



**9<sup>th</sup> July 2007**

To whom it may concern;

In accordance with Public Notice DA 00-1407 dated June 2000, Cirronet, an RF Monolithics Company, wish to apply for modular approval of the DM1810 module, FCC ID: HSW-DM1810A.

Each requirement is addressed individually below;

<p>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.</p>	<p><b>The DM1810 Modules are all based on RFM's Amplifier Switched Hybrid (ASH) Technology, which is fully shielded in its own metal package and has been type certified by the FCC.</b></p>
<p>•2) The modular transmitter must have buffered data inputs (if such inputs are provided). This is intended to ensure that the module will comply with Part 15 requirements in the event of excessive data rates or over-modulation conditions.</p>	<p><b>The ASH Transceiver is buffered by the 16F689 PIC Microprocessor. All inputs to the Transceiver come through the micro and the data rate to and from the radio is fixed at 4.8kb/s</b></p>
<p>•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.</p>	<p><b>The on board regulator powers both the micro and ASH device</b></p>
<p>•4) The modular transmitter must comply with the requirements of Section 15.203 - 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 this Section may not be applied to modules. Please note that Section 15.204(c) also applies to modules - 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.</p>	<p><b>Antennas for the DM1810-916 Modules are soldered in place.</b></p>
<p>5) The modular transmitter must be tested in a stand-alone configuration, i.e., the antenna, AC or DC power, and data input/output lines must be connected to the module, but the module must not be inside another</p>	<p><b>The DM1810 Modules have met this requirement and have been fully tested.</b></p>

<p>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 the length typical of actual usage 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)).</p>	
<p>•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: HSW-DM1810A" or "Contains FCC ID: HSW-DM1810A" 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.</p>	<p><b>We have visible labels on the top of the device to meet this requirement.</b></p> <p><b>If a DM1810 Module is installed in another package, the outside package must display an external label with wording such as the following: "Contains Transmitter Module FCC ID: HSW-DM1810A" or "Contains FCC ID: HSW-DM1810A"</b></p>
<p>•7) The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate</p>	<p><b>All DM1810 modules meet this requirement as is. Customers can not operate the device in a way that will not comply to these specifications.</b></p>

<p>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, only cordless phones are permitted to operate under Section 15.233, thus, a module authorized under this Section would be limited to use in cordless phones and the instructions provided with the device must explain this limitation.</p>	
<p>•8) 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 it is a Scanning Receiver, in which case it is also subject to Certification, pursuant to Section 15.101(a)).</p>	<p><b>Receiver in the DM1810 Module meets all requirements and is shown in Nemko report.</b></p>
<p>•9) 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><b>DM1810-916 Modules meet required spread spectrum requirements and compliance requirements. Measured and verified in Nemko report</b></p>

Information provided by:

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7/9/07

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