



CAEN RFID srl

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Viareggio November 11th, 2016

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

Object: Class II Permissive Change request for R1230CB (Quark - Low Power OEM UHF Compact RFID Reader)
FCC ID: UVECAENRFID010

This letter serves as an official request for FCC approval of a Class II Permissive Change for R1230CB (Quark - Low Power OEM UHF Compact RFID Reader).

The reasons for the Class II permissive change are the following:

- Replacement of obsolete RF driver amplifier Hittite P.N. HMC474SC70E with Hittite P.N. HMC311SC70E and modification of relevant bias and matching components.
Old and new component are pin to pin compatible and have almost the same RF power gain at the operating frequency.
- Replacement of obsolete RF power amplifier MACOM P.N. MAAMSS0071 with Berex P.N. BT09E and modification of relevant bias and matching components.
Old and new component are pin to pin compatible and have almost the same RF power gain at the operating frequency.
- Addition of CAEN RFID mod. WANT021XMMCX (QUAD Circular Polarized Quadrifilar Antenna; 0.7dBi gain) in the list of the antennas authorized to operate with the module.

Since the overall transmit chain power gain has been kept unchanged the maximum conducted RF output power rating of the module is not changed.

The additional antenna is added in the module User's Manual and the relevant MPE calculation is provided.

RF testing is necessary in order to demonstrate that the reader remains compliant with FCC rules.

Sincerely

Adriano Bigongiari
Chief Operating Officer
CAEN RFID srl