



May 20, 2014

Timco Engineering, Inc.  
 849 N.W. State Road 45  
 P.O. Box 370  
 Newberry, Florida 32669 USA

**Re: Application for a Limited Single Modular Request for Anti-Pilferage Device,  
 FCC ID: BVCAMS90604**

Dear Sir or Madam:  
 Federal Communications Commission  
 Authorization and Evaluation Division

Pursuant to Section 15.212 (b) of the Commission’s Rules;

“(b) A limited modular approval may be granted for single or split modular transmitters that do not comply with all of the above requirements, *e.g.* , shielding, minimum signaling amplitude, buffered modulation/data inputs, or power supply regulation, if the manufacturer can demonstrate by alternative means in the application for equipment authorization that the modular transmitter meets all the applicable part 15 requirements under the operating conditions in which the transmitter will be used. Limited modular approval also may be granted in those instances where compliance with RF exposure rules is demonstrated only for particular product configurations. The applicant for certification must state how control of the end product into which the module will be installed will be maintained such that full compliance of the end product is always ensured.”

Modular approval requirement	Yes	No *
(a) The radio elements must have the radio frequency circuitry must be shielded. Physical/discrete and tuning capacitors may be located external to the shield, but must be on the module assembly.		No shielding present.
(b) The module shall have buffered modulation/data input(s) (if such inputs are provided) to ensure that the module will comply with the requirements set out in the applicable RSS standard under conditions of excessive data rates or over-modulation.		No data is transmitted, thus there are no inputs or buffers.
(c) The module shall have its own power supply regulation on the module. This is to ensure that the module will comply with the requirements set out in the applicable standard regardless of the design of the power supplying circuitry in the host device which houses the module.		The transmitter power regulation is controlled by the AC Mains.
(d) The module shall comply with the provisions for external power amplifiers and antennas detailed in this standard. The equipment certification submission shall contain a detailed description of the configuration of all antennas that will be used with the module.		The transmitter drives a resonant loop antenna system. No other power amps or antenna would function with this design.

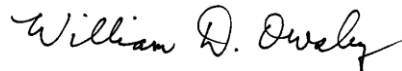
(e) The module shall be tested for compliance with the applicable standard in a stand-alone configuration, i.e. the module must not be inside another device during testing.	The design of this transmitter is as a stand-alone system.
(f) The module must be labelled with its permanently affixed FCC ID label, or use an electronic display (See KDB Publication 784748 about labelling requirements);	The chassis carries the label.
(g) The module must comply with all specific rules applicable to the transmitter including all the conditions provided in the integration instructions by the grantee;	This transmitter is professionally installed by trained service techs.
(h) The module must comply with RF exposure requirements	The transmitter operates at frequencies below the limits.

This circuit board generates a series of 58 kHz pulses used to activate anti-pilferage tags and detect the resonance of those tags. The transmitter drives a set of loop antennas to establish a magnetic field that interacts with any tags present. This is the first model of this present implementation. There are plans to add more loop antenna configurations and chassis to hold them. Using one transmitter board that can be used for each configuration would be an advantage in time to market.

The transmitter does not comply with all the modular requirements. It is not shielded; the transmitter power is not regulated on board, it uses the regulation of the AC Mains; it has no buffered modulation or data inputs being a tuned resonant system that uses one frequency; it is not available to be installed into any other systems or units outside of the applicants control. Testing and results as indicated in the test report, shows that the transmitter meets the general radiated limits of 15.209 from 56 kHz to 1 GHz and also the conducted limits of 15.207.

Therefore, as we the applicant will always maintain control of the end product by manufacturing the transmitter board into a variety of chassis with loop antennas, all to perform the same tuned resonant function of detecting anti-pilferage tags, we are applying for a Limited Modular approval.

Sincerely,



William D. Owsley  
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