| Request for Modular Approval Request for Limited Modular Approval Request for Limited Modular Approval Request for Limited Modular Approval Requirements Requirements EUT Conditions Comply (V/N) | Applicant/Grantee Primex, Inc. | | | | | | | | |
|--|--------------------------------|--|-------------------|---------------|---|---|--|--|--|
| Section 15.212 Modular Transmitters | | | | | | | | | |
| Request for Modular Approval Single Modular Approval EUT Conditions Comply (Y/N) | | | | | | | | | |
| Requirements Single Modular Approval Requirements | | | | | | | | | |
| Single Modular Approval Requirements | | | F F | | | Comply (Y/N) | | | |
| 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. 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. The modular transmitter must have its own power supply regulation. The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another | | L | | le Modular / | | 1 3 3 3 2 2 3 4 3 7 3 7 3 7 3 7 3 7 3 7 3 7 3 7 3 7 | | | |
| transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements. 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. 3 The modular transmitter must have its own power supply regulation. 4 The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another | 1 | The radio ele | | V | | | | | |
| shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements. 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. 3 The modular transmitter must have its own power supply regulation. 4 The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another All inputs to the module are buffered. Y The module has its own internal power supply regulation that works from input voltages of 4 to 30VDC. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. | _ | | | | | | | | |
| tuning capacitors may be located external to the shielded radio elements. 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. 3 The modular transmitter must have its own power supply regulation. 4 The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another All inputs to the module are buffered. Y The module has its own internal power supply regulation that works from input voltages of 4 to 30VDC. Y The module has its own internal power supply regulation that works from input voltages of 4 to 30VDC. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The work from input voltages of 4 to 30VDC. The modular transmitter must comply approved to the module described printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The modular transmit tran | | shielding. The physical crystal and tuning capacitors may be located | | | | | | | |
| 2 The modular transmitter must have buffered 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. 3 The modular transmitter must have its own power supply regulation. 4 The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another All inputs to the module are buffered. Y The module are buffered. Y The module has its own internal power supply regulation that works from input voltages of 4 to 30VDC. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna on meets this requirement. | | | | | | | | | |
| 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. The modular transmitter must have its own power supply regulation. The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another All inputs to the module are buffered. Y The module are buffered. Y The module has its own internal power supply regulation that works from input voltages of 4 to 30VDC. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The modular transmiter must be tested in a standalone configuration, i.e., the module must not be inside another | | | | | | | | | |
| 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. 3 The modular transmitter must have its own power supply regulation. 4 The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another The module has its own internal power supply regulation that works from input voltages of 4 to 30VDC. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. | 2 | | | | All inputs to the module are buffered. | Y | | | |
| inputs are provided) to ensure that the module will comply with Part 15 requirements under conditions of excessive data rates or over-modulation. 3 The modular transmitter must have its own power supply regulation. 4 The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another The module has its own internal power supply regulation that works from input voltages of 4 to 30VDC. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The device was tested in a standalone configuration, i.e., the module must not be inside another | | buffered mo | dulation/data inp | outs (if such | | | | | |
| module will comply with Part 15 requirements under conditions of excessive data rates or over-modulation. The modular transmitter must have its own power supply regulation. The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another The module has its own internal power supply regulation that works from input voltages of 4 to 30VDC. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The device was tested in a standalone configuration. Y The device was tested in a standalone configuration. | | | - | * | | | | | |
| requirements under conditions of excessive data rates or over-modulation. The modular transmitter must have its own power supply regulation. The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another The module has its own internal power supply regulation that works from input voltages of 4 to 30VDC. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The equirement. The device was tested in a standalone configuration. | | | | | | | | | |
| excessive data rates or over-modulation. The modular transmitter must have its own power supply regulation. The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another The module has its own internal power supply regulation that works from input voltages of 4 to 30VDC. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The device was tested in a standalone configuration. Y The device was tested in a standalone configuration. | | | | | | | | | |
| with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another supply regulation that works from input voltages of 4 to 30VDC. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The device was tested in a standalone configuration. | | | | | | | | | |
