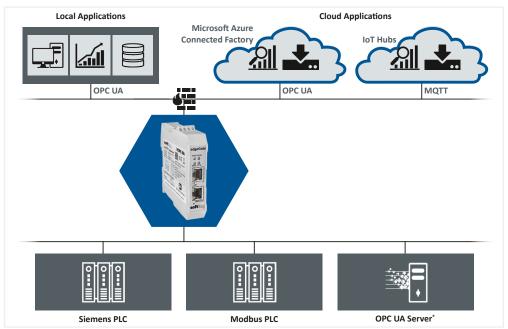


## edgeGate

# Reliable Connectivity of Siemens and Modbus PLCs to IoT Hubs from Different Cloud Vendors

- Bidirectional Data Exchange Between Controllers and Microsoft Azure Connected Factory
- Generic MQTT Publisher and OPC Server Functionality for Connecting Industrial Networks to IT Applications Running On-premise or in Cloud
- Usage of High Security Standards for Protecting Transferred Data





### Connection of IoT Hubs from Different Vendors With Siemens and Modbus PLCs

- Adjustable topic settings for MQTT payload according application requirements
- Chance for analytics, storage, computing applications in cloud solutions from different vendors
- Integration of OPC UA and MQTT client applications running on-premise as well as in private and public clouds
- Worldwide remote access to field data
- Suited to new applications such as IoT or analytics functionality while dedicated to retrofit upgrades
- No PLC programming necessary
- Symbol import from STEP 7 and TIA Portal projects
- No software updates, operating system patches and PC updates required

#### \* when using Microsoft Azure Connected Factory

## **Comprehensive Integration with Microsoft Azure Applications**

- Direct data access from Microsoft Azure to Siemens and Modbus PLCs
- Bidirectional data exchange between cloud and shopfloor by accessing OPC UA Servers on edgeGate or in OT network via integrated Microsoft OPC Proxy and Publisher components

#### **Industry-proven Security**

- Physically separated interfaces and separate configuration rights for OT and IT networks preventing intrusions
- Supporting security standards as SSL/TLS and X.509 certificates
- OPC UA compliant data encryption and user authentification



### edgeGate

#### **Technical Data**

Hardware Processor Altera Cyclone V SoC with Dual-core ARM Cortex-A9

> 2 x IEEE 802.3 100BASE-TX/10BASE-T (independent interfaces) Connectors Status LEDs PWR (power supply), RUN (running), ERR (error), SYS (configuration)

Dimensions (H x W x D) 100 mm x 22.5 mm x 105 mm

18 VDC ... 32 VDC, SELV/PELV supply mandatory **Power Supply** 

Typically 200 mA, maximum 1 A at switch-on

Operating Temperature, Horizontal

**DIN Rail Installation** 

-40 °C ... 50 °C (0 mm minimum distance) -40 °C ... 55 °C (22.5 mm minimum distance)

Rail Installation

Operating Temperature, Vertical DIN -40 °C ... 35 °C (0 mm minimum distance) -40 °C ... 40 °C (22.5 mm minimum distance)

Storage Temperature -40 °C ... 85 °C

Relative Humidity 10 % ... 90 %, non-condensing

Weight About 0.2 kg Mounting DIN Rail (35 mm)

Phoenix Contact ME MAX Housing

**Protection Class** 

Software IT Network / Cloud Connectivity OPC UA (Server, 60,000 items in total), MQTT (Publisher, up to 1,000 topics)

> Controller Connectivity RFC1006, Modbus TCP

Maximum Number of Controllers

Supported IoT Hubs Microsoft Azure Connected Factory, Microsoft Azure IoT Hub,

IBM Watson IoT Hub, General Electric Predix, Amazon AWS, etc.

Siemens S7-300, S7-400, S7-1200, S7-1500 **Supported Controllers** 

Modbus TCP-compatible controllers (Schneider Electric, Wago, Beckhoff, Phoenix Contact, etc.)

**Supported Engineering Tools** SIMATIC STEP 7, TIA Portal V13/V14/V15 including Service Packs

Conformity **Emission** EC Directive 2004/108/EC "Electromagnetic Compatibility", EN 55011, Group 1, Class A

> EC Directive 2004/108/EC "Electromagnetic Compatibility", EN 55022, Class A EC Directive 2004/108/EC "Electromagnetic Compatibility", EN 61000, Part 6-4

FCC CFR45, Part 15 Section 15.107 and 15.109 (Class A), VCCI Class A Information Technology Equipment 2002

EC Directive 2004/108/EC "Electromagnetic Compatibility", EN 61000, Part 6-2 Immunity

Certifications CE, FCC, RoHS

#### Scope of Delivery

Hardware edgeGate

Software Tool for configuration over integrated web interface,

dataFEED Exporter for easy symbol import from Siemens Project Files

Quick Startup Guide (printed documentation) Documentation

#### **Order Numbers**

GAA-YY-145122 edgeGate



https://data-intelligence.softing.com

