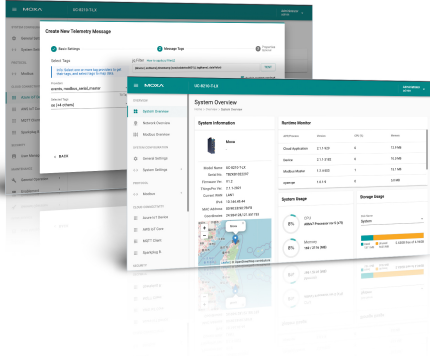


ThingsPro Edge Series

IIoT gateways software for device-to-cloud connectivity



Features and Benefits

- Comprehensive device data processing to prepare field data for cloud platforms
- Built-in client and SDK for popular cloud platforms Azure, AWS, and Sparkplug
- Web-based GUI for remotely monitoring device configuration and data visualization
- Secure and robust OTA design to ensure continuous connectivity to IIoT gateways
- RESTful APIs for extending the existing functionalities and integrating them with IT services
- Provisioning tool for batch configuration of Moxa IIoT gateways

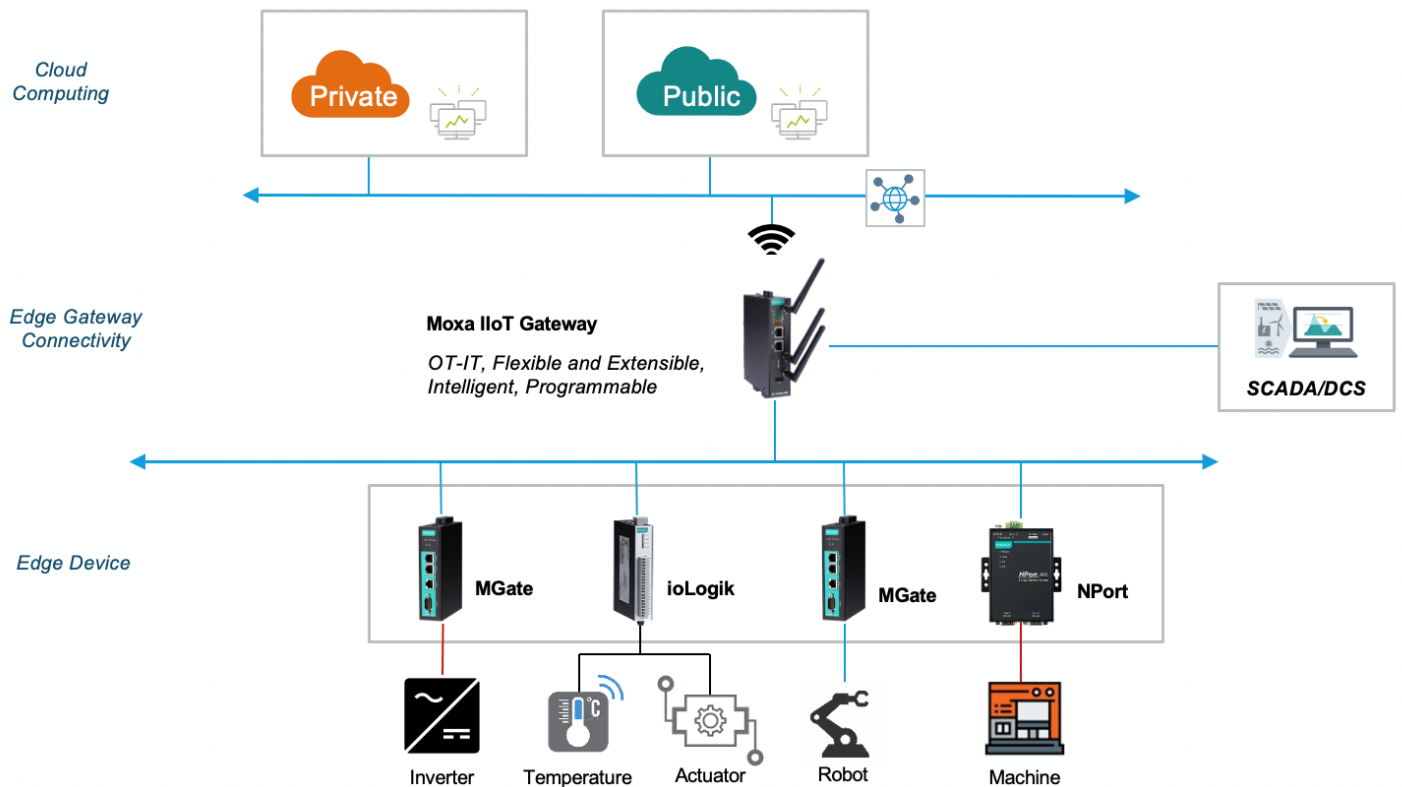
Introduction

ThingsPro Edge is an IIoT gateway software that helps transform your edge computer into a secure and reliable IIoT gateway to suit your business needs. System administrators on the operation technology (OT) side can use its intuitive web GUI to ensure continuous operation while IT developers can use RESTful APIs to configure, monitor, and effectively control IIoT gateway devices. ThingsPro Edge also provides:

- Modbus polling engine with easy-to-use web-based UI for data acquisition from end devices deployed in industrial field sites
- Simplified transfer of Modbus device data to a MQTT broker in cloud applications
- Built-in Azure IoT Edge (AIE) client¹ to accelerate your IIoT application development; no additional effort required to integrate an AIE client into your IIoT gateway
- JSON-based configurable schema for telemetry data upload to satisfy the demands of cloud applications
- A network manager that handles field device connectivity to a WAN

1. The model with built-in AIE client is only available in the AIG-300 Series. We have designed an agent called ThingsPro Agent that can run as a module inside AIE and integrate with ThingsPro Edge via APIs.

System Architecture



Integration With Public and Private Cloud Platforms

- Supports Azure IoT Device, Azure IoT Edge, AWS IoT Core, Sparkplug and MQTT client
- Supports remote device management via cloud portals such as Azure Direct Method enabling device reboots and configuration updates
- Supports MQTT input and output topics for invoking RESTful APIs

Streamlined Sensor-to-cloud Data Transportation