| The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. The EUT has a permanently attached printed circuit trace antenna and meets this requirement. | 3 | The modular | r transmitter mus | t have its | The module has its own internal power | Y | | | |
| The modular transmitter must comply with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The EUT has a permanently attached printed circuit trace antenna and meets this requirement. Y The device was tested in a standalone configuration. | | own power s | supply regulation | 1. | supply regulation that works from input | | | | |
| with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another printed circuit trace antenna and meets this requirement. The device was tested in a standalone configuration. Y | | | | | voltages of 4 to 30VDC. | | | | |
| with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another printed circuit trace antenna and meets this requirement. The device was tested in a standalone configuration. Y | | | | | | | | | |
| with the antenna and transmission system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another printed circuit trace antenna and meets this requirement. The device was tested in a standalone configuration. Y | | | | | | | | | |
| system requirements of Sections 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another this requirement. this requirement. The device was tested in a standalone configuration. | 4 | | | | The EUT has a permanently attached | Y | | | |
| 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another The device was tested in a standalone configuration. | | | | | printed circuit trace antenna and meets | | | | |
| 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 Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another The device was tested in a standalone configuration. | | | | | this requirement. | | | | |
| employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable). The "professional installation" provision of Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a standalone configuration, <i>i.e.</i> , the module must not be inside another | | \ / | \ / | | | | | | |
| all connections between the module and the antenna, including the cable). The "professional installation" provision of Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another The device was tested in a standalone configuration. | | | | | | | | | |
| the antenna, including the cable). The "professional installation" provision of Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another The device was tested in a standalone configuration. | | | • | • ' | | | | | |
| "professional installation" provision of Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another The device was tested in a standalone configuration. | | | | | | | | | |
| Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another The device was tested in a standalone configuration. | | | | | | | | | |
| modules but can apply to limited modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another The device was tested in a standalone configuration. | | - | | | | | | | |
| modular approvals under paragraph (b) of this section. 5 The modular transmitter must be tested in a standalone configuration, <i>i.e.</i> , the module must not be inside another The device was tested in a standalone configuration. | | | | | | | | | |
| of this section. The modular transmitter must be tested in a standalone configuration, <i>i.e.</i> , the module must not be inside another The device was tested in a standalone configuration. | | | 11. | | | | | | |
| The modular transmitter must be tested in a standalone configuration, <i>i.e.</i> , the module must not be inside another The device was tested in a standalone configuration. | | | | agraph (b) | | | | | |
| in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another | | | | 41 4 4 1 | | *7 | | | |
| module must not be inside another | 3 | | | | | Y | | | |
| | | | _ | | configuration. | | | | |
| device during testing for compnance | | | | | | | | | |
| with Part 15 requirements. Unless the | | | | - | | | | | |
| transmitter module will be battery | | | • | | | | | | |
| powered, it must comply with the AC | | | | • | | | | | |
| line 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 be marketed with the | | | | | | | | | |
| module (see Section 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 Section 15.31(i)). | | |
| 6 | The modular transmitter must be | The modular device has a label showing | Y |
| | equipped with either a permanently | the FCC ID number on its exterior. This | |
| | affixed label or must be capable of | modular device is intended to not mount | |
| | electronically displaying its FCC | inside of another device, but rather | |
| | | · · | |
| | identification number. | alongside another device. Thus, a | |
| | (A) If using a permanently affixed label, the modular transmitter must be labeled with its own | second label for the device it is mounted | |
| | FCC identification number, and, if the FCC | to is not supplied. | |
| | 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 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. | | |
| 7 | The modular transmitter must comply | Please Refer to the "Emergency Light | Y |
| | with any specific rules or operating | Monitoring Installation and Users | _ |
| | requirements that ordinarily apply to a | Guide". | |
| | | Guide . | |
| | 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. | | |
|---|--|---|---|
| 8 | The modular transmitter must comply with any applicable RF exposure | The EUT meets the RF exposure compliance. | Y |
| | requirements in its final configuration. | 1 | |

A **limited modular approval** may be granted for single or split modular transmitters that do not comply with all of the above requirements, *e.g.*, shielding, minimum signaling amplitude, buffered modulation/data inputs, or power supply regulation, if the manufacturer can demonstrate by alternative means in the application for equipment authorization that the modular transmitter meets all the applicable Part 15 requirements under the operating conditions in which the transmitter will be used. Limited modular approval also may be granted in those instances where compliance with RF exposure rules is demonstrated only for particular product configurations. The applicant for certification must state how control of the end product into which the module will be installed will be maintained such that full compliance of the end product is always ensured.