

Airvine™ Regulatory and Safety Guide



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Introduction

This document contains the safety and regulatory compliance information for the following Airvine Products:

<u>Product Model</u>	<u>Country/Certification</u>
Airvine WaveTunnel Model 2041-SM	USA FCC, Class A Device
Airvine WaveTunnel Model 2041-DC	USA FCC, Canada ICES (Class A Device), and Europe (CE Mark)

Safety Warnings

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

When installing and using these products, safety precautions should always be carefully followed to reduce the risk of fire, electrical shock, injury to persons, and damage to the system.

Such safety precautions including the following:

- Read the installation instructions before using, installing, or connecting the system to the power source.
- Only trained and qualified personnel should be allowed to install, replace, or service this equipment.
- 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 environments must conform to all applicable national and local regulations and codes including all relevant electrical codes.
- Devices are to be used with and powered only by power sources that are either provided by Airvine or recommended by Airvine. Failure to properly power the unit, which includes using power sources that don't comply to the system's required input voltage or current ranges, or the use of unapproved power sources, or the failure to not properly connect the power sources to the system's power connector, can result in possible injury or permanent damage to the unit.
- Ultimate disposal of this product should be handled according to all national laws and regulations.
- No user-serviceable parts inside; all repairs and services must be handled by a qualified Airvine service center.
- To avoid the risk of electric shock or damage to the unit, do not open unit or remove any covers of the unit.
- Do not insert any objects of any shape or size inside these devices while powered on. Such objects may contact hazardous energy parts that could result in a risk of fire, personal injury, or damage to the unit.
- Do not remove or alter the markings or labels affixed to these devices.

Airvine devices are for indoor use only and are not meant to be installed outdoors.

Symbols on Equipment or Documentation



DANGER

DANGER statements indicate potentially hazardous situations including those that could cause loss of life or physical injury.



CAUTION

