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PROEMION MiC 4.0 Enriching AEMP API Instructions

Contents

MiC 4.0 Guide

1. MiC 4.0 Guide

The following guide provides information on how Proemion supports the MiC 4.0 standard by enriching the **AEMP API** and standardize data and how can become MiC 4.0 compliant.

MiC 4.0 defines a standard for the AEMP interface that can be used by OEMs, Machine Owners and Rentals of earth-moving machinery, e.g. road construction machines.
For information on MiC 4.0, see **MIC 4.0**.

In order for OEMs, Machine Owners and Rentals to become MiC 4.0 compliant, they must:

- Use all AEMP relevant **standard metrics** as described in the **AEMP API**.
- Maintain the additional fields exposed on the AEMP API which will be described in the following.

1.1. Enriched data

In the following it described which metadata is supported in the **AEMP API** to comply with the MiC 4.0 standard.

🚫 | Consider that the parameters are stored at the machine/model and must be set by the OEM for each machine individually via the **Modify attributes of a Machine** endpoint of the **Rest API**.

1.1.1. Fuel and DEFFuel

Data for Fuel- and DEFFuel-capacity have been enriched in the **AEMP API**.
The data is provided as a volumetric unit at the model.

⚠️ | The values for Fuel- and DEFFuel tank capacity must be maintained in the **Modify attributes of a Machine** endpoint of the **Rest API**.

As long as Fuel- and DEFFuel-capacity is provided, the capacity together with the unit is included in the endpoint's response, which is MiC 4.0 compliant, see also the **Examples**.

If only Fuel- and DEFFuel-level is provided, only the level will be included in the response without the capacity or units XML elements. This is not MiC4.0 compliant.

1.1.2. Other Data

The following MiC 4.0 parameters have been enriched in the **AEMP API**:

- TCU installation date

  o When retrofitting and replacing the transmission component the date will be updated.
- Model name; as seen in the machine identification plate

  o Provide a model attribute initialized with the model entity name but that can be updated independently.
- Engine (Serial) Number

  o This is filled by the timeseries signal.

2. Examples

2.1. Fuel Remaining

You can request the Fuel Remaining Ratio and the response will include:

- Datetime for "Fuel Remaining"
- "Percent"
- "Fuel Tank Capacity Unit"
- "Fuel Tank Capacity"

2.2. DEF Remaining

If DEF Tank Capacity is not available, it will send 0.

3. Service and Support

The latest versions of the drivers, software, firmware, and documentation are available in our **Document Library**.

Do you need help or want to report a bug?
Visit our website **Proemion** for more information, or raise a ticket at the **Support**.

Or contact our Sales Team via the **Sales Team Contact Form**.

Documents / Resources

PROEMION MiC 4.0 Enriching AEMP API [pdf] Instructions
MiC 4.0 Enriching AEMP API, MiC 4.0, Enriching AEMP API, AEMP API

References

- 🌐 **Proemion ISO-15143-3 (AEMP) API documentation**
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