

Dated May/29/02

Federal Communications Commissions

Subject: Cover letter of Request for Modular Approval

Dear Application Examiner,

The Manufacturer & Product name module is seeking FCC authorization as a part 15 unlicensed modular transmitter approval. The requirements of the FCC public notice DA 00-1407 are met.

The following requirements are fulfilled.

1. **The modular transmitter must have its own RF shielding.**
The radio portion of the module is contained in its own RF shielding. See photos in exhibit
2. **The modular transmitter must have buffered modulation/data inputs**
The module has a memory management unit inside of the IC. It buffers the data inputs from UART
3. **The modular transmitter must have its own power supply regulation**
The IC contains an own voltage regulation. In case of changes in the supply voltage VCC (for example caused by temperature changes or other effects), the internal voltage will be stabilized.
4. **The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(e)**
The transmitter shall only be used with the tested external antenna ...
5. **The modular transmitter must be tested in a stand-alone configuration**
The EUT was tested in a stand-alone configuration, separated from the host by at least 10 cm. The module was set in a continuous transmit mode. See also the test report and test setup photos for more details.
6. **The modular transmitter must be labeled with its own FCC ID number**
The EUT will be labeled with its own FCC ID number . The label is specified in the exhibit.....
If the module is installed inside of an end-product, the label will not be visible. In this case the OEM customer will be instructed to how to apply the exterior label.
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**
The EUT is compliant with all applicable FCC rules. Detail instructions are given in the Users Guide (Exhibit.....)
8. **The modular transmitter must comply with any applicable RF exposure requirements.**
The maximum measured power output is 29.67mW, the maximum antenna gain is 5.5dBi = numeric gain.... (see also FCC test report Exhibit..)

The maximum permissible exposure is defined in the 47CFR 1.1310 as 1 mW/cm². The distance from the EUT's transmitting antenna where the exposure level reaches the maximum permitted level is calculated using the general equation:

$$S = P * G / 4\pi R^2$$
$$R = \sqrt{PG/4\pi S}$$

$$R = (926.8 * 3.55) / 4 * 3.14 * 0.601)^{1/2} = (3290.14 / 7.55)^{1/2}$$

Therefore, in order to comply with the uncontrolled exposure a 20.8cm separation distance for the radiation structure must be maintained.

If you have any further questions please feel free to contact us.

Best Regards



Roger Stewart
V.P of Engineering