

May 17, 2013

RE: ATCB013964 – Original Equipment Certification Application

FCC ID: O8ICONTROLLER32 for SISTEMATICA S.p.A.

Here are the reply to your comments, between the rows in red.

Thank you

Francesco Barbieri

1. The submitted test report has several issues that need to be addressed as follows:

(a) The test report has numerous references to ANSI C63.4-2009 and ANSI C63.10-2009 as the test standard for this device. Please be advised that ANSI C63.4-2009 requires the use of RF absorbing material on the ground plane in the size of 2.4 meters by 2.4 meters for radiated emissions testing above 1 GHz at a 3 meter test distance. However ANSI C63.10-2009 does not have this same requirement. Please indicate in an amended test report which procedure was used. If ANSI C63.4-2009 was used, please indicate that absorbing material was used as prescribed in Section 5.5. Either photos of the RF absorber material during radiated measurements or a statement that it was used may be submitted. If ANSI C63.10-2009 was used, please state so in the amended test report.

IMQ: please, see the test report revision

7.5 RADIATED EMISSIONS

TEST REQUIREMENT	
Test setup	ANSI C63.4 § 5.5
Test facility	Semi-anechoic chamber below 1 GHz; for measurement above 1 GHz are used 2.4 m by 2.4 m RF absorbing material covering the ground plane between the antenna and the EUT

(b) The duty factor plots for this 900 MHz band transmitter were taken at 867 MHz. In an amended test report, please explain why duty factor plots for this 900 MHz band transmitter can be applicable to the ones shown at 867 MHz.

IMQ: the Duty Cycle is the same in all the band. If you check the new test report at the section

7.2 PULSE TRAIN MEASUREMENT FOR PULSED OPERATION

TEST REQUIREMENT
According to CFR 47 Part 15, section 15.35(c). Guide ANSI C63.4 Devices transmitting pulsed emissions and subject to a limit requiring an average detector function for radiated emissions shall initially be measured with an instrument that uses a peak detector. A radiated emission measured with a peak detector may then be corrected to a true average using the appropriate factor for emission duty cycle. This correction factor relates the measured peak level to the average limit and is derived by averaging absolute field strength over one complete pulse train that is 0.1 s, or less, in length. If the pulse train is longer than 0.1 s, the average shall be determined from the average absolute field strength during the 0.1 s interval in which the field strength is at a maximum.

(c) Page 4 and Section 7.3 of this test report state that the device antenna is a dedicated soldered wire (integral) antenna. This disagrees with the user manual which states that an external antenna is connected via the SMA antenna connector on the back of this device. Internal photos also do not show the soldered wire antenna on the printed circuit board. Please address.

IMQ: I uploaded the internal photo correct.

2. Page 3 of the submitted user manual states that an external SMA antenna connector is to be used to connect the antenna to this transmitter. SMA antenna connectors do not meet the unique antenna connector requirement in Section 15.203 of the FCC Rules. This section requires the use of a unique antenna connector. The last document that A CB has from the FCC in 2000 prohibited the use of SMA antenna connectors for meeting Section 15.203 of the FCC Rules. Please address.

IMQ: this manual include description for products to sell in European market and US market, so we can declare that the US version NOT include SMA connector, as showed in the new set of internal photos.

3. Please provide an internal photo showing the soldered wire (integral) antenna which will be used with this device.

IMQ: done