PRODUCT CHANGE NOTIFICATION

PCN#: PCN_ETHSx-Stepcode_DE-PCN-20191118
Change Title: New energy store and transport mode for ETHSA
Date of publication: November 2019

Products affected / EnOcean ordering codes
- ETHSA / S3001-C350 (Stepcode DE and later)
- ETHSA / S3001-T350 (Stepcode DE and later)
- ETHSU / S3051-C350 (Stepcode DE and later)

Reason for change
- The super capacitor used as energy storage in the product ETHSA has been discontinued by the supplier and no direct replacement exists

Description of change
- ETHSx will be redesigned to use a small rechargeable accumulator with higher energy storage capacity (MS412FE)
- The higher capacity will provide a longer operation time without supply and require a longer period of illumination to fully charge the energy store (details see data sheet and user manual)
- A dedicated low power mode for transport and storage will be provided that disables radio transmission to conserve energy and minimize discharge
- A signal telegram (data 0x0E) will be sent when entering transport mode, for details see EnOcean Alliance EEP specification
- Following changes have been made to simplify secure mode installations according to EnOcean Alliance best practice: 3-byte RLC transmitted explicitly, 4-byte -> 3-byte CMAC, RLC starts with 0 from production
- Detachment force of the mounting plate latches is increased.
- The form factor (geometry / dimensions) of the products remains unchanged

Milestones
- Samples of modules with new energy storage are available on request, please check details with your sales representative
- Volume shipping will start from January 2020, please check details with your sales representative

Customer impact of change and recommended action
- **Product label and documentation**: Self-created OEM product labels and/or user documentation have to be updated to reflect the new feature set and consider additional regulatory requirements
- **Waste Treatment, additional regulatory requirement**: A registration according to Battery Directive has been already done for Germany. Since the European Union requires country specific recycling, for all other countries than Germany the OEM customer (B2B) has to register at country specific recycling organizations.
- **Storage**: OEMs might consider putting the final product to transport / storage mode based on their logistic chain

PCN revision history

<table>
<thead>
<tr>
<th>Date of revision</th>
<th>Author</th>
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<tr>
<td>November 18, 2019</td>
<td>Anders/Kreitmair</td>
<td>01</td>
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Annex

- **New Step Code**
  ETHSx will be delivered with new Stepcode DE

- **Update of the User Documentation**
  ETHS User Manual, V3.0

- **Mode Switch via Learn Button**

  ![Mode Switch Diagram]

  - **Transport -> Standard** (as before)
    After pressing the learn button short for 1 s the radio module will enter Standard Mode (Mode 1). The LED will flash 1x and a standard learn telegram will be sent.

  - **Standard -> Secure** (changed)
    After pressing the learn button 2x long (press 5 s, pause <1 s, press 5 s) the radio module will enter Secure Mode (Mode 2). The LED will flash 2x and a secure learn telegram will be sent.

  - **Secure or Standard -> Transport** (new)
    To keep initial charging and avoid long recharging times and/or switching off radio during air cargo. After pressing the learn button 1x long 5 s the radio module will enter Transport Mode (Mode 3). The LED will flash 3x and a signal learn telegram will be sent.
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Acknowledgement of receipt

☐ Customer has received above mentioned Product Change Notification.

☐ Customer has received product sample(s).

Type (amount):

Customer has tested following features (system test):

☐ Learn Telegram (Commissioning)

☐ Operation in standard mode

☐ Operation in secure mode (if used)

Company Name

Signature