Fact Sheet
Generic Profiles

What is it about?

Generic Profiles (GP) are the second one of the EnOcean Alliance’s application level “languages” applicable for devices communicating with each other.

Its major difference to the EnOcean Equipment Profiles (EEP): Generic Profiles provides a protocol which enables devices to establish a self-described communication between each other based on the specified schematics.

Generic Profiles aims at
- minimized overhead for the communication at telegram level,
- providing sufficient flexibility in product design to assure product longevity,
- short development cycle / time-to-market,
- independence from the radio, serial or any other communication type,
- describing the data channels of a device

How do I benefit from it?

- You can offer products or solutions which are interoperable with the products and solutions of the EnOcean eco-system
- You hit the market faster at lower cost by applying our specification
- You have reduced efforts by adapting a sophisticated communication architecture
- You have lower development costs by applying the specification provided by the Alliance of a transparent, slim and energy efficient self-described communication protocol

Where do I find the latest release?

You will find its latest release at https://www.enocean-alliance.org/specifications/
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Which information will I find there?

- Chapter 1: introduces the motivation to create Generic Profiles and terms & abbreviations
- Chapter 2: describes the Communication Layers defined for this architecture.
- Chapter 3: defines the language to communicate the data types and data ranges to be transmitted, and the defined set of parameters describing every aspect of a digital value to enable the recalculation of the actual physical value
- Chapter 4: describes how to execute the Teach-in process to enable data exchange based on Generic Profiles
- Chapter 5: In operational mode, either complete or selected data messages will be sent transmitted. This chapter describes how the data are arranged.
- Chapter 6: looks into the co-existence of EEP and Generic Profiles.
- The Appendix to the specification – a separate document - contains the variable lists, which are used in the Generic Profiles Specification (data, flag, enumeration) and best use case practices.

**Measurement**

<table>
<thead>
<tr>
<th>Temperature sensor</th>
<th>Channel definition</th>
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</thead>
<tbody>
<tr>
<td>Range: 0 – 40 °C</td>
<td></td>
</tr>
<tr>
<td>Resolution: 10 bit</td>
<td></td>
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<tr>
<td>Purpose: current value</td>
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</table>

**Channel definition**

- Channel type: Data 01
- Signal type: Temperature 0011000
- Value type: Current value 01
- Resolution: 10 bit 0111
- Scaled eng. minimum: 0°C [00000000]
- Scaling minimum: x 1 0001
- Scaled eng. maximum: 40 °C [00101000]
- Scaling maximum: x 1 0001

*Example of Data Channel definition: Temperature Sensor*

Who can help?

- Support for integration of Generic Profiles into your module is provided by your chip / module supplier
- You would like to learn more about Generic Profiles? Contact twg@enocean-alliance.org, please.
- Could we improve our Generic Profiles or do you have an idea which will progress Generic Profiles to its next stage? We are curious to learn about it – write to twg@enocean-alliance.org, please.