

A man and a woman are in a server room. The man is pointing at a laptop held by the woman. They are looking at a large digital display that shows various icons like a globe, a shield, a folder, a cloud, and a gear. The background is filled with server racks and blue lighting.

# EnOcean IoT Connector Intelligent Transforming

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## EnOcean IoT Connector

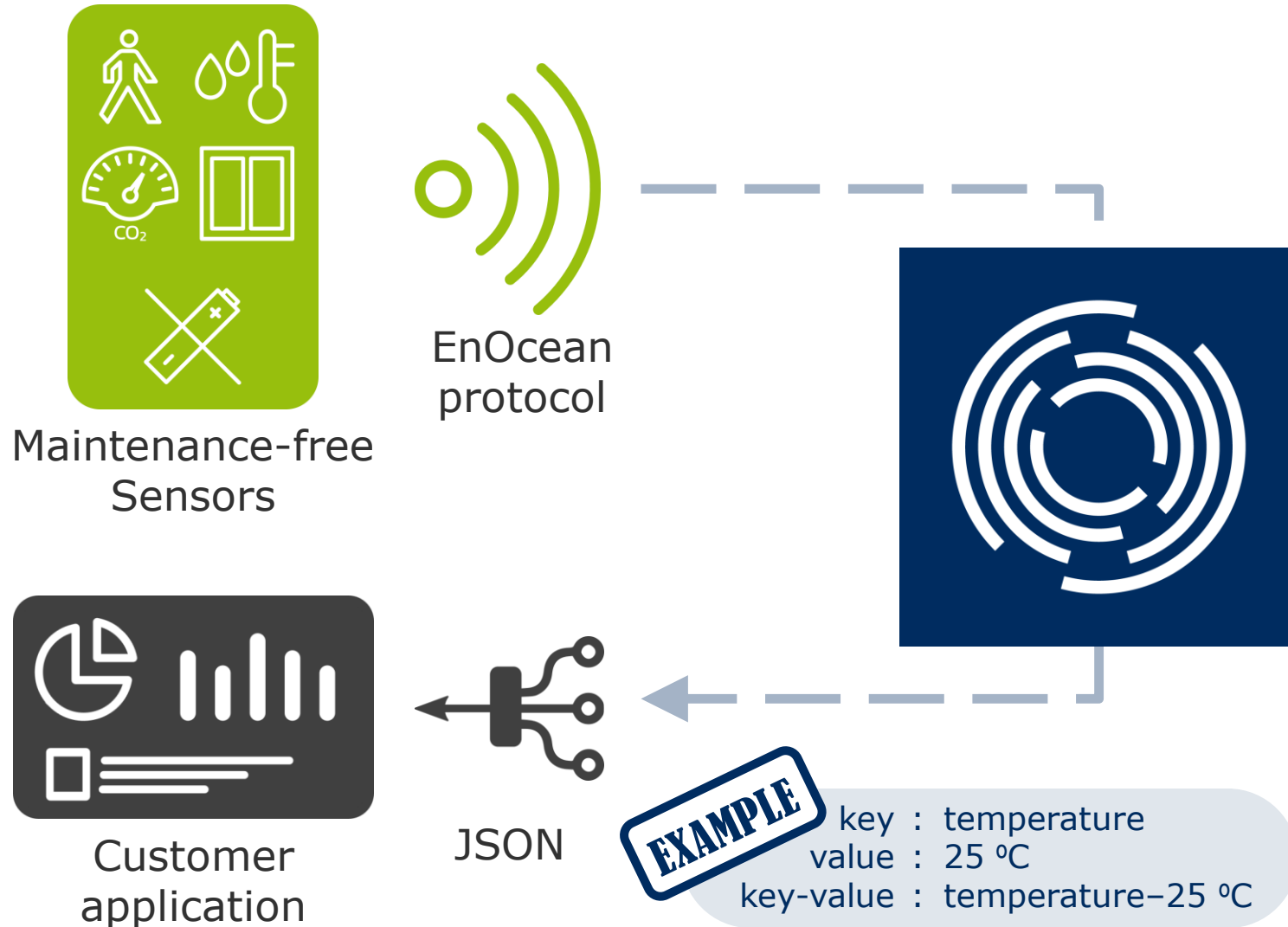
Intelligent Transforming

### **For IoT system integrators and application providers:**

- Easiest way to integrate EnOcean devices
- No middleman between you and your data
  - exclusive control over the data flow
- Lowest connectivity cost
  - leverage existing building infrastructure & cloud computing
- Instant deployment and updates on premises or in the cloud
  - get it via the Azure Marketplace or similar

### The EnOcean IoT Connector:

- is a software
- is available as a Docker container image
- transforms EnOcean IoT data (EEPs) and sensor health into a standardized format – “Key-Value pairs” in JSON



## EnOcean protocol:

- Highly optimized for maintenance-free sensors
- Post processing algorithms required to decode IoT data

## Customer application:

- Consumes IoT data in „Key-Value pairs“ format e.g. JSON

The EnOcean IoT Connector does the transformation and much more.

