



Jan. 23, 2004

TIMCO ENGINEERING INC.

P.O. Box 370
849 N.W. State Road 45
Newberry, Florida

Subject: FCC Certification Authorization Application under FCC Part 15, Subpart C, Sec. 15.247 - Digital Modulation Transmitters operating in the frequency band 2400 - 2483.5 MHz.

Product: Psion Teklogix 2.4 GHz Modular Transmitter
Model No.: RA2020
FCC ID: GM3RA2020M

Dear Sir/Madam,

As appointed agent for Psion Teklogix Inc., we would like to submit the application to the Federal Communications Commission for Modular Approval of the above product. Please review all necessary files uploaded to TIMCO Upload Web Site.

This application is subject to Modular Approval as Model RS2020. Please refer to the attached sheet below for compliance with FCC Public Notice DA00-1407 (June 26, 2000) - Part 15 Unlicensed Modular Transmitter Approval.

If you have any queries, please do not hesitate to contact us.

Yours truly,

Tri Minh Luu, P. Eng.,
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Encl



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FCC Public Notice DA00-1407 (June 26, 2000)

Part 15 Unlicensed Modular Transmitter Approval Psion Teklogix Model RA2020, FCC ID: GM3RA2020M

	Requirements for Modular Transmitters	Manufacturer's Clarification	Laboratory's Comments
(a)	In order to be considered a transmitter module, the device must be 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 power supply and modulation/data inputs	<ul style="list-style-type: none"> ✓ The transmitter is completed with its own reference oscillator, antenna. ✓ Only connectors provide are dc supply, data and rf ports are provided with the modular transmitter 	Satisfactory
(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	<ul style="list-style-type: none"> ✓ The radio is intended for use in all applications (portable, mobile and base). It complies with SAR test with body tissue ✓ The radio is intended for use with mobile or fixed base stations only. It complies with MPE per 2.1091 & 1.1307 	Satisfactory
(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 the authorized module is installed still be authorized as PC peripheral, subject to the appropriate equipment authorization)	<ul style="list-style-type: none"> ✓ The equipment under complies with FCC Part15, Subpart B, Class B – Unintentional radiators 	Satisfactory
(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 if is a Scanning Receiver, in which case it is also subject to Certification, pursuant to Section 15.101(a))	<ul style="list-style-type: none"> ✓ The receiver operates in the band above 960 MHz; therefore, the FCC authorization for the receiver is exempted. 	Satisfactory
(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.	<p>End-users must comply with the following instruction sated in the users' manual:</p> <ul style="list-style-type: none"> ✓ Labeling requirement for equipment using this modular transmitter. ✓ RF Exposure Warning for compliance with FCC Rules 2.1091 and 1.1307 when the radio is used in a mobile or base system 	Satisfactory

	Requirements for Modular Transmitters	Manufacturer's Clarification	Laboratory's Comments
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 applied to modules.	✓ The radio and its associated antennas are provided with the special coupling antenna connectors (reversed SMA.....).	Satisfactory
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. Unless the transmitter module will be battery powered, it must comply with the AC conducted requirements found in Section 15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will marketed with the module (see Section 15.27(a)). The length of these lines shall be 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 or commercially available (See Section 15.31(I)).	✓ The modular transmitter was tested in a stand-alone configuration	Satisfactory
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. 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 included in the application for equipment	✓ Instructions for labeling requirements on the out side of the final end product are included in the user manual.	Satisfactory

	Requirements for Modular Transmitters	Manufacturer's Clarification	Laboratory's Comments
7	<p>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. A copy of these instructions must be included in the application for equipment authorization. For example, there are very strict operational and timing requirements that must be met before a transmitter is authorized for operation under Section 15.231. For instance, data transmission is prohibited, except for operation under Section 15.231(e), in which case there are separate field strength level and timing requirements. Compliance with these requirements must be assured</p>	<p>✓ Not applicable</p>	<p>Satisfactory</p>
8	<p>The modular transmitter must comply with any applicable RF exposure requirements. For example, FCC Rules in Sections 2.1091, 2.1093 and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f) and 15.255(g), require that Unlicensed PCS, UNII and millimeter wave devices perform routine environmental evaluation for RF Exposure to demonstrate compliance. In addition, spread spectrum transmitters operating under Section 15.247 are required to address RF Exposure compliance in accordance with Section 15.247(b)(4). Modular transmitters approved under other Sections of Part 15, when necessary, may also need to address certain RF Exposure concerns, typically by providing specific installation and operating instructions for users, installers and other interested parties to ensure compliance.</p>	<p>✓ Instructions for maintaining a minimum distance of 20 Cm between the antenna of the device and persons during device operation are included in the user manual.</p>	<p>Satisfactory</p>