

Nov. 05, 2009

TIMCO ENGINEERING INC
849 NW State Road 45
P.O.Box 370
Newberry, Florida 32669

Re.: Requesting the transmitter limited modular approval of FCC ID: 161-NRM-900-1

To whom it may concern,

Nautilus International Control & Engineering Ltd., in accordance with FCC Part 15.212, hereby summarized that transmitter module characteristic for requesting the transmitter limited modular approval.

Transmitter Module Characteristics

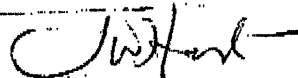
Item	Requirements	EUT
i	The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.	No shielding required Mechanical design of host system guarantees that no wire or other object will come in closer than tested counted with the RF front end of the transmitter.
ii	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.	Data rate and modulation are controlled by the firmware on the host system and cannot be exceeded by applying excessive voltages to the transmitter's inputs.
iii	The modular transmitter must have its own power supply regulation.	Transmitter is installed only into host system designed by Nautilus that has voltage regulation.
iv	The modular transmitter must comply with the antenna and transmission system requirements of §§ 15.203, 15.204(b) 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). The "professional installation" provision of § 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section.	The module has a reverse-polarity SMA connector that prevents the end customer from using unauthorized antennas.

v	The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i>, the module must not be inside another device during testing for compliance with part 15 requirements. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in § 15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see § 15.27(a)). The length of these lines shall be the length typical of actual use or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified and commercially available (see § 15.31(i)).	Being an RF front end only, the module requires a host to operate. It has been tested while connected to a host emulation system, but not contained within it. The module is intended for battery powered equipment. The length of the lines connecting the module to the host emulation system was typical of actual use. The lines did not contain ferrites during testing.
vi	The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number. (A) If using a permanently affixed label, the modular transmitter must be labeled with its own FCC identification number, and, if the FCC identification number 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. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: XYZMODEL1," or "Contains FCC ID: XYZMODEL1." Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be	The transmitter has its own silk screened indelible label. The host system will have another label that states: "CONTAINS FCC ID: 161-NRM-900-1"

	included in the application for equipment authorization. (B) If the modular transmitter uses an electronic display of the FCC identification number, the information must be readily accessible and visible on the modular transmitter or on the device in which it is installed. If the module is installed inside another device, then the outside of the device into which the module is installed must display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains FCC certified transmitter module(s)." Any similar wording that expresses the same meaning may be used. The user manual must include instructions on how to access the electronic display. A copy of these instructions must be included in the application for equipment authorization.	
vii	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.	The host system description has been created that provides adequate instructions required to integrate the module into the system and operate it within applicable rules.
viii	The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.	The transmitter has been tested in a system that closely emulates its intended host and passed 15.247(i) § RSS 102.

If you have any questions please feel free to contact the undersigned.

Sincerely,



Jason Hart