

Stratum™ X5

Safety and Regulatory Guide

Products Covered

Stratum™ X5

-SX5-1040A

-SX5-1042A

-SX5-1040A Quickbridge

-SX5-1042A Quickbridge



Copyright

© 2024 Proxim Wireless Corporation, San Jose, CA. All rights reserved. Covered by one or more of the following U.S. patents: 5,231,634; 5,875,179; 6,006,090; 5,809,060; 6,075,812; 5,077,753. The content described herein are copyrighted with all rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form by any means without the written permission of Proxim Wireless Corporation.

Trademarks

Stratum™, Proxim® and the Proxim logo are the trademarks of Proxim Wireless Corporation. All other trademarks mentioned herein are the property of their respective owners.

Disclaimer

Proxim reserves the right to revise this publication and to make changes in content from time-to-time without obligation on the part of Proxim to provide notification of such revision or change. Proxim may make improvements or changes in the product(s) described in this guide at any time. When using these devices, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons.

GPL License Note

Stratum™ products include, in part, some free software that is developed by Free Software Foundation. A user is granted license to this software under the terms of either the GNU General Public License or GNU Lesser General Public License (See <http://www.gnu.org/licenses/licenses.html>). This license allows the user to freely copy, modify and redistribute this software and no other statement or documentation from us. To get a copy of this software, or for any other information, please contact our customer support team).

OpenSSL License Note

Stratum™ products contains software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>) and that is subject to the following copyright and conditions:

Copyright (c) 1998-2016 The OpenSSL Project. All rights reserved.

The names “OpenSSL Toolkit” and “OpenSSL Project” must not be used to refer to, endorse, or promote the products or for any other purpose related to the products without prior written permission. For written permission, please contact openssl-core@openssl.org.

This software is provided by the OpenSSL Project “as is” and any expressed or implied warranties, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose are disclaimed. In no event shall the OpenSSL Project or its contributors be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of the use of this software, even if advised of the possibility of such damage.

Stratum™ X5 - Safety and Regulatory Guide

Documentation Version:1.1
P/N 765-00424, January 2024.

Preface	4
1 Stratum™ Series - Regulatory Information	5
Safety Information (USA, Canada and European Union and UK)	5
Federal Communications Commission (FCC) Compliance	6
Modifications	6
FCC Radiation Exposure Statement	7
Installation within TDWR Range	7
Industry Canada Compliance	8
IC Radiation Exposure Statement	9
European (ETSI) and UK Compliance	10
Countries of Operation and Conditions of Use	10
5GHz Operation	10
Transmit Power Control (TPC) for 5 GHz operation	10
Certification Summary	11
USA (See USA - Certification)	11
Canada (See CANADA - Certification)	11
ETSI (See ETSI - Certification)	11
UK (See UK - Certification)	11
CB (See CB - Test Certificate)	11
2 Information for Professional Installer	11
Information for Professional Installers	11
Adjusting Tx Output Power	11
Antenna Gain Configuration	12
A USA - Certification	14
B CANADA - Certification	17
C ETSI - Certification	19
D UK - Certification	24
E CB - Test Certificate	35

Preface

About this Guide

This document contains the safety and regulatory compliance information for the following Stratum™ products:

- **Stratum™ X5 Series**
 - SX5-1040A
 - SX5-1042A

Related Documents

In addition to this guide, please refer to the following documents for *Stratum™ X5* products that are available at Proxim's support site <http://support.proxim.com>.

- **Quick Installation Guide (QIG):** A quick reference guide that provides essential information for installing and configuring the device.
- **Device Management Guide** - A guide that gives an overview of the device user interface and explains the step-by-step procedure to configure, manage and monitor the device by using Graphical User Interface.
- **Software Configuration Guide:** A guide that provides software configuration information for Proxim devices.
- **Hardware Installation Guide:** A guide that provides a hardware overview and details about the installation procedures and hardware specifications.
- **CLI Guide** - A guide that gives instructions on how to configure, manage and monitor the device using Command Line Interface.

Proxim recommends you to visit its support site <http://support.proxim.com> for regulatory information and latest product updates.

