

# Rajant WLM200N5-26ESD OEM/Integrators Installation Manual

The Rajant WLM200N5-26ESD is a high power miniPCI that is purchased by Rajant Corporation from Compex Systems for exclusive use in Rajant branded wireless mesh data networking products. WLM200N5-26ESD radios marked with FCC ID: VJA-WLM200N526ESD and ICES 7382-N526ESD are not resold by Rajant to end users as a part for use in a non-Rajant product. The use of the module is limited to OEM installation only in Rajant branded host hardware.

### **Installation Instructions**

The WLM200N5-26ESD mini PCI radio is installed at manufacture or repair of Rajant branded host equipment in accordance with the approved assembly procedures, manufacturing work instructions, and repair procedures. End users of Rajant products are not authorized to install the WLM200N5-26ESD radio. No instructions are provided to end users for servicing host equipment.

The following precautions are applicable to all host assembly procedures:

- 1. The radio card shall not be installed into a host system that is energized.
- 2. The card can be damaged by electro static discharge (ESD). Personnel performing assembly or repair shall exercise caution to prevent ESD damage to the device.
- 3. The radio shall not be operated without a 50 ohm load on the RF chains. Permanent damage to the radio can result from operating the radio with the RF ports unterminated.
- 4. The WLM200N5-26ESD design shall not be electrically or mechanically modified for use in Rajant branded host equipment.
- 5. Host equipment that incorporates the WLM200N5-26ESD shall have a label that specifies the FCC and IC ID of the WLM200N5-26ESD, "CONTAINS TRANSMITTER MODULES FCC ID: VJA- WLM200N526ESD IC: 7382A-N526ESD". The label shall be visible on an outside surface of the host equipment enclosure. The host equipment labels are provided by Rajant to approved contract manufacturers. The host FCC/IC labels are installed per approved assembly procedures. The design of the labels and the installation instructions meet the labeling requirements of KDB 784748 D01.

#### **IMPORTANT NOTE:**

## **FCC Radiation Exposure Statement:**

The antenna used for this transmitter must be kept at a separation distance of at least 20 cm from all persons and must not be co-located with any other transmitter antenna. Certification of body worn host equipment incorporating this radio module will require SAR testing which is not a part of this approval.



## **Certified Power and Antenna Requirements UNII-1**

The WLM200N5-26ESD is certified for operation on channels with a 5 MHz channel bandwidth centered on frequencies 5180 MHz to 5240 MHz. The maximum certified total conducted average power for 5 MHz channels is 21.8 dBm.

The WLM200N5-26ESD is certified for operation on channels with a 10 MHz channel bandwidth centered on frequencies 5180 MHz to 5240 MHz. The maximum certified total conducted average power for 10 MHz channels is 24.1 dBm.

The WLM200N5-26ESD is certified for operation on channels with a 20 MHz channel bandwidth centered on frequencies 5180 MHz to 5240 MHz. The maximum certified total conducted average power for 20 MHz channels is 26.0 dBm.

The WLM200N5-26ESD is certified for operation on channels with a 40 MHz channel bandwidth centered on frequencies 5190 MHz to 5230 MHz. The maximum certified total conducted average power for 10 MHz channels is 21.7 dBm.

The channel plan was certified with a 6dBi omni directional antenna system. Wireless compliance of host equipment using the Rajant WLM200N5-26ESD radio module is dependent on operation using the same antenna type and gain, at the certified transmitter power levels. The module is approved for use in mobile and portable applications. Operation in fixed base stations also permitted, provided that operation is at the same certified power level and EIRP as the mobile / portable configuration.

#### **Certified Power and Antenna Requirements UNII-3**

The WLM200N5-26ESD is certified for operation on channels with a 20 MHz channel bandwidth centered on frequencies 5745 MHz to 5825 MHz. The maximum conducted (average) output power for 20 MHz channels is 22.4 dBm.

The WLM200N5-26ESD is certified for operation on channels with a 40 MHz channel bandwidth centered on frequencies 5755 MHz to 5795 MHz. The maximum conducted (average) power for 40 MHz channels is 21.4 dBm.

The channel plan was certified with a 6dBi omni directional antenna. Wireless compliance of host equipment using the Rajant WLM200N5-26ESD radio module is dependent on operation using the same antenna type and gain, at the certified transmitter power levels.

The module is approved for use in mobile and portable applications. Operation in fixed base stations also permitted, provided that operation is at the same certified power level and EIRP as the mobile / portable configuration.



## **ICES User Notice for License-Exempt Radio Apparatus**

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) l'appareil ne doit pas produire de brouillage;
- 2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### **ICES RF Exposure Statement**

This device was evaluated for RF exposure per the requirements of RSS-102(3.2). When operated with the certified antenna system, the power density was determined to be below the MPE limit at 20 cm. The safe operating distance from this device is therefore 20cm.

Cet appareil a été évalué pour l'exposition RF selon les exigences de RSS-102 (3.2). Lorsqu'il était utilisé avec le système d'antenne certifié, la densité de puissance était inférieure à la limite de MPE à 20 cm. La distance de sécurité de fonctionnement de cet appareil est donc de 20 cm.

# **ICES U-NII-1 Licensing Notice**

In Canada, a license is required to use channels in the frequency range 5150-5250 MHz outdoors. Licensing information may be found at <a href="http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11294.html">http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11294.html</a>

Au Canada, une licence est requise pour utiliser les canaux dans la gamme de fréquences 5150-5250 MHz à l'extérieur. Les informations sur les licences peuvent être consultées sur <a href="http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11294.html">http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11294.html</a>