edgeConnector 840D

Software for Connecting SINUMERIK 840D Controllers with IoT Applications

- Easy Access to Data from SINUMERIK 840D Solution Line and Power Line Tooling Machines via OPC UA & MQTT
- Deployment, via Docker Management Systems e.g. Azure IoT Edge or AWS IoT Greengrass
- Local Configuration via Web Interface or Remote Configuration via REST-API

Accessing Tooling Machine Data from OPC UA Applications

- Provision of SINUMERIK 840D Solution Line and Power Line data
- Pre-defined namespace, customizable for special machine data sets
- Automatic tool recognition and listing of all available magazines and tools
- Standardized OPC UA communication for data integration into management systems like ERP, MES or SCADA or for data exchange with other docker containers like Microsoft OPC Publisher or Amazon AWS IoT SiteWise
- Connection of up to 20 SINUMERIK 840D controllers with one Container Runtime
- Dedicated for retrofit upgrades of existing SINUMERIK controllers

Easy Cloud-driven or Local Deployment

- Container images stored in different online repositories like Docker Hub, Azure Container Registry (ACR) or Amazon Elastic Container Registry (ECR)
- Simple data transmission to an MQTT broker using the MQTT publisher functionality for local or cloud-based solutions
- Recipe manager functionality for writing process data from the cloud to controllers (MQTT Subscriber)
- Licensing via Softing Floating License Server

Lightweight Flexible Container Solution

- Less resources plus increased scalability and flexibility
- Support of security standards as SSL/TLS, X.509 certificates, authentication and data encryption
- Highly flexible state-of-the-art application to be started or stopped immediately, if needed
- Deployment and configuration also via management systems such as Kubernetes, Azure IoT Edge or AWS IoT Greengrass
# edgeConnector 840D

## Technical Data

| Supported Controllers | Siemens SINUMERIK 840D Solution Line, software version V2.7 and higher  
| Supported Controllers | Siemens SINUMERIK 840D Power Line, software version V5.3 and higher  
| Supported Protocols | OPC UA, MQTT  
| Supported Protocols | SIMATIC S7 (RFC1006), SINUMERIK (RFC1006)  
| Supported MQTT Specifications | V3.1, V3.1.1 & V5  
| Supported MQTT Features | MQTT Publisher & Subscriber  
| Supported MQTT Features | TCP, TLS/SSL, WS, WSS, (including certificates)  
| Supported MQTT Features | QoS, Retain, LastWill & Testament  
| Supported MQTT Features | Store & Forward  
| Supported OPC Specifications | OPC Unified Architecture V1.04  
| OPC UA Roles | OPC UA Server  
| OPC UA Profiles | Data Access  
| OPC UA Security | Security methods: Aes256Sha256-RsaPss, Aes128Sha256-RsaOaep, Basic256Sha256, Basic256, Basic128Rsa15, None  
| OPC UA Security | Authentication: Anonymous, Username and Password, Certificate  
| Configuration Interface Authentication | Username / Password  
| Configuration Interface Authentication | LDAP/LDAPS  
| Logging, Diagnostics | Built-in trace and audit logging facilities, configurable and accessible through the web interface  
| Logging, Diagnostics | Docker integrated trace logging  
| Logging, Diagnostics | Prometheus Metrics Information  
| Supported Architectures | AMD64, ARM64, ARM32  
| Supported Container Orchestration Systems | Kubernetes (K8s), Amazon ECS  
| Minimum Hardware Requirements | 320 MB free disk space, 2 GB RAM  
| Licensing | Licensed via Softing Floating License Server  
| Demo Version | 20 PLC connections timed at 72 hours  
| REST-API | Access using the edgeConfigurator, download via Docker Hub  

## Scope of Delivery

- Software: edgeConnector 840D, download via Docker Hub or Azure Marketplace
- License Key: E-mail delivery
- Documentation: Online help (German / English) and online at: https://github.com/SoftingIndustrial/datafeed-edge-connector

## Order Numbers

| Order Numbers | edgeConnector – Premium License (1 Connection)*  
| LRA-XX-153001 |  
| LRA-XX-153005 | edgeConnector – Premium License (5 Connections)*  
| LRA-XX-153010 | edgeConnector – Premium License (10 Connections)*  
| LRA-XX-153020 | edgeConnector – Premium License (20 Connections)*  
| LRA-XX-153055 | edgeConnector – Premium License (ADD 5 Connections)*  

## SOFTWARE UPGRADES

| SOFTWARE UPGRADES | edgeConnector – 1 Year Software Upgrades for Premium License (1 Connection)  
| LMA-XX-153001 |  
| LMA-XX-153005 | edgeConnector – 1 Year Software Upgrades for Premium License (5 Connections)  
| LMA-XX-153010 | edgeConnector – 1 Year Software Upgrades for Premium License (10 Connections)  
| LMA-XX-153020 | edgeConnector – 1 Year Software Upgrades for Premium License (20 Connections)  
| LMA-XX-153055 | edgeConnector – 1 Year Software Upgrades for Premium License (ADD 5 Connections)  

*edgeConnector Licenses already include their respective 1 Year Software Upgrade license (LMA-XX-)

## Additional Products and Services

- LRA-XX-155100 edgeAggregator – OPC UA Connection 100, license for hundred (100) OPC UA Server connections.
- GPA-CS-041000 NETLink S7-Compact (for S7-300/S7-400 without CP or Ethernet connection)
- 6FC5851-1XC45-4YA8 SINUMERIK 840D SL CNC software and SINUMERIK Operate, toolbox including NCVar Selector (please order directly from Siemens)

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