SIA Connect

Simply Connecting the Industry

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SENDING NEW SIGNALS

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Many Industry 4.0 & IIoT projects fails

before even started because of lack of data

- Releasing data from shop floor has high risks and associated costs
- Complexity of OT data sources requires complex solutions
- Lack of system compatibility and metadata between IT & OT
- IT & OT teams have different ways of working

SIA Connect is the solution to these problems

Gateway to Cloud & IT / OT

Protocol converter

Data Logger

Areas of applications

Industry 4.0 & IIoT
Turn Industrial controllers into IIoT devices

Smart Building
Support for BMS & Meters

OT / IT convergence
Embedded OPC-UA server & SQL support

OEM solutions
Integrate able software custom solutions

Succeed in Industrial digitization

by bringing in simplicity and flexibility with SIA Connect

Simplicity & Scalability

are the keys to apply Industry 4.0

User centric software
Web based & responsive configuration software

No programming
Intuitive UI ensures a Click'n'Connect "feeling"

Open API & Architecture
For developers by developers

Full data ownership
You own the data 100%. No middleware services.

Cloud Gateway & IT / OT

Connecting shop floors to clouds & enterprise systems

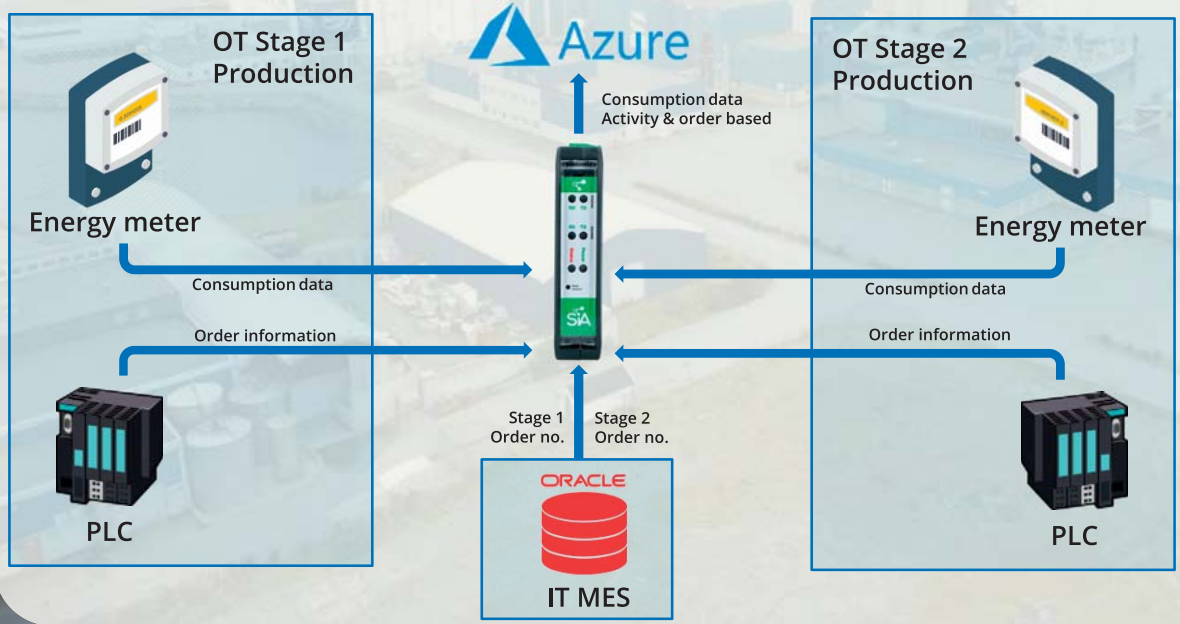
Cloud Gateway & IT / OT

- **Edge processing**
  Process, filter and handle all the logic on the edge
- **Correlation & combination of data**
  Use data from various sources as metadata in payloads & queries
- **Fallback buffer**
  Process, filter and handle all the logic on the edge
- **SQL support**
  Data exchange and bidirectional SQL queries to IT systems
- **OPC-UA server & API**
  Bidirectional data exchange accessible on OPC-UA & API

Activity based CO2 footprint in production

Challenge: Combine various data sources and in a scalable solution for all their plants where no plants are the same. The solution had to be in a retrofittable and non-invasive.

Technologies & components: Allen-Bradley PLC, Energy meters using Modbus & Wireless Mbus, Oracle database & Azure SQL database.



Universal data logger

for any application and purpose

Data logger

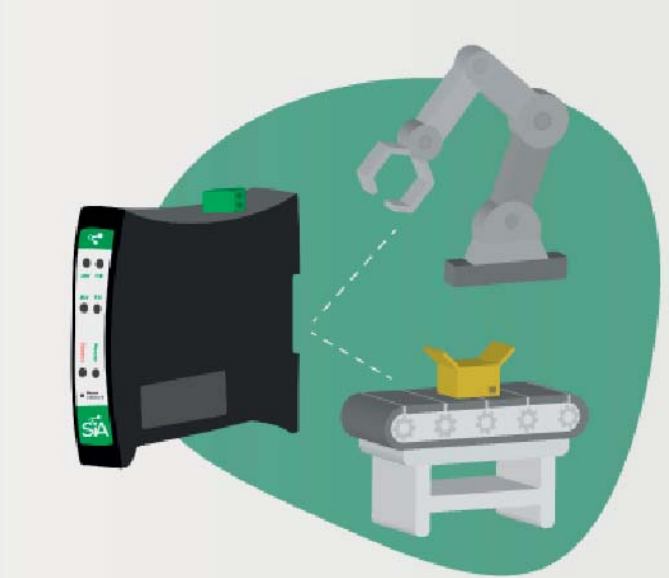
- **30+ protocols & technologies**
  Data logging tool that covers a broad range of applications
- **25M+ samples storage**
  Memory can store 25M+ samples. Integrated chart tool in software
- **Data access & export**
  Export the logged data to CSV or access it using the Open API
- **Triggers & processing**
  Advanced triggers and filters ensures high quality of data

Protocol converter

making incompatible protocols & devices talk

Protocol converter

- **Many-to-Many**
  Route data between 30+ protocols and endless of devices
- **Push-pull conversion technology**
  Reduce commissioning time & avoid invasive modifications
- **Conditional & logic rules**
  Apply logic rules and conditions for data conversion
- **Server “READY”**
  Architecture allows server implementation as a classical gateway



OPC UA

Integrated OPC-UA server

Simplest Azure gateway

making IIoT projects in Azure succeed

Azure gateway

- **IoT Hub**
  Fast setup with Connection String. Support for Message Properties
- **Event Hub using REST API**
  Ingest data to the Event Hub by using the REST API Connector
- **Azure SQL Database**
  Execute queries directly to the database to read or write data.
- **Customizable payload**
  Generate valuable metadata by combining data from any source
- **Bi-directional data exchange**
  Enable feedback loops from big data algorithms & AI in Azure

Azure

"We have all been extremely impressed with the ease in which we were able to very quickly get data from the PLC up to Azure. I think it might have taken a sum total of around 30min! A super result and a fantastic unit that was extremely simple to configure."

- Simon Russell, Lead Engineer at HARSCO

HARSCO

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