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Entrust Corporation

4/27/23

Element Project TS-DTCD-0004

Modular Integration Instructions

Dear Application Examiner,

We, Entrust Corporation hereby declare that the Supplies ID radio transmitter GDI-SID004 complies with the considerations provided in the sections below.

1. General
 - a. The Supplies ID radio transmitter GDI-SID004 will only be integrated into Entrust Corporation products and is therefore controlled exclusively by Entrust Corporation.
 - b. No manual exists for installation of this transmitter since Entrust is the integrator; however, the end product manual will include the FCC regulator notice that is described in section 8 below.
2. List of applicable FCC rules
 - a. The applicable rules for this transmitter are the following:
 - i. 15.212 Modular transmitters
 - ii. 15.203 Antenna requirement
 - iii. 15.204 External radio frequency power amplifiers and antenna modifications
 - iv. 15.225 Operation within the band 13.110-14.101 MHz
3. Summarize the specific operational use conditions
 - a. This transmitter is only for use in Entrust host products that are within the scope of this limited modular approval (GDI-SID004).
 - b. EMC Compliance Notice: To ensure compliance of the model RX10 retransfer printer to the radiated emissions requirements for class "A" Information Technology Equipment, be sure to use a shielded Ethernet cable when connecting to your network.



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4. Limited module procedures

- a. The info below is also found in the FCC Modular Approval Letter exhibit, but is also provided here:

Entrust Corporation, Supplies ID, GDI-SID004 is seeking modular approval. The radio meets the requirements for modular approval as detailed in FCC 15.212. Compliance to each of the requirements is described below:

- i. **“The modular transmitter must have its own RF shielding.”** The radio portion of the module is contained in its own RF shielding. The shielding is installed at the factory. Please see the Internal Photos exhibit.
- ii. **“The modular transmitter must have buffered modulation/data inputs.”** The EUT has buffered data inputs to ensure compliance with part 15 requirements under conditions of excessive data rates or over-modulation. Please see the Schematics exhibit.
- iii. **“The modular transmitter must have its own power supply regulation.”** The EUT has its own power supply regulation to ensure compliance with Part 15 requirements regardless of the quality or level of external DC supplying the module from the host unit. Please see Schematics exhibit. Also, the technical report exhibit contains AC power line conducted emissions data taken with the EUT powered from a linear power supply that contains no EMC suppression components.
- iv. **“The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204©.”** The EUT meets the FCC antenna requirements. Please see Antenna information exhibit and internal photos exhibit.
- v. **“The modular transmitter must be tested in a stand-alone configuration.”** The EUT was tested in a stand-alone configuration. The module was greater than 10cm from the host device. Please see setup photos exhibit and technical report exhibit.
- vi. **“The modular transmitter must be labelled with its own FCC ID number.”** The EUT is labelled with its own FCC ID number. Please see FCC ID label & location exhibit. If the FCC ID number will not be visible when the module is installed inside a host device, another label with the FCC ID will be applied to the exterior of the host device.
- vii. **“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**



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module to explain any such requirements.” The EUT is compliant with all applicable FCC rules. Detailed instructions for maintaining compliance are given in the user manual.

viii. **“The modular transmitter must comply with any applicable RF exposure requirements.”** See section 6 below.

5. Trace antenna designs
 - a. Transmitter is 13.54MHz and uses a circular PCB loop antenna with 4 turns, and a diameter of 46mm.
6. RF exposure considerations
 - a. This device is for use with a minimum separation distance of 20cm between the antenna and the body, in a general / uncontrolled environment.
7. Antennas
 - a. See section 5 above for details on the PCB trace antenna.
8. Label and compliance information
 - a. The following FCC regulatory notice will be integrated into the end product manuals.

Regulatory Compliance

Notice for USA (FCC notice)

This equipment has been tested and found to comply with the limits for Class A computing devices, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy. If this equipment is not installed and used in accordance with this instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

9. Information on test modes and additional testing requirements
 - a. Operational modes and conditions were considered when creating and executing the test plan for the transmitter. The transmitter was operated in the appropriate mode for each test (such as continuous transmit, inactive, etc). These special test modes are not available to the operator; the equipment under test was manually configured to be in a certain test mode, and the test reports describe the mode(s) used for each test.



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10. Additional testing, Part 15 Subpart B disclaimer

- a. See section 8 above for information on the regulatory notice that is included with the products that contain this transmitter.
- b. The manufacturer is required to ensure that the final host product that contains this limited modular device complies with Part 15 Subpart B through compliance testing.
- c. Entrust Corporation is ensuring compliance with FCC regulations by ensuring that any new type of host product that integrates this limited modular transmitter is tested and certified with a class II permissive change.

Sincerely,

Jeff Aymond
Sr Electrical Engineer