Stratum™ Series - Regulatory Information

1

This chapter contains information on the following:

- [Safety Information \(USA, Canada and European Union and UK\)](#)
- [Federal Communications Commission \(FCC\) Compliance](#)
- [Industry Canada Compliance](#)
- [Certification Summary](#)

1.1 Safety Information (USA, Canada and European Union and UK)

Listed below are the product(s) and their corresponding safety standards that they comply with:

Product(s)	Standards
SX5-1040A SX5-1042A	IEC 62368-1:2018 UL 62368-1:2019 CSA C22.2 No. 62368-1:19 EN IEC 62368-1:2020+A11:2020 BS EN IEC 62368-1:2020+A11:2020

All products are intended to be installed, used, and maintained by experienced telecommunications personnel only.

When using these products, basic safety precautions should always be followed to reduce the risk of fire, electrical shock, and injury to persons, including the following:

- Devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation.
- Installation of these products in the end use must conform to local regulations and codes.
- Devices are to be used with and powered only by the Power Injector provided.
- A 16-amp circuit breaker is required at the power source.
- The devices are intended to be grounded. Use a 12 AWG earthing conductor at a minimum.
- Do not connect or disconnect the power cable from the device when the power injector is plugged into an AC power outlet.
- Devices should be serviced by trained personnels only. Do not disassemble the device. By opening or removing any covers, you may expose yourself to hazardous energy parts. Incorrect reassembly of these devices can cause malfunction and/or electric shock when later used. There are no user serviceable parts; all repairs and services must be handled by a qualified service center.
- Do not insert any objects of any shape or size inside these devices while powered on. Object may contact hazardous energy parts that could result in a risk of fire or personal injury.
- Do not remove or alter the marking label provided on these devices.
- To avoid the risk of electric shock from lightning, do not use these devices during an electrical storm.
- RJ-45 maximum available current is 1.33A.

WARNING: *These devices are intended for installation in accordance with Articles 110-18, 110-26, and 110-27, 725, 800, and 810 of the United States National Electric Code ANSINFP 70, and per the applicable Articles in the Canadian National Electric Code.*

1.2 Federal Communications Commission (FCC) Compliance

The Stratum™ devices have been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING:

- *To comply with FCC part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States. The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.*

The device operation is subject to the following two conditions:

1. The device may not cause harmful interference
2. The device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located or operate in conjunction with any other antenna or transmitter.

The FCC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied.

1.2.1 Modifications

The FCC requires the user to be notified that any changes or modifications to this device that are not expressly approved by the manufacturer may void the user's authority to operate the device. The correction of interference caused by unauthorized modification, substitution or attachment will be the responsibility of the user. The manufacturer and its authorized resellers or distributors are not liable for any damage or violation of government regulations that may arise from failing to comply with these guidelines.

WARNING:

- *Modification of this device to receive cellular Radio Telephone service signals is prohibited under FCC Rules and Federal Law.*
- *Modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC Rules.*

1.2.2 FCC Radiation Exposure Statement

The Stratum™ devices comply with FCC radiation exposure limits set forth for an uncontrolled environment.

Tabulated below are the products and the FCC radiation exposure limits followed by the devices:

Product(s)	Standards
SX5-1040A SX5-1042A	- Product models using external antennas require professional installation. The antennas used for professional installation must be fixed-mounted on outdoor permanent structures with a minimum separation distance from the antenna to the users for antennas according to the below table: - Antennas must not be co-located and must not operate in conjunction with any other antenna or transmitter.

Antenna Model	Frequency (MHz)	Minimum Separation Distance (CM)
TM55D-HVOMNI-12	5150 to 5250	33
	5250 to 5350	20
	5470 to 5725	20
	5725 to 5850	37
TM55D-HVSCTR-21	5150 to 5250	47
	5250 to 5350	20
	5470 to 5725	20
	5725 to 5850	59
MT-466010/NVH	5150 to 5250	83
	5250 to 5350	45
	5470 to 5725	45
	5725 to 5850	131
TM55L-DPDISH	5150 to 5250	66
	5725 to 5850	292
MA-WA57-QP4MIMO19	5150 to 5250	52
	5250 to 5350	20
	5470 to 5725	20
	5725 to 5850	59
PCB Antenna	2402 to 2480	20

