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> Viareggio June 26th, 2018

Attn: Reviewing Engineer Federal Communications Commission 7435 Oakland Mills Road Columbia, MD 21046

Object: Modular approval request for R1270C - Quark Up - 500mW UHF RFID Ultra **Compact Module UVECAENRFID015** FCC ID:

CAEN RFID s.r.l. requests the authorization for a modular approval of R1270C - Quark Up -500mW UHF RFID Ultra Compact Module, FCC ID: UVECAENRFID015.

This device complies with the requirements of section 15.212 of FCC rules as shown in the statements below:

- 1) The radio elements of the modular transmitter must have their own shielding. The device is equipped with a metal shield soldered around the part of the module containing the RF section. Please see the External Photo exhibit.
- 2) The modular transmitter must have buffered modulation/data inputs. All modulation/data inputs are buffered through logic or microprocessor inputs. Please see the Schematics exhibit.
- 3) The modular transmitter must have its own power supply regulation. Internal supply voltages are generated by linear regulators. Please see Block Diagram and Operational Descriptions exhibits.
- 4) The modular transmitter must comply with the antenna and transmission system requirements of §§ 15.203, 15.204(b) and 15.204(c). R1270C module meets the FCC antenna requirements. The antennas used are the CAEN RFID WANT021XAUFL and CAEN RFID 7R1251IUNFAA with U.FL plug female socket connector. Please see the Antenna datasheet exhibit.

R1270C is equipped with unique antenna connector (U.FL receptacle), please see User Manual and External Photos exhibits.

5) The modular transmitter must be tested in a stand-alone configuration, i.e., 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. Tests have been performed in a stand alone configuration, with the device mounted on a

service board connected to a personal computer. Please refers to Test Report exhibit for the photos of the setup.

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

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The device is labelled with its own FCC ID number (please see Label exhibit). In case that the module is installed inside an OEM equipment, the manufacturer shall apply externally a label reporting the words "Contains FCC ID:UVECAENRFID015"

- 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. The device complies with all applicable FCC rules. Detailed instructions for maintaining the compliance are given in the User Manual exhibit.
- 8) The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.

The device complies with all applicable RF exposure requirements. Please see RF exposure exhibit for details.

Sincerely

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Adriano Bigongiari Chief Executive Officer CAEN RFID srl