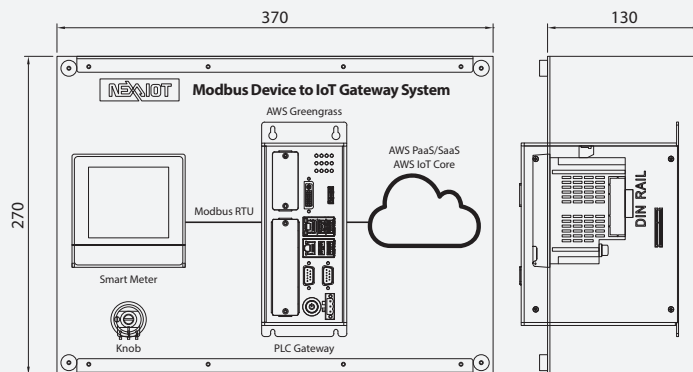
- Basic Widget (3D Bar Chart, Data Table, Gauge...)

- Industrial Widget (Heater, Motor, Pump...)

- NVD3 Widget (Bullet Chart, Bubble Plot, Pie...)



## Dimension Drawing-Starter Kit



## User Scenario

### IoT Gateway (CPS200-M)

- Forward the field data source to AWS IoT Core

### Smart Meter

- Records information such as consumption of electric energy, temperature, and power factor

## Benefits of CPS200-M Solution

### Seamless Integration

- Compatible with existing installation in field control network
- Industrial protocol support – Modbus TCP/RTU, OPC UA client
- Data mining – MQTT-broker, OPC UA client
- Data processing and distribution – JavaScript, JSON, XML, MQTT client, TCP, UDP, HTTP, WebSocket, E-mail

### Secure Gateway Management

- Secure boot
- Gateway monitoring
- Network protocol – HTTP, HTTPS, IPv4, TCP/IP, UDP
- Wireless support\* – Wi-Fi

\* Additional module support

### Productive Engineering

- Drag-n-drop workflow builder
- Versatile pre-defined function blocks
- Initialize-configure-read/write-close pattern

### Direct IIoT Communication

- For devices with OPC UA, Modbus and fieldbus protocol support
- In parallel to the PLC over a direct communication channel
- With data semantics for easy abstraction in the cloud
- **Connect AWS IoT Greengrass**
- Integrate IoT Greengrass ML Inference

### Wireless Connectivity (Optional Module, up to 2)

- IEEE 802.11 a/b/g/n connectivity

### Power Requirement

- 1 x 24VDC input, ±20% range

### Storage Device

- 1 x 2.5" front accessible 128GB SSD support
- 1 x SD card socket

### Dimensions

- 85mm (W) x 157mm (D) x 214mm (H)

### Weight

- 2.25Kg (w/ disk)

### Construction

- Aluminum and metal chassis with fanless design

### Shock Protection

- SSD: 50G, half sine, 11ms, IEC60068-2-27
- CFast: 50G, half sine, 11ms, IEC60068-2-27

### Vibration Protection w/ CFast & SSD condition

- Random: 2Grms @5~500Hz, IEC60068-2-64
- Sinusoidal: 2Grms @5~500Hz, IEC60068-2-6

### Operation Temperature

- Ambient with air flow: 0°C to 50°C

### Storage Temperature

- -20°C to 80°C, relative humidity: 10% to 95%

### Regulation

- CE/FCC
- LVD

## Gateway Platform Specifications

### CPU Performance

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0 GHz

### Memory

- Built-in DDR3L 4GB system memory

### Display

- DP and DVI-I display output

### Networking Connectivity

- 2 x 10/100/1000Mbps LAN ports

### Major I/O Connectivity

- 1 x miniSIM card holder
- 1 x USB 3.0 (900mA)
- 3 x USB 2.0 (500mA per each)
- 2 x RS232/485, 2.5KV isolation protection on COM1
- Power on/off switch

## Ordering Information

- **CPS 200-M (P/N: 10J70020004XR)**

PLC to IoT edge, HiveX, J1900, 4GB RAM, 2.5" 128GB SSD, 24V DC