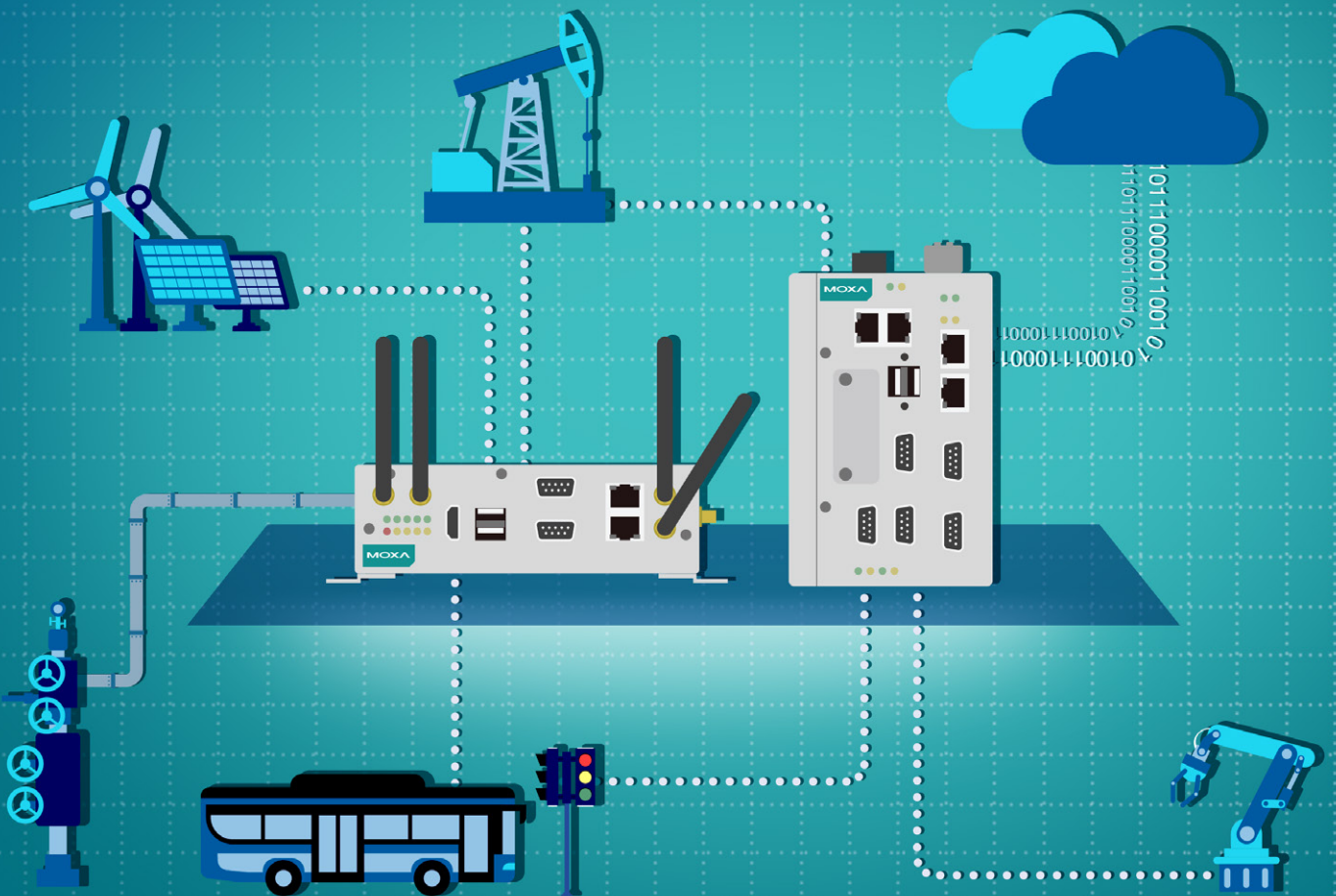


Rugged IIoT Edge Computers for Any Application

4G-ready compact x86 computing platforms



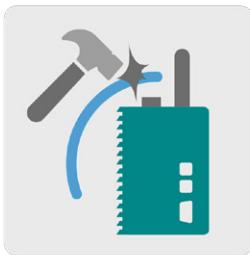
4G-Ready x86 Edge Computers for Tough Environments

In the Industrial IoT age, industrial computers are increasingly being deployed in remote and harsh environments to collect data from field devices for effective monitoring and preventive maintenance.

