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AES Chemunex would like to apply for FCC Single Modular Approval.

This document is our application form according to FCC Part 15.212:

Modular transmitter requirements	Manufacturer clarification
A- In order to be considered a transmitter module, the device must be a complete RF transmitter, i.e. it must have its own reference oscillator (e.g. VCO), antenna, etc. The only connectors to the module, if any, may be the power supply and modulation/data inputs.	The module has its own oscillator and its own PCB antenna. The only connector is the communication SPI data and input DC power between 8V and 30VDC.
B- Compliance with FCC RF exposure requirements may, in some instances, limit the output power of a module and/or the final applications in which the approved module may be employed.	Module is designed to be installed only in fixed or mobile applications as defined in §2.1091 of CFR 47 FCC Rules. Portable configurations as defined in §2.1093 of CFR47 FCC Rules and/or different antenna configurations shall require separate approval.
C- While the applicant for a device into which an authorized module is installed is not required to obtain a new authorization for the module, this does not preclude the possibility that some other form of authorization or testing may be required for the device (e.g. a WLAN into which an authorized module is installed must still be authorized as a PC peripheral, subject to the appropriate equipment authorization).	OK
D- In the case of a modular transceiver, the modular approval policy only applies to the transmitter portion of such devices. Pursuant to Section 15.101(b), the receiver portion will either be subject to Verification, or it will not be subject to any authorization requirements (unless it is a Scanning Receiver, in which case it is also subject to Certification, pursuant to Section 15.101(a)).	Ok See Emitech test report.
E- The holder of the grant of equipment authorization (Grantee) of the module is responsible for the compliance of the module in its final configuration, provided that the OEM, integrator and/or end user has complied with all of the instructions provided by the Grantee which indicate installation and/or operating conditions necessary for compliance.	Ok
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. Such coupling may result in non-compliant operation.	Ok

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.	There are two 8-bit registers in the component. Each register contains one bit which renders information on the FIFO buffer. <ul style="list-style-type: none"> • One bit indicates that there are too much written data on the FIFO buffer. • The other bit indicates that the FIFO buffer is between 1/3 and 2/3.
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.	OK The module has its own DC/DC power supply. It is possible to put power between 8V and 30V.
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 II permissive change. The “professional installation” provision of Section 15.203 may not be employed for modules.	Ok Integrated PCB antenna which could not be modified. Trying to disconnect the antenna will break the equipment.
5- The modular transmitter must be tested in a stand-alone configuration, i.e. the module must not be inside another device during testing. This is intended to demonstrate that the module is capable of complying with Part 15 emission limits regardless of the device into which it is eventually installed.	OK See Emitech test report
6- The modular transmitter must be labeled with its own FCC ID number, and, if the FCC ID is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module.	OK See label sample. Finished product(s) integrating the module shall bear following label: “This device contains RF module FCC ID: S3X-FC0062 IC: 10929A-FC0062”
7- The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements.	OK. See Emitech test report.
8- The modular transmitter must comply with any applicable RF exposure requirements.	Ok. See Emitech test report.

Sincerely,
Wednesday 27th February 2013,

Johan DEVELON
R&D Instruments Manager

