



MODULAR COVER LETTER

To whom it may concern,

SORHEA Inc would like to apply for Modular FCC Approval. This letter is our application for such 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.	OK Reference oscillator included in the radio card Antenna supplied with the radio card The Connector received power supply and data inputs.
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.	OK (1mW)
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 Another type of authorization can be asked for the product which integrates the radio module. The product which received the radio module is subjected to security requirements and CEM
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)).	Applicable to the transmitter part only. The receiver part is not a scanning receiver The checking tests on the Rx have been done by Emitech. The results are in the 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 The sharer of the Authorization (SORHEA Inc.) is responsible for the respect of the Warranty when the radio module is included in a product.



<p>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.</p>	<p>OK The set of radio module includes the U.FL – SMA line cord + antenna + antenna fixing plate (70x70mm)</p>
<p>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.</p>	<p>OK buffered modulation/data inputs Modular Approval + Cover</p>
<p>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.</p>	<p>OK Power supply generation integrated in the radio card.</p>
<p>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.</p>	<p>OK The set of radio module includes line cord + antenna + antenna fixing plate</p>
<p>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.</p>	<p>OK Possible tests on the radio module alone.</p>
<p>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.</p>	<p>OK FCC ID Label</p>
<p>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.</p>	<p>OK</p>



SORHEA

8- the modular transmitter must comply with any applicable RF exposure requirements.	OK
--	----

Sincerely,

Date : 20th of March 2013

Eric THORD
Treasurer
SORHEA Inc.