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Federal Communications Commission
Authorization and Evaluation Division

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Modular Approval Request
Applicant: EnOcean GmbH
FCC ID: SZV-TCM320U

Pursuant to Section 15.212(a)(1) of the FCC rules, the Applicant hereby request for limited modular approval, compliance with the requirements are addressed below:

Modular approval requirement	Justification
(i) The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.	The modular transmitter has its own RF shielding
(ii) The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with part 15 requirements under conditions of excessive data rates or over-modulation.	The modular transmitter has buffered modulation/data inputs
(iii) The modular transmitter must have its own power supply regulation.	The modular transmitter has its own power supply regulation.

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<p>(iv) The modular transmitter must comply with the antenna and transmission system requirements of §§ 15.203, 15.204(b) and 15.204(c). The antenna must either be permanently attached or employ a “unique” antenna coupler (at all connections between the module and the antenna, including the cable). The “professional installation” provision of § 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section.</p>	<p>NO, see explanation 1) below.</p>
<p>(v) The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another device during testing for compliance with part 15 requirements. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in § 15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see § 15.27(a)). The length of these lines shall be the length typical of actual use or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified and commercially available (see § 15.31(i)).</p>	<p>The modular transmitter was tested in a stand-alone configuration.</p>

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(vi) The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number.

(A) If using a permanently affixed label, the modular transmitter must be labeled with its own FCC identification number, and, if the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: “Contains Transmitter Module FCC ID: XYZMODEL1” or “Contains FCC ID: XYZMODEL1.” Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.

(B) If the modular transmitter uses an electronic display of the FCC identification number, the information must be readily accessible and visible on the modular transmitter or on the device in which it is installed. If the module is installed inside another device, then the outside of the device into which the module is installed must display a label referring to the enclosed module. This exterior label can use wording such as the following: “Contains FCC certified transmitter module(s).” Any similar wording that expresses the same meaning may be used. The user manual must include instructions on how to access the electronic display. A copy of these instructions must be included in the application for equipment authorization.

The module has a permanent affixed label that includes the FCC ID number. The user manual provides instruction for exterior labeling when modular transmitter is installed inside another device.



<p>(vii) The modular transmitter must comply with any specific rules or operating requirements that ordinarily apply to a complete transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements. A copy of these instructions must be included in the application for equipment authorization.</p>	<p>The user manual for the modular transmitter provides adequate instructions along with the module to explain any such requirements.</p>
<p>(viii) The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.</p>	<p>The modular transmitter was tested and complies with applicable RF exposure requirements.</p>

- 1) The module is designed as a THT module to be mounted on a host device. The antenna is pre-installed onto the module. EnOcean will provide appropriate antenna information, installation instructions and grant conditions. EnOcean will request every customer to sign up a limited modular approval user agreement.

Sincerely,

(Oliver Sczesny)