1.2.3 Installation within TDWR Range

Before mounting and installing the device, please check the distance between the device location and the near by Terminal Doppler Weather Radar (TDWR). You can find the locations of the airport weather radars from the Wireless Internet Service Providers Association (WISPA) database at <http://spectrumbridge.com/udrs/home.aspx>. If the distance from the device to any TDWR is less than 35 kms, then the radio is not allowed to operate in channels closer than 30 MHz relative to the TDWR frequency (above and below). To protect these TDWR, the channels up to 30 MHz must be blacklisted so they cannot be selected as operational channel. In addition to blacklisting of the channels, register the location of the device radio in the

WISPA database, so that any interference caused by the operation of the radio can be addressed in compliance with the Part 15 requirements.

For example: Consider the TDWR location at Phoenix, AZ operating at 5610 MHz (N 33 25 14; W 112 09 46). If the device is installed within 35 kms radial distance from this location then avoid operating in (5580 - 5640) MHz band. Also, blacklist all channels overlapping the 5580 - 5600 MHz band (5600 - 5650) is already removed from operation list of our device).

1.3 Industry Canada Compliance

The Stratum devices comply with Canadian ICES-003 and license-exempt RSS standard(s).

The device operation is subject to the following conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device

WARNING:

- **High-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.**

NOTES:

- This device and its antenna(s) must not be co-located or operated in conjunction with any other antenna or transmitter.
- Under Industry Canada regulations, the radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.
- The devices are designed to operate with disabled operation between 5600-5650 MHz within the 5470-5725 MHz band.
- The device automatically discontinues transmission in case of absence of information to transmit, or operational failure. Note that this is not intended to prohibit transmission of control or signaling information or the use of repetitive codes which is required by the technology.
- Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate these devices.
- This radio transmitter has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain. Antenna types not included in this list, and having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Conformité Industry Canada

Les appareils Stratum sont conformes aux normes canadiennes ICES-003 et RSS sans licence. Le fonctionnement de l'appareil est soumis aux conditions suivantes:

- Cet appareil ne doit pas provoquer d'interférences.
- Cet appareil doit accepter toute interférence, y compris les interférences qui peuvent provoquer un fonctionnement indésirable de l'appareil.

ATTENTION:

- **Les radars haute puissance sont attribués en tant qu'utilisateurs principaux (c'est-à-dire utilisateurs prioritaires) des bandes 5250-5350 MHz et 5650-5850 MHz. Ces radars pourraient provoquer des interférences et / ou endommager les appareils LE-LAN.**

REMARQUES:

Regulatory Information

- Cet appareil et son (ses) antenne(s) ne doivent pas être co-localisés ou utilisés avec une autre antenne ou un autre émetteur.
- En vertu de la réglementation d'Industrie Canada, l'émetteur radio ne peut fonctionner qu'avec une antenne d'un type et d'un gain maximum (ou moindre) approuvés pour l'émetteur par Industrie Canada. Pour réduire les interférences radio potentielles pour les autres utilisateurs, le type d'antenne et son gain doivent être choisis de telle sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne soit pas supérieure à celle nécessaire pour une communication réussie.
- L'appareil est désactivé entre 5600-5650 MHz dans la bande 5470-5725 MHz.
- L'appareil interrompt automatiquement la transmission en cas d'absence d'informations à transmettre ou de panne de fonctionnement. Notez que cela ne vise pas à interdire la transmission d'informations de commande ou de signalisation ou l'utilisation de codes répétitifs requis par la technologie.
- Tout changement ou modification non expressément approuvé par le fabricant peut annuler le droit de l'utilisateur à utiliser cet appareil.
- Cet émetteur radio a été approuvé par Industrie Canada pour fonctionner avec les types d'antennes énumérés ci-dessous avec le gain maximum autorisé. Les types d'antennes non inclus dans cette liste, et ayant un gain supérieur au gain maximum indiqué pour ce type, sont strictement interdits d'utilisation avec cet appareil.

