



Mühlbauer GmbH & Co. KG
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Attn: Reviewing Engineer

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Roding, 2016-09-19

RE: PART 15 UNLICENSED MODULAR TRANSMITTER APPROVAL

To Whom It May Concern:

We, (*Muehlbauer GmbH & Co. KG*), hereby request for part 15 unlicensed modular transmitter approval of our device, described as follows:

Brand name: Muehlbauer GmbH & Co. KG
Model name: MB RFID 1301 001
FCC ID: XJPMBRFID1301001

In section §15.212 "Modular transmitters" of 47 CFR Part 15 there are eight numbered requirements for single modular transmitters that our device complies with:

- 1. 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.**

[See Test Report Annex C](#)

- 2. 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 data to be send are buffered in the components IC1 and IC5 \(see schematics: side 2 and 4\) in the internal FIFO](#)

- 3. The modular transmitter must have its own power supply regulation.**

[The two low dropout regulators are in the schematics on page 5 \(IC6 and IC7\)](#)

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4. 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 antenna is connected to the reader via shielded cable using MCX connector

5. The modular transmitter must be tested in a stand-alone configuration

See Test Report Annex A

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

See label and location information

7. 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.

The RF module complies to this requirement and any restrictions are clearly addressed in the integration manual

8. The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.

Not applicable as device under 15.209 is categorically excluded from the RF Exposure Requirements.

Signature:

Mr. Martin Dimpfl, Dept. Electronic Design
(Name, job title and/or department)