Moxa's 4G-enabled, Intel Atom® -based IIoT edge computers are designed to operate reliably in extreme conditions, such as continuous exposure to low or high temperatures, humidity, vibration, or power surges, making them perfect for heavy industry, solar grid, water/wastewater, oil and gas, transportation, and marine applications.



Key Features



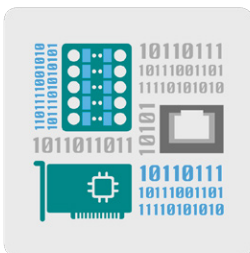
Rugged Design

- Industrial-grade **fanless** design
- **HALT** validated for extreme environment



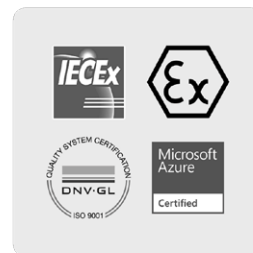
Robust Connectivity

- **4G LTE**-enabled with **-40 to 70°C** wide operating temperature range
- **Carrier approval** (Verizon, AT&T)*



Compact Design with Rich I/O

- Built-in **4 DIs** and **4 DOs** to save cost and space
- Up to **4 Giga LAN** and **4 serial** ports
- Up to **2 miniPCIe** sockets



Industry Certifications

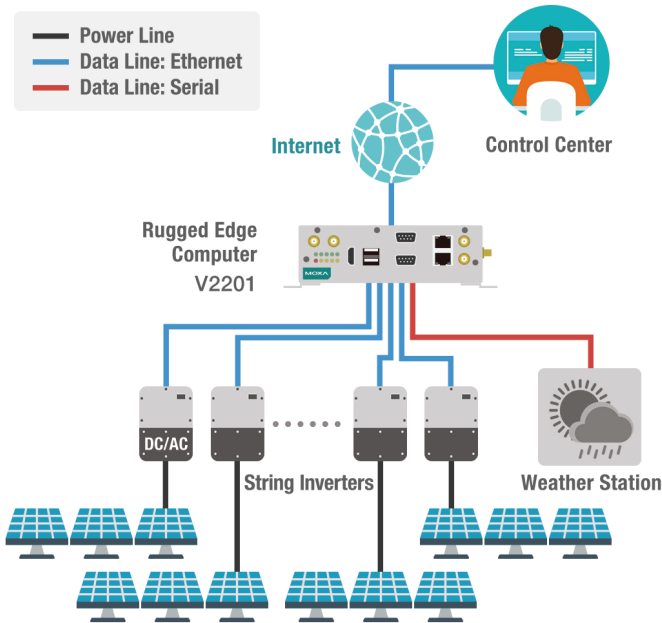
- **ATEX/IECEx Zone 2**, and **UL CID2** certified
- **DNV GL** certified
- Microsoft **Azure Certified** for IoT

*Certification is underway; check the product page for the most up-to-date certification status

Solar Power Monitoring in Western Europe

Communication and Control of Solar Energy Inverters

A major solar inverter supplier uses Moxa's x86 computers to facilitate management of inverters deployed in the field. The computer's Ethernet interface is used to connect to and manage up to 42 inverters and the serial interface is used to connect to the weather station and grid management system. Field data is sent to backend servers to facilitate energy data acquisition, monitoring, and device management.



System Requirements

- A compact and robust computing platform for centralized communications and system control
- Ability to connect to the grid management system and weather station via reliable serial communications
- Ability to connect inverters and backend servers for data acquisition and monitoring through SCADA systems and business dashboards

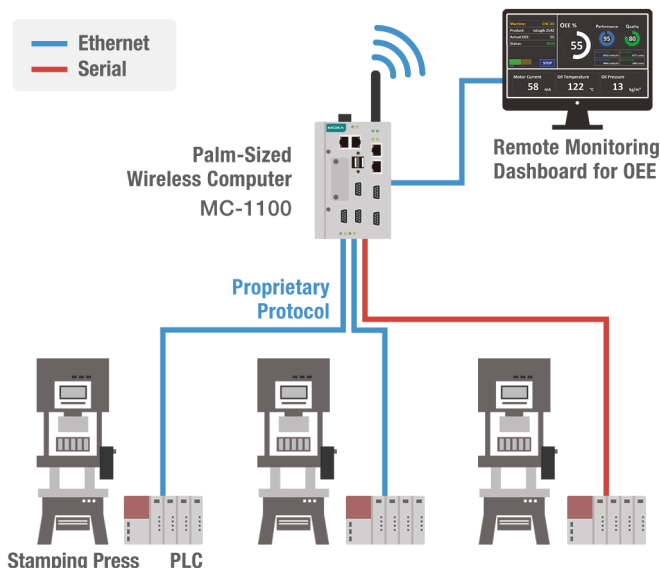
Why Moxa

- V2201 industrial computer with an anti-vibration design and an operating temperature of -40 to 85°C keeps systems running 24/7 in harsh outdoor environments
- Power-efficient Intel Atom® processor that can handle large volumes of complex data generated continuously by sensors connected to rotors, gears, and other field devices
- Palm-sized (150 x 48.8 x 120.2 mm) design and easy installation with DIN-rail mounting or wall-mounting options