Frequency Band	Antenna Type	Maximum Gain (dBi)
(5.250-5.250)GHz / ((5.470-5.725)GHz / (5.725-5.850) GHz	Panel	28
	Omni Directional	12
	Sector	21
	Panel (Integrated)	19
(5.725 - 5.850) GHz	Parabolic Dish	35
(2.402 - 2.480)GHz	PCB	2

1.3.1 IC Radiation Exposure Statement

This device complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. The device should be installed and operated with a minimum distance between the antenna and the user according to the below table. Under such configuration, the IC RSS-102 radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux rayonnements IC RSS-102 établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de distance entre la source de rayonnement et votre corps conformément au tableau ci-dessous. Dans ces conditions, les limites d'exposition aux rayonnements IC RSS-102 établies pour un environnement non contrôlé peuvent être satisfaites.

Antenna Model	Frequency (MHz)	Minimum Separation Distance (CM)
TM55D-HVOMNI-12	5225 to 5350	20
	5470 to 5725	20
	5725 to 5850	33

TM55D-HVSCTR-21	5250 to 5350	20
	5470 to 5725	20
	5735 to 5850	51
MT-466010/NVH	5250 to 5350	45
	5470 to 5725	45
	5725 to 5850	114
TM55L-DPDISH	5725 to 5850	255
MA-WA57-QP4MIMO19	5250 to 5350	20
	5470 to 5725	20
	5725 to 5850	51
PCB Antenna	2402 to 2480	20

1.4 European (ETSI) and UK Compliance

The Stratum devices comply with the Low Voltage Directive (LVD) (2014/35/EU) and Radio Equipment Directive (2014/53/EU). Compliance with these directives implies conformity to harmonized European standards (European Norms).

1.4.1 Countries of Operation and Conditions of Use

The devices may be used in the following EU and EFTA countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom.

The professional installer must use the configuration utility provided with the device to ensure that EIRP and the channels of operation are in conformance with the spectrum usage rules for EU and EFTA countries as described below.

1.4.2 5GHz Operation

The installer must use the configuration utility provided with the device to ensure the channels of operation are in conformance with the spectrum usage rules.

The device employs a radar detection feature required for European Community and EFTA country operation in the 5 GHz band. This feature is automatically enabled when the country of operation is correctly configured for any European Community or EFTA country. The presence of nearby radar operation may result in temporary interruption of operation of this device. The radar detection feature will automatically restart operation on a channel free of radar.

1.4.3 Transmit Power Control (TPC) for 5 GHz operation

It is recommended not to disable ATPC on the device. However, if you wish to manually set TPC level, use professional installer services to ensure TPC level is set properly and complies with European regulatory requirements.

NOTE:

The TPC procedure should be repeated when relocating the wireless device within the current wireless network or to a wireless network in a new location.

1.5 Certification Summary

1.5.1 USA (See [USA - Certification](#))

Models	Frequency Band	Certification/Reference Number
SX5-1040A -US SX5-1042A -US	(5.150 - 5.250)GHz (5.250 - 5.350)GHz (5.500 - 5.725)GHz (5.725 - 5.850)GHz (2.402 - 2.480)GHz for BLE	FCC ID: HZB-GIGA5

1.5.2 Canada (See [CANADA - Certification](#))

Models	Frequency Band	Certification/Reference Number
SX5-1040A -WD SX5-1042A -WD	(5.150 - 5.250)GHz (5.250 - 5.350)GHz (5.500 - 5.725)GHz (5.725 - 5.850)GHz (2.402 - 2.480)GHz for BLE	IC:1856A-GIGA5

1.5.3 ETSI (See [ETSI - Certification](#))

Models	Certification/Reference Number
SX5-1040A SX5-1042A	CE

1.5.4 UK (See [UK - Certification](#))

Models	Certification/Reference Number
SX5-1040A SX5-1042A	UKCA

1.5.5 CB (See [CB - Test Certificate](#))

Models	Certification/Reference Number
SX5-1040A SX5-1042A	JPTUV-151216

Information for Professional Installer

2

This chapter contains information on the following:

- Information for Professional Installers
 - Adjusting Tx Output Power
 - Antenna Gain Configuration

2.1 Information for Professional Installers

All products must be professionally installed, and the transmit power of the system must be adjusted by the professional installers to ensure that the system EIRP is in compliance with the limit specified by the regulatory authority of the country of application.

2.1.1 Adjusting Tx Output Power

NOTE: When the system is set to transmit at the maximum power, professional installers must ensure that the maximum EIRP limit is not exceeded. To achieve this, they may have to add attenuation between the device and the antenna when a high gain antenna is used.