# Integration of EnOcean products is now easier than ever before



## Bidirectional operation

Decode and encode the EnOcean Protocol with the IoT Connector

## End-to-end encryption

AES 128 encryption & TLS

## Sensor health & IoT Data



### Sensor health supervision:

- Transmissions in defined intervals?
- Sufficient signal strength margin?
- Is the current and harvested energy sufficient for operation?

## Easy adoption by IoT

JSON is exchanged with:

- MQTT
- Azure IoT Hub

Key-Value representation for every EEP

- specified by the EnOcean Alliance



# EnOcean IoT Connector can run anywhere

Deployed in the connectivity infrastructure e.g on:

- edge devices
- 3<sup>rd</sup> party clouds

Typical use cases:

- centralized controls
- building automation



EnOcean  
IoT Connector

## NEW MODEL

Deployed at the data destination

- e.g. in Azure IoT hub

Typical uses cases:

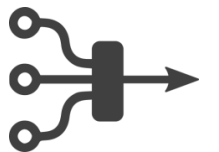
- data analytics
- IoT applications



Building & External  
Connectivity infrastructure  
(e.g. edge devices, 3<sup>rd</sup> party clouds)



The data destination  
(e.g. your cloud)



# Leverage existing building infrastructure

## Example: Aruba Access Points

- Standard support in Aruba OS
- Aruba AP talks directly to the EnOcean IoT Connector
- No additional gateway needed

## In complete scenario:

- You have exclusive control over the data flow



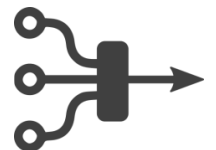
## Reach lowest connectivity cost

- Upgrade an existing infrastructure (e.g. Wi-Fi AP) with an EnOcean USB stick
- Get traffic from existing EnOcean buildings

+ IoT Connector in your cloud



Leveraged building infrastructure (e.g. Aruba Access Point)





- EnOcean IoT Connector is a containerized application
- Container is a standard unit of software
- Best for development, shipment and deployment



# The Management API onboards sensors to the EnOcean IoT Connector

EnOcean IoT Connector API 0.0.1 OAS3

The API to manage devices for the EnOcean IoT Connector.

Servers

https://virtserver.swaggerhub.com/enOcean-cloud/ManagemenAPIot/1.0.0 - SwaggerHub API Auto Mocking

Export & Import

- GET /export
- POST /importOverwrite

EnOcean Entity.

- POST /device
- PUT /device
- GET /device
- DELETE /device

Vitality

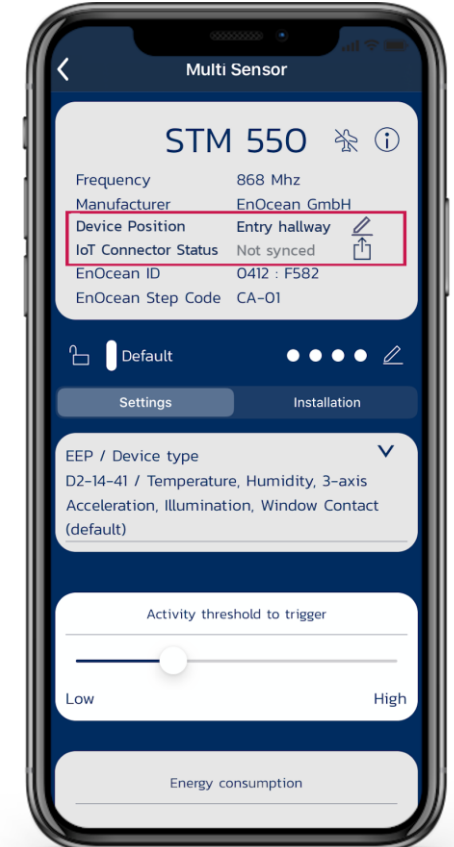
- GET /vitality/status
- PUT /vitality/status/{value}
- GET /vitality/device/status/

## Features of Management API:

- Easily onboard (add, edit, remove) sensors into the EnOcean IoT Connector
- OAuth2 support
- OpenAPI
- BackUp possibility

## Available as:

- **Direct calls**
- Web interface (OpenAPI)
- EnOcean Tool (iOS, Android) for NFC interface





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# You focus on your expertise &



EnOcean  
IoT Connector

# delivers the data.

- Try new applications and do quick POCs
- Simple to scale up and to deploy



**For details & contact see <https://www.enocean.com/iot-connector>  
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