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Attn: Director of Certification

FCC ID: R9M-IDOT-002
IC: 7701A-IDOT002

IntelliDOT Corporation is hereby requesting limited modular transmitter approval for RF3. The numbered requirements identified below are addressed below.

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. It is also intended to prevent coupling between the RF circuitry of the module and any wires or circuits in the device into which the module is installed. Such coupling may result in non-compliant operation.

IntelliDOT RF Module RF3 does not have shielding. It complies with spurious emissions due to its low output power and circuitry contained in a single chip device. This is a application for a limited modular approval. This module will only be installed in hosts under the control of IntelliDOT. As such, IntelliDOT will be able to ensure that adequate shielding is provided by the host device for any devices that incorporate this module in the future. Radiated emission tests will be performed on future hosts to ensure compliance. The data will be recorded and may be treated as a class I permissive change.

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.

The IntelliDOT RF module RF3 contains buffered modulation/data inputs.

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.

The IntelliDOT RF module RF3 contains its own power supply regulation and is not influenced by any outside circuitry.

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 IntelliDOT RF module RF3 antenna is permanently attached to the module. The antenna is not interchangeable and complies with 15.203

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 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 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 IntelliDOT RF module RF3 transmitter was tested as a stand alone configuration utilizing a DC battery power source. No power lines are used in powering the module. See test setup photos.

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 authorization.

The IntelliDOT RF module RF3 will be labeled with the FCC ID and IC UPN. The module label will not be visible when installed. As a result the host device will include an exterior label that includes the following information:

Contains FCC ID: R9M-IDOT-002

Contains IC: 7701A-IDOT002

IntelliDOT, Inc

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. 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.

The device is a handheld device. Typically the FCC does not concern itself with RF exposure for extremities when the device is not worn on an extremity. The device is typically handheld when being used, however it is then worn on the body until the next use. Given that the SAR limit for the body is much lower than that for hand the device has been tested for body SAR. The device does include some body worn accessories that do not contain any metal

The body SAR testing was performed at zero separation and a 100% duty cycle. The actual operating duty cycle of the device is very low and any body worn accessories will only increase the distance between the device and the body. Given the lower duty cycle and the increased separation distance in real operation, the actual SAR will be significantly less than what is presented in the SAR test report.

This is a limited modular approval. IntelliDOT will continue to ensure RF Exposure compliance by maintaining the antenna gain and type of antenna as well as the separation between the antenna and the outside of the host device.

8. 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.

SAR testing has been performed on a host device. The unit will be tested with a 100% duty cycle at zero separation. Only body SAR is required. The maximum measured SAR was less than .1 w/Kg

Testing the device at 100% duty cycle and zero separation is a worst case test scenario since the actual transmit duty cycle is very very low and they use of any body worn accessory will only increase the separation to the body and reduce the SAR..

Given that this is a limited modular approval and IntelliDOT will maintain control of the host devices, IntelliDOT can maintain the internal separation distance between the antenna and the outside of the host device thus enduring continued SAR compliance.

IntelliDOT will not offer this RF3 RF module for distribution as a product, rather it will be used for IntelliDOT products designed and manufactured with total control by IntelliDOT.

Sincerely yours,



Signature

Trace Funderrburk Director
of Manufacturing

IntelliDOT Corporation