

# Cover Letter

Date: January 17<sup>th</sup>, 2014

American Certification Body, Inc.

6731 Whittier Avenue

Suite C110

McLean, VA 22101

FCC ID: UDV-201314

## Request Modular Authority

We hereby request Modular Approval based on the numbered requirements identified below as we address them to be included in our application for equipment authorization.

1. The modular transmitter must have its own RF shielding. This is intended to ensure that the module does not have to rely upon the shielding provided by the device into which it is installed in order for all modular transmitter emissions to comply with Part 15 limits. It is also intended to prevent coupling between the RF circuitry of the module and any wires or circuits in the device into which the module is installed. Such coupling may result in non-compliant operation.  
Response: The SIM800 module meets this requirement by the use of an RF shield which encases power amplifier, PA, filters and all other RF components. The chipset, oscillators, and associated circuitry are entirely resident under a continuous metal shield assembly, designed for EMI mitigation, with designated ground and interfaces. Please reference device photos supplied with the document package for shield placement and assembly.
2. The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with Part 15 requirements under conditions of excessive data rates or over-modulation.

Response: The modulation/data inputs are buffered, and routed through the baseband signal processor U101 which inherently prevents non-compatible data rates or modulation types from being introduced to the transmitter.

3. The modular transmitter must have its own power supply regulation. This is intended to ensure that the module will comply with Part 15 requirements regardless of the design of the power supplying circuitry in the device into which the module is installed.

Response: The transmitter module has its own dedicated power supply regulation, it is a linear regulator which buffers the SIM800 DC voltage from the power supply voltage of the unit in which it is installed, thereby ensuring that the EMI emissions of the SIM800 module are independent and unaffected by the device in which it is installed.

4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c). The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable). Any antenna used with the module must be approved with the module, either at the time of initial authorization or through a Class n permissive change. The "professional installation" provision of Section 15.203 may not be applied to modules.

Response: The SIM800 module has two antenna connectors, this module requires a unique coaxial feed assembly direct to the external antenna, which is approved for use as required in the relevant Sections and will be tested to confirm to FCC limits.

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.

Response: Test in a stand-alone configuration and found compliant.  
Please refer to test report for compliance details.

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

Response: The module is equipped with a permanently affixed FCC ID label.  
Reference the label document showing label location on the module.

Reference the User manual which states: "When integrating the module into a host, the label must be visible through a window, visible through an access panel that is easily removed, or a second label must be placed on the outside of the host device that contains the following text: Contains FCC ID: UDV-201314."

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. A copy of these instructions must be included in the application for equipment authorization.

Response: Complies with rules and requirements that apply to a complete transmitter. Detailed instructions for maintaining compliance are given in the User's Manual.

8. The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.

Response: The final configuration modular transmitter is compliant with applicable RF exposure requirements. The module will only be integrated into other authorized devices. RF Exposure is addressed in the RF Exposure Compliance.

Thank you for your attention and timely review.

Sincerely,

A handwritten signature in cursive script that reads "Wu feiping".

Wu Feiping

SrEngineer