

PART 15 UNLICENSED MODULAR TRANSMITTER APPROVAL

For Desko RFID500 268460

1. The modular transmitter must have its own RF shielding. This is intended to ensure that the module does not have to rely upon the shielding provided by the device into which it is installed in order for all modular transmitter emissions to comply with Part 15 limits. It is also intended to prevent coupling between the RF circuitry of the module and any wires or circuits in the device into which the module is installed. Such coupling may result in non-compliant operation.

Answer: *The transmitter has no shielding. Integration of this modular approved transmitter is strongly limited to final host devices, where the Grantee has the control of the integration and can assure compliance of the final host device with the FCC radiation limits; e.g. integration typically by Grantee himself or dedicated integrators/manufacturers.*

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.

Answer: *Buffered data inputs are integrated in IC (U1 = MFRC631)*

3. The modular transmitter must have its own power supply regulation. This is intended to ensure that the module will comply with Part 15 requirements regardless of the design of the power supplying circuitry in the device into which the module is installed.

Answer: *The transmitter module is USB powered (regulated by host device). Integration of this modular approved transmitter is strongly limited to final host devices, where the Grantee has the control of the integration (USB power) and can assure compliance of the final host device with the FCC radiation limits; e.g. integration typically by Grantee himself or dedicated integrators/manufacturers.*

4. The modular transmitter must comply with the antenna requirements of Section 15.203 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). Any antenna used with the module must be approved with the module, either at the time of initial authorization or through a Class II permissive change. The "professional installation" provision of Section 15.203 may not be applied to modules.

Answer: *The modular approved transmitter is equipped with an internal PCB antenna. There is no connectivity of external/auxiliary antennas.*

5. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing. This is intended to demonstrate that the module is capable of complying with Part 15 emission limits regardless of the device into which it is eventually installed. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in Section 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 Section 15.27(a)). The length of these lines shall be 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 or commercially available (see Section 15.31(i)).

Answer: *The RF module is tested in stand alone configuration as documented in the test report and on the test setup photos.*

6. The modular transmitter must be labeled with its own FCC ID number, and, if the FCC ID 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.

Answer: *The modular approved transmitter is labeled with its own FCC ID. The final host product, into which this modular approved transmitter is finally integrated, will be labeled with an auxiliary label, such as:*

Dateneingabe
 -Systeme
 -Konzepte

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This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Contains Transmitter Module RFID500:
 FCC ID: WTMRFD500
 IC: 7998A-RFID500

Article No.: **HP500e**

Serial No.:

2 0 0 0 8 4 8 0 0 0 0 1

== U=5V (DC) I_{max}=1.6 A

7. The modular transmitter must comply with any specific rule or operating requirements applicable to the 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. For example, there are very strict operational and timing requirements that must be met before a transmitter is authorized for operation under Section 15.231. For instance, data transmission is prohibited, except for operation under Section 15.231(e), in which case there are separate field strength level and timing requirements. Compliance with these requirements must be assured.

Answer: *No requirements for devices subject to Section 15.225*