- Modbus master to acquires data from edge devices and publish tagged data to cloud connectivity applications
- Caching of device-to-cloud messages in a specified location and defining policies to send these messages to the cloud
- Customizing of the message format used to publish acquired data to cloud platforms to suit your applications or systems

Device Management

- Dashboard overview to monitor resource consumption and device configurations such as GPS settings and cellular strength signal
- Supports keep-alive check and default route priority to ensure continuous network connectivity
- Supports Wi-Fi access point mode to remotely connect to devices for troubleshooting
- Import and export system configuration to create backups or golden samples

Secure Design and Robust OTA Upgrade

- SecureBoot function and a built-in Trusted Platform Module (TPM) to enhance the security of your IIoT gateways
- Over-the-air (OTA) upgrades to keeps the software and device firmware up-to-date
- The resume capability ensures the integrity of the upgrade packs and the roll-back mechanism events failed upgrades

Batch Provisioning

ThingsPro Proxy (TPP) for batch configuring and provisioning of IIoT gateways. TPP is a Windows-based utility, which can be download from the Moxa website and install in a Windows 10 environment.

- Supports ThingsPro Edge installation
- Effortlessly provisioning of devices including software upgrade, cloud enrollment, and device configuration

Specifications

System Requirements

Supported Devices	Eligible Devices-ThingsPro Edge			
	Eligible Devices			
	Series	Model	Revision	Firmware Version
	AIG-300 Series	AIG-301-US-AZU-LX	1.0.0	1.1
		AIG-301-EU-AZU-LX	1.0.0	1.1

Series	Eligible Devices		
	Model	Revision	Firmware Version
	AIG-301-AP-AZU-LX	1.0.0	1.1
	AIG-301-CN-AZU-LX	1.0.0	1.1
	AIG-301-AZU-LX	1.0.0	1.1
UC-8200 Series	UC-8210-T-LX	1.0.0/1.0.1	1.3
	UC-8210-T-LX-S	1.0.0/1.0.1	1.3
	UC-8220-T-LX	1.0.0/1.0.1	1.3
	UC-8220-T-LX-US-S	1.0.0/1.0.1	1.3
	UC-8220-T-LX-EU-S	1.0.0/1.0.1	1.3
	UC-8220-T-LX-AP-S	1.0.0/1.0.1	1.3
UC-8100A-ME-T	UC-8112A-ME-T-LX	1.0.2/1.0.3	1.5
	UC-8112A-ME-T-LX-AP	1.0.2/1.0.3	1.5
	UC-8112A-ME-T-LX-US	1.0.2/1.0.3	1.5
	UC-8112A-ME-T-LX-EU	1.0.2/1.0.3	1.5

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