

# edgeGate



Access PLC, CNC, and OPC UA Data via MQTT and OPC UA for higher-level management applications

- Easy Access to Data from existing PLC or CNC Controllers via OPC UA & MQTT
- Standardize and Simplify the Machine Data Integration through Modern OPC UA and MQTT Communication Functionality
- Expandable through more docker based solutions, like edgeConnectors and edgeAggregator
- Usage of High Security Standards allow to protect production secrets



## Access to existing PLC and CNC Controller Data

- Read and write access to Simatic Siemens PLC, Allen-Bradley PLC, Siemens Sinumerik controller, Fanuc CNC controller, Modbus TCP, or OPC UA Client machine Data
- Easy local and global access to field data and routing through firewalls
- Protect investment through simple retrofit upgrades, as well as for modern controllers' integration, without require modifying the running configuration in them.
- No PLC programming or dedicated PC required

## Standardize and Simplify the Machine Data Integration

- Integration of higher-level management systems like ERP, MES, or SCADA using integrated OPC UA Server providing open, platform-independent, and market-proven communication
- Simple data transmission to an MQTT broker using the MQTT publisher functionality for local or cloud-based solutions.
- Separate Web interface for Gateway configuration and Access Data application to avoid misconfigurations

## Industry-proven Security

- Physically separated interfaces for OT and IT networks add security layer to the plant
- Supporting security standards such as SSL/TLS and X.509 certificates
- Support of all security functions of OPC UA and MQTT
- Filtered access depending on IP address (Whitelist / Blacklist for OPC UA endpoints)

Technical Data		
Hardware	Processor	Broadcom BCM2711 quad-core ARM Cortex-A72 (ARM v8) 64-bit SoC @ 1,5GHz
	Status LEDs (Gateway)	PWR (Power Supply), RUN (Running), ERR (Error), APP (Application)
	Real-Time Clock	Real-Time clock with buffering, setting the time via browser or by NTP server (buffer time depends on conditions such as ambient temperature and duration of use)
Interfaces	Ethernet	2x IEEE 802.3 10BASE-T/100BASE-TX/1000BASE-T, Connector: RJ45
	USB	1x USB 2.0, Connector: Type A
	HDMI	1x HDMI 2.0, Connector: Type A
Supported Communication Protocols	Northbound	<ul style="list-style-type: none"> <li>▪ MQTT V3.1, V3.1.1, &amp; V5</li> <li>▪ OPC UA Server</li> </ul>
	Southbound	<ul style="list-style-type: none"> <li>▪ OPC UA Client</li> <li>▪ Modbus TCP</li> <li>▪ SIMATIC S7, RFC1006, S7+: S7-300/-400/-1200/-1500 PLCs</li> <li>▪ EtherNet/IP CIP: Allen-Bradley CLX PLCs</li> <li>▪ Sinumerik 840D (RFC1006): Sinumerik PL &amp; SL CNCs</li> <li>▪ FOCAS (Ethernet): FANUC CNCs</li> </ul>
Physical Properties	Dimensions (H x W x D)	120 mm x 28 mm x 110 mm
	Weight	Approx. 420g
	Power Supply	24Vdc ±20%, SELV/PELV supply mandatory, typical input current 500mA (max. 1A, considering rush-in current at switch-on)
	Typical Power Loss	9.5W
	Operating Temperature	-20°C ... +60°C
	Storage Temperature	-40°C ... +85°C
	Relative Humidity	5% ... 95%, non-condensing
	Cooling	Convection, no fan
	Mounting	DIN rail 35mm
Protection Class	IP20	
Conformity/Standards	CE	Electromagnetic compatibility (EMC) and Restriction of Hazardous Substances (RoHS) EN61000-6-2 Generic standards – Immunity standard for industrial environments EN61000-6-3 Generic standards – Emission standard for residential, commercial, and light-industrial environments EN61000-6-4 Generic standards – Emission standard for industrial environments EN61326-1 Electrical equipment for measurement, control, and laboratory use EN61131-2 Programmable controllers – zone B EN55011 Industrial, scientific, and medical equipment – Radio-frequency disturbance characteristics – Group 1 Class B EN55032 Electromagnetic compatibility of multimedia equipment – Emission Requirements - Class B EN 50581:2012/EN IEC 63000:2018 RoHS, Assessment to the restriction of hazardous substances
	FCC	FCC 47 CFR Part 15B and ICES-003 – Class B
	VCCI	Class B Information Technology Equipment (ITE) set forth in the Agreement of Voluntary Control Council for Interference by Information Technology Equipment (VCCI), April 2015

## Scope of Delivery

Hardware	edgeGate
Software	Integrated web interface to configure the device Integrated web interface to configure the machine data connectivity

## Order Numbers

GAL-YY-051000	edgeGate
LRL-XX-161001	edgeConnection – Perpetual License*
LMA-XX-161001	edgeConnection – Software Upgrade License

\* edgeConnection License already include 1 Year Software Upgrade license (LMA-XX-161001)

## Additional Products and Services

[edgeAggregator](#)

[edgeConnector Modbus](#)

[edgeConnector Siemens](#)

[edgeConnector Allen-Bradley PLC](#)

[edgeConnector FANUC CNC](#)

[edgeConnector 840D](#)

GPA-CS-041000	NETLink S7-Compact (for S7-300/S7-400 without CP or Ethernet connection)
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