Use the following formula in combination with the table of EIRP limits in US and EU countries to calculate system transmit power (based on EIRP limits) of these countries:

$$\text{Tx Power (dBm)} = \text{EIRP Limit (dBm)} + \text{FL (dB)} - \text{G (dB)}$$

where,

Tx Power = Output power measured at the antenna input

EIRP Limit = EIRP limits specified below

FL = Feeder loss including loss of connectors

G = Antenna Gain

Transmit output power can be reduced by using **Automatic Transmit Power Control (ATPC)**, or manually setting the **Transmit Power Control (TPC)**. For information to automatically or manually set TPC, refer to **Software Management Guide** available at <http://support.proxim.com>.

Regulatory Domain	Frequency (MHz)	Max EIRP (dBm)	
		PTP Mode (QB)	PTMP Mode (MP)
US SKU			
United States 5GHz	5150 ~ 5250 (Non-DFS)	30	30
	5250 ~ 5350(DFS)		
	5500 ~ 5725(DFS)		
	5725 ~ 5850 (Non-DFS)		
United States 5.8GHz	5725 ~ 5850 (Non-DFS)	53	36(Base Station), 53(Subscriber Unit)
United States1(5.3, 5.4 GHz)	5250 ~ 5350(DFS)	30	30
	5500 ~ 5725(DFS)		

United States2(5.3, 5.8 GHz)	5250 ~ 5350(DFS)	30	30
	5725 ~ 5850 (Non-DFS)		
United States3 (5.2, 5.8 GHz)	5150 ~ 5250 (Non-DFS)	53	36(Base Station), 53(Subscriber Unit)
	5725 ~ 5850 (Non-DFS)		

WD SKU			
World 5 GHz	5150 ~ 5925 (Non-DFS)	100	100
United States 5GHz	5150 ~ 5250 (Non-DFS)	53	36(Base Station), 53(Subscriber Unit)
	5250 ~ 5350(DFS)		
	5500 ~ 5725(DFS)		
	5725 ~ 5850 (Non-DFS)		
United States 5.8GHz	5725 ~ 5850 (Non-DFS)	53	36(Base Station), 53(Subscriber Unit)
United States1 (5.3, 5.4 GHz)	5250 ~ 5350(DFS)	30	30
	5500 ~ 5725(DFS)		
United States2 (5.3, 5.8GHz)	5250 ~ 5350(DFS)	53	36(Base Station), 53(Subscriber Unit)
	5500 ~ 5725(DFS)		
United States3 (5.2, 5.8 GHz)	5150 ~ 5250 (Non-DFS)	53	36(Base Station), 53(Subscriber Unit)
	5725 ~ 5850 (Non-DFS)		
Canada 5 GHz	5150 ~ 5250 (Non-DFS)	23 (Indoor)	23 (Indoor)
	5250 ~ 5350(DFS)	30	30
	5470 ~ 5600(DFS)		
	5650 ~ 5725(DFS)		
	5725 - 5.850 (Non-DFS)	53	36(Base Station), 53(Subscriber Unit)
Europe 5.4 GHz	5470 ~ 5600 (DFS)	30	30
	5650 ~ 5725 (DFS)		
Europe 5.8 GHz	5725 ~ 5875 (DFS)	36	36
UK 5.8 GHz	5725~5795	36	36
	5815~5850		

IMPORTANT! You must add external attenuation pad if the calculated EIRP is over the limit. If you are at the TPC limit, reduce the power and continue with the attenuation.

2.1.2 Antenna Gain Configuration

When using external antenna, the professional installer should ensure to configure proper antenna gain so that the radio does not exceed the EIRP allowed per regulatory domain.

USA - Certification



Given below are the USA certification details for the following products:

- SX5-1040A -US
- SX5-1042A -US

TCB

GRANT OF EQUIPMENT
AUTHORIZATION

TCB

Certification
Issued Under the Authority of the
Federal Communications Commission
By:

TUV Rheinland of North America, Inc.
1279 Quarry Lane Suite A
Pleasanton, CA 94566

Date of Grant: 09/22/2023

Application Dated: 09/20/2023

Proxim Wireless Corporation
2114 Ringwood Avenue
San Jose, CA 95131

Attention: Ken Lim , Accounting Manager

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE,
and is VALID ONLY for the equipment identified hereon for use under the
Commission's Rules and Regulations listed below.

