Rhein Tech Laboratories, Inc. 360 Herndon Parkway Suite 1400 Herndon, VA 20170 http://www.rheintech.com Client: Capacitec, Inc.
Model: PC1000RF
Standard: FCC 15.247
FCC ID: WQV-PC1000RF
Report #: 2008138

## Appendix D: FCC Modular Approval – DA 00-1407

Please refer to the following page.

## FCC ID: WQV-PC1000RF

Design compliance with modular requirements:

- 1. The module must have its own shielding. Due to the surface mount construction, small size of the components, shielding nature of the IC and the 24 MHz crystal case being grounded and the complete ground plane in layer 2 of 4 the layers in the PCB, the module has inherent shielding.
- 2. The modular transmitter must have buffered modulation and data inputs. All data inputs to the module are buffered through the microprocessor. The modulation is generated in the MAC and thus the modulation input is not accessible to the user.
- 3. The modular transmitter must have its own regulation. The internal 1.8 V regulator in the Ember EM250 IC regulates the voltage to the crystal oscillator and the transmitter.
- 4. The modular transmitter must have a permanent antenna or unique connector. The module antenna is a trace on the printed circuit board.
- 5. The modular transmitter must be tested in a stand alone configuration. See the test report for details
- 6. The module must be labeled with its own ID or have instructions on how the equipment must be labeled. The manual contains instructions
- 7. The module must comply with a specific rule. The module complies with 15.247 requirements. There are no restrictions in the operation of the device as the device is loaded with the Ember stack which forces compliance with the rule.
- 8. The module must comply with applicable RF exposure requirements. The 2 dBm output power of the module at 2.4 GHz enables the module to be exempt from SAR measurements and calculations.