



Firmware for AIG-301 Series Release Notes

Version: v1.7	Build: • .1-4424
Release Date: Jan 24, 2025	

Applicable Products

AIG-301 Series

Supported Operating Systems

Moxa Industrial Linux 1 (Debian 9)

New Features

- Adds support for the Telit LE910C4-WWXD module.

Enhancements

- The DLM Client for the Moxa DLM Service now implements a backoff mechanism to prevent excessive message repetition during high-frequency events, optimizing events reported while ensuring critical notifications remain visible.
 - If the same event occurs five times within a 5-minute window, the system enters backoff mode, progressively increasing the message delay up to a maximum of 60 minutes.
 - During backoff, events are sent as compressed messages with an indication of suppression count (e.g., "backed off for x times").
 - Normal message delivery is resumed once the event stops occurring or after a device reboot.

Bugs Fixed

- An instance of the DO value set by Modbus not updating correctly.
- An unresponsive refresh button on the I/O page.
- An error message "SparkPlug service is busy (please try again later)" appears when configuring SparkPlug.
- Selection of the "Only send changed values" option for Publish Immediately mode in SparkPlug is not saved.

Changes

N/A

Notes

- Known Issue: The Sparkplug configuration will be lost if power is cycled within 10 seconds after saving the configuration.

Note: Sparkplug configuration will take at least one minute when a large number of messages or tags are selected. Wait at least one minute after saving the configuration.



Version: v1.6	Build: N/A
Release Date: Nov 14, 2024	

Applicable Products

AIG-301 Series

Supported Operating Systems

Debian 9.x

New Features

- Supports Modbus TCP Slave.
- Supports backup of logs with capability to upload to FTP/SFTP.
- Supports whitelist for HTTP, HTTPS, and SSH services.

Enhancements

N/A

Bugs Fixed

- A tag streaming issue after Modbus device disconnection and reconnection.
- A case of IoT edge modules startup failure when AIG was disconnected.
- An issue maximum journal log size limit.
- An issue where memory usage was unusually high.
- A case of inability to send data to the cloud when it contains a NaN value.
- An issue with a DO initial state configuration.
- Modbus master, OPC UA Server, and Function Management apps occasionally fail to start after reboot.
- A case of incorrect display of Wi-Fi information.
- A case of inability to select writable tags in OPC UA server.
- An issue with GPS time synchronization drift.
- A case of inability to connect to a private Azure IoT Hub.
- An issue where function app content was missing after extracting large files.
- A login failure due to an expired account when the account is unlocked via RESTful API.
- An issue with iptables rule persistence after action changes.
- Remove unsupported options in the serial interface modes RS-422, RS-485-2w, and RS485-4w.
- A case of unexpected message display when fail2ban is triggered.
- A data loss issue during telemetry transmission via Azure IoT Edge.
- A module connection failure issue when the UDP DNS payload is too long.
- An issue of the GPS API not returning up-to-date values.
- CVE-2024-1086: <https://nvd.nist.gov/vuln/detail/CVE-2024-1086>
- CVE-2024-21646: <https://nvd.nist.gov/vuln/detail/CVE-2024-21646>
- CVE-2024-27099: <https://nvd.nist.gov/vuln/detail/CVE-2024-27099>
- CVE-2024-25110: <https://nvd.nist.gov/vuln/detail/CVE-2024-25110>

Changes

- Updated Azure IoT Edge runtime to v1.4.33.
- Updated thingspro-agent to v2.2.6 with Azure IoT Edge v1.4.40.
- edgeAgent and edgeHub images updated to v1.4.40.

Notes

- The size this upgrade package is approximately 341 MB, and the upgrade process will take a minimum of 40 minutes.



Version: v1.5.1	Build: • .1-2768
Release Date: Mar 27, 2024	

Applicable Products

AIG-301 Series

Supported Operating Systems

Moxa Industrial Linux 1 (Debian 9)

New Features

N/A

Enhancements

N/A

Bugs Fixed

- 1. CVE-2024-21646: <https://github.com/Azure/azure-uamqp-c/security/advisories/GHSA-j29m-p99g-7hvp>
- CVE-2024-27099: <https://github.com/Azure/azure-uamqp-c/security/advisories/GHSA-6rh4-fj44-v4jj>
- CVE-2024-25110: <https://github.com/Azure/azure-uamqp-c/security/advisories/GHSA-c646-4whf-r67v>

Changes

- Upgrades the Azure IoT SDK of Azure IoT Device and thingspro-agent to LTS_03_2024. https://github.com/Azure/azure-iot-sdk-c/releases/tag/LTS_03_2024.

Notes

- This patch applies to AIG-301 with firmware v1.5 and ThingsPro v2.4.0-4020
- To upgrade to the patch, do the following:
 - Download the *.deb file from the Moxa official website: <https://www.moxa.com/en/products/industrial-computing/iiot-gateways/programmable-iiot-gateways/aig-301-series#resources>
 - Log in to the AIG-301 web console with admin permissions and go to General Operation > Software Upgrade.
 - Select "Upgrade From the Local Drive" and select the *.deb file you downloaded.
 - Confirm the app version is 2.4.1-2768 on the Dashboard page when the patch is successfully installed.
- To use the Azure IoT Edge to send out telemetry messages, you need to upgrade the thingspro-agent module as well. Do the following to upgrade the thingspro-agent module:
 - Deploy the IoT Edge module thingspro-agent with URI: `moxa2019/thingspro-agent:2.2.5-armhf` in IoT Hub.

Set the create option:

```
{
  "HostConfig": {
    "Binds": [
      "/var/thingspro/apps/azureiotedge/data/setting:/var/thingspro/cloud/setting/",
      "/run:/host/run/",
      "/var/thingspro/data:/var/thingspro/data/"
    ]
  }
}
```

- Confirm that the version of the module is 2.2.5, indicating successful deployment on the Azure IoT Edge page.



Note: It is normal for a red flag with the warning "Not a compatible version with ThingsPro Edge" to be displayed.