CPS 100

Main Features

- Seamless integration of field devices, web, database and cloud services
- Fieldbus (slave) PROFIBUS®, PROFINET® or EtherNet/IP™ support
- Modbus TCP/RTU, OPC UA support in parallel
- Intuitive visual flow-based programming paradigm
- Secure HTTPS/TLS encrypted data transmissions

Product Overview

CPS 200/100 series, an edge IoT gateway, is fully integrated with fieldbus accessibility, Modbus TCP/RTU, OPC UA and IoT studio for extremely easy deployment of both centralized/decentralized field data implementation in automation process. Equipped with fieldbus accessibility, user can not only retrieve the data for live monitoring but also extract key information for custom process, like prediction and maintenance, yield rate of production…and so on. Furthermore, IoT studio brings benefits of drag-and-drop data process, exchange field data over network securely between edge and the cloud, flexible field data store/analytics/statistics…and so on.

CPS 200/100 series is a perfectly matched solution for remote field data processing in automation.

Benefits of CPS Solution

Seamless Integration
- Compatible with existing installation in field control network
- Multiple fieldbus (slave) support – PROFIBUS®, PROFINET® or EtherNet/IP™
- 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, SSH, SNMP
- 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 IoT 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

Gateway Platform Specifications

CPU Performance
- Onboard Intel® Atom™ processor E3805 1.33 GHz

Memory
- Built-in DDR3L 2GB system memory

Networking Connectivity
- 2 x 10/100/1000Mbps LAN ports
- Isolated field control 10/100Mbps ports, PROFIBUS®, PROFINET® or EtherNet/IP™

Major I/O Connectivity
- 1 x USB 3.0 (900mA)
- 1 x USB 2.0 (500mA)
- 1 x RS232/485, 2.5KV isolation protection
- Management console
- 4 x DI/DO

Wireless Connectivity (Optional Module)
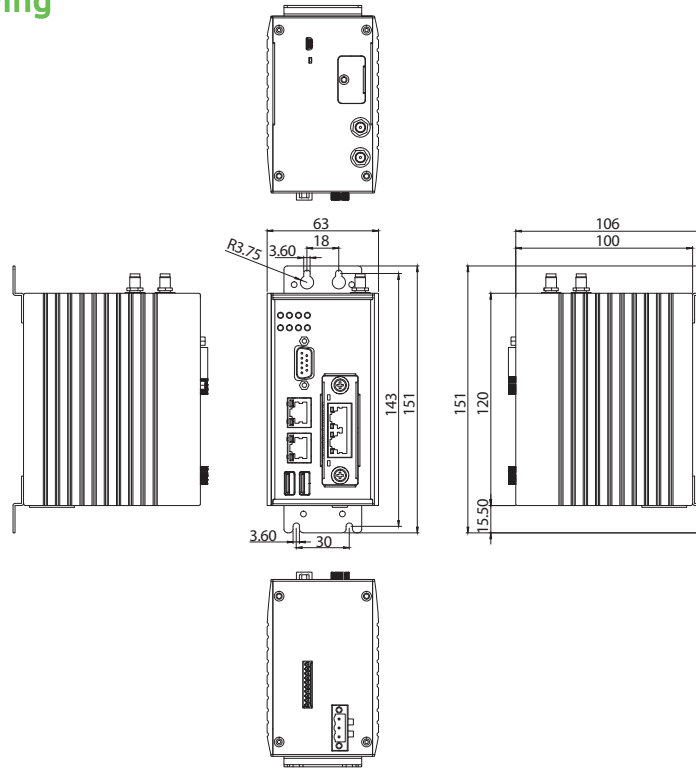- IEEE 802.11 a/b/g/n connectivity

Power Requirement
- 1 x 12/24VDC input, ±20% range

Storage Device
- 1 x eMMC 16GB flash memory

Dimension Drawing

Dimensions
* 63mm (W) x 100mm (D) x 151mm (H)

Weight
* 600g

Construction
* Aluminum and metal chassis with fanless design

Shock Protection
* 50G, half sine, 11ms, IEC60068-2-27

Vibration Protection
* Random: 2Grms @ 5~500HZ, IEC60068-2-64
* Sinusoidal: 2Grms @5~500Hz, IEC60068-2-6

Operation Temperature
* Ambient with air flow: -20°C~65°C

Storage Temperature
* -20°c~80°c, relative humidity: 10%~95%

Regulation
* CE/FCC
* LVD

Ordering Information

* **CPS 100-DP (P/N: 10JC0010000X0)**
  Industrial IoT remote gateway, E3805, 2GB RAM, 16GB eMMC, PROFIBUS®

* **CPS 100-RE (P/N: 10JC0010001X0)**
  Industrial IoT remote gateway, E3805, 2GB RAM, 16GB eMMC, real-time Ethernet