Factory Automation in Asia

Machine Data Acquisition for Preventive Maintenance

Machine tool builders are now willing to invest in new IIoT applications so that they can provide more value with their products and improve their OEE (Overall Equipment Effectiveness) by collecting and analyzing status data from machines.



System Requirements

- Computing solution that can collect data from remote PLCs for monitoring the status of stamping presses
- A solution that is compatible with PLCs from Mitsubishi, Delta, and Allen-Bradley
- Compact-sized and vibration-proof computers for reliable operation when installed inside the cabinet in a stamping press system

Why Moxa

- MC-1100 computers with Intel Atom® processor that can support various proprietary PLC protocols and are suitable for edge-intelligence applications
- Compact-sized DIN-rail mountable industrial-grade computers for installing in cabinets without having to change the structure of existing machines
- Wireless connectivity for production lines with cabling constraints



Reliable Networks ▲ Sincere Service



| Model | V2201 | MC-1111 | MC-1121 | MC-1112 | MC-1122 |
|----------------------------------|---|---|---|---|---|
| CPU | Intel Atom® E3815/E3826/E3845 | Intel Atom® E3826/E3845 | Intel Atom® E3826/E3845 | Intel Atom® E3826/E3845 | Intel Atom® E3826/E3845 |
| Memory | Up to 8 GB | Up to 8 GB | Up to 8 GB | Up to 8 GB | Up to 8 GB |
| Storage | mSATA | CFast + SD | CFast + SD | CFast | CFast |
| OS | WS7E/Windows 10 IoT/ Debian 8 | WS7E/Windows 10 IoT/ Debian 8 | WS7E/Windows 10 IoT/ Debian 8 | WS7E/Windows 10 IoT/ Debian 8 | WS7E/Windows 10 IoT/ Debian 8 |
| Communication Interfaces | 2 Serial, 2 Giga LAN, 4 DIs, 4 DOs, 1 USB 3.0, 2 USB 2.0 | 2 Giga LAN, 2 USB 2.0 | 2 Serial, 4 Giga LAN, 4 DIs, 4 DOs, 2 USB 2.0 | 2 Serial, 2 Giga LAN, 2 USB 2.0 | 4 Serial, 4 Giga LAN, 4 DIs, 4 DOs, 2 USB 2.0 |
| miniPCIe Socket | 2 (1 Cellular, 1 Wi-Fi) | - | 1 (Cellular or Wi-Fi) | - | 1 (Cellular or Wi-Fi) |
| Display Interface | 1 HDMI | 1 VGA, 1 DisplayPort | 1 VGA, 1 DisplayPort | 1 VGA | 1 VGA |
| Industrial Certifications | EN 61000-6-2/4 | CID2, ATEX Zone 2, IECEx, IEC 60945, DNV GL | CID2, ATEX Zone 2, IECEx, IEC 60945, DNV GL | CID2, ATEX Zone 2, IECEx, IEC 60945, DNV GL | CID2, ATEX Zone 2, IECEx, IEC 60945, DNV GL |
| Operating Temperature | <ul style="list-style-type: none"> -40 to 85°C (Single/Dual Core Models) -40 to 70°C (Quad-Core Models) | -40 to 70°C | -40 to 70°C | -40 to 70°C | -40 to 70°C |
| Dimensions | 150 x 120.2 x 48.8 mm | 132 x 122 x 68 mm | 132 x 122 x 87 mm | 132 x 122 x 68 mm | 132 x 122 x 87 mm |

Your Trusted Partner in Automation

Moxa is a leading provider of edge connectivity, industrial computing, and network infrastructure solutions for enabling connectivity for the Industrial Internet of Things. With over 30 years of industry experience, Moxa has connected more than 50 million devices worldwide and has a distribution and service network that reaches customers in more than 70 countries. Moxa delivers lasting business value by empowering industry with reliable networks and sincere service for industrial communications infrastructures.

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