FCC IDENTIFIER: HZB-GIGA5
Name of Grantee: Proxim Wireless Corporation
Equipment Class: Digital Transmission System
Notes: Startum X5 Gigabit 5 GHz Radio

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
CC	15C	2402.0 - 2480.0	0.0018		

Output power listed is peak conducted.

CC: This device is certified pursuant to two different Part 15 rules sections.



TCB**GRANT OF EQUIPMENT
AUTHORIZATION****TCB****Certification****Issued Under the Authority of the
Federal Communications Commission****By:****TUV Rheinland of North America, Inc.
1279 Quarry Lane Suite A
Pleasanton, CA 94566****Date of Grant: 09/22/2023****Application Dated: 09/20/2023****Proxim Wireless Corporation
2114 Ringwood Avenue
San Jose, CA 95131****Attention: Ken Lim , Accounting Manager****NOT TRANSFERABLE**

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE,
and is VALID ONLY for the equipment identified hereon for use under the
Commission's Rules and Regulations listed below.

FCC IDENTIFIER: HZB-GIGA5**Name of Grantee:** Proxim Wireless Corporation**Equipment Class:** Unlicensed National Information Infrastructure
TX**Notes:** Startum X5 Gigabit 5 GHz Radio

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
CC MO	15E	5150.0 - 5250.0	0.1297		
CC MO	15E	5725.0 - 5850.0	0.1901		

Output power listed is conducted. Professional installation is required. Device operates with specific antennas in MIMO configurations as described in this filing. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 2.9 m from all persons and not be co-located with any other transmitters except in accordance with FCC multi-transmitter product procedures. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance. This device has 20 MHz and 40 MHz, 80 MHz bandwidth modes. This device contains BLE transmitter.

CC: This device is certified pursuant to two different Part 15 rules sections.

MO: This Multiple Input Multiple Output (MIMO) device was evaluated for multiple transmitted signals as indicated in the filing.

CANADA - Certification

B

Given below are the USA certification details for the following products:

- SX5-1040A -WD
- SX5-1042A -WD

TECHNICAL ACCEPTANCE CERTIFICATE

CERTIFICAT D'ACCEPTABILITÉ TECHNIQUE



CERTIFICATE NO.: No. DE CERTIFICATION:	1856A-GIGA5	MARKETING NAME (PMN): NOM DE MARQUE DU PRODUIT (NMP):	Stratum X5
CERTIFICATE TYPE: TYPE DE CERTIFICATION:	Single New Model	HARDWARE VERSION (HVIN): VERSION DU MATÉRIEL (NIVM):	Gigabit 5 quad
TYPE OF EQUIPMENT : GENRE DE MATÉRIEL	Wireless Local Area Network Device	FIRMWARE VERSION (FVIN): VERSION LOGICIEL (NIVL):	N/A
ISSUED TO: DÉLIVRÉ A:	Proxim Wireless Corporation 2114 Ringwood Ave, San Jose, CA 95131, United States Of America		
TESTED BY: TESTÉ A:	TÜV RHEINLAND (INDIA) PVT. LTD. 27/B, 2nd Cross, Electronics, City Phase 1, Bangalore 560 100, India	Company Number: NUMÉRO DE COMPAGNIE:	27711
CONTACT: CONTACT:	B.R. Guruprasad Tel.: N/A	Email: Fax:	guruprasad.br@ind.tuv.com N/A

Frequency Range Low High MHz	RF Power Conducted Watt	Emission Designator (TRC-43 e.g.- 150KP1D)	Specification Standard RSS No. & Issue No.
2402 2480	0.0018	1M03G1D	RSS-247, Issue 3
5745 5825	0.1901	19M2D1D	RSS-247, Issue 3
5755 5795	0.1853	38M2D1D	RSS-247, Issue 3
5775 5775	0.1409	78M5D1D	RSS-247, Issue 3
-- --	--	--	--

ANTENNA TYPE & GAIN: 5 GHz Band: Pannel Antenna with 28 dBi (Max.), Omni Directional Antenna with 12 dBi (Max.), Sector Antenna with 21 dBi (Max.), Parabolic Dish Antenna with 35 dBi (Max.), Integrated Panel Antenna with 19 dBi (Max.); 2.4 GHz Band: PCB Antenna with 2 dBi (Max.)

Certification of equipment means only that the equipment has met the requirements of the above-noted specification. Licence applications, where applicable to use certified equipment, are acted on accordingly by the ISED issuing office and will depend on the existing radio environment, service and location of operation. This certificate is issued on condition that the holder complies and will continue to comply with the requirements and procedures issued by ISED. The equipment for which this certificate is issued shall not be manufactured, imported, distributed, leased, offered for sale or sold unless the equipment complies with the applicable technical specifications and procedures issued by ISED.

La certification du matériel signifie seulement que le matériel a satisfait aux exigences de la norme indiquée ci-dessus. Les demandes de licences nécessaires pour l'utilisation du matériel certifié sont traitées en conséquence par le bureau de délivrance d'ISDE et dépendent des conditions radio ambiantes, du service et de l'emplacement d'exploitation. Le présent certificat est délivré à la condition que le titulaire satisfasse et continue de satisfaire aux exigences et aux procédures d'ISDE. Le matériel à l'égard duquel le présent certificat est délivré ne doit pas être fabriqué, importé, distribué, loué, mis en vente ou vendu à moins d'être conforme aux procédures et aux spécifications techniques applicables publiées par ISDE.

I hereby attest that the subject equipment was tested and found in compliance with the above-noted specification.

J'atteste, par la présente, que le matériel a fait l'objet d'essai et a été jugé conforme à la spécification ci-dessus.

Certifier: Sam Lin**Date: September 22, 2023****Signature:****Title: Certifier**

TÜV Rheinland of North America Inc., 1279 Quarry Ln., Suite A, Pleasanton, CA 94566 USA
Tel: (925) 249-9123 Fax: (925) 249-9124
Product Approval Certificate

MS-0044716

Page 1 of 1

Revision 5

ETSI - Certification

Given below are the products with the ETSI Certification:

- SX5-1040A
- SX5-1042A

UK - Certification

Given below are the products with the authorization to use UL Mark:

- SX5-1040A
- SX5-1042A

CB - Test Certificate



Given below is the CB Test certification for the following products:

- SX5-1040A
- SX5-1042A

	<table border="1"> <tr> <td>Ref. Certif. No.</td> </tr> <tr> <td>JPTUV-151216</td> </tr> </table>	Ref. Certif. No.	JPTUV-151216
Ref. Certif. No.			
JPTUV-151216			

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME	
CB TEST CERTIFICATE	
Product Name and address of the applicant Name and address of the manufacturer Name and address of the factory Ratings and principal characteristics Trademark (if any) Customer's Testing Facility (CTF) Stage used Model / Type Ref. Additional information (if necessary may also be reported on page 2) A sample of the product was tested and found to be in conformity with As shown in the Test Report Ref. No. which forms part of this Certificate	Stratum X5 (Wireless Ethernet Devices) Proxim Wireless Corporation 2114 Ringwood Avenue, San Jose, CA 95131, USA Proxim Wireless Corporation 2114 Ringwood Avenue, San Jose, CA 95131, USA Proxim Wireless Corporation 2114 Ringwood Avenue, San Jose, CA 95131, USA Input: 56Vdc 1.1A - via Ethernet Port OR 12Vdc 3.0A - via Access Port Output: 56Vdc 30W Max. (Optional) (Only when 56V dc input provided); Class III Stratum™ N/A SX5-UUVWY-ZZ (UU=10 or 20, V=2 or 4, W=0-9, Y=A or B or C, ZZ can be 2 alphabets) For model differences, refer to the test report. IEC 62368-1:2018 See Test Report for National Differences IN23ZC03 001
This CB Test Certificate is issued by the National Certification Body	
 TÜVRheinland® Date: 2023-09-01	TÜV Rheinland Japan Ltd. Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan Phone + 81 45 914-3888 Fax + 81 45 914-3354 Mail: info@jpn.tuv.com Web : www.tuv.com  Paddy Qiu

10061 CB 0620/6/K

Disclaimer: This is an electronically released document. The authenticity of this certificate can be verified on the IECEE Website "http://certificates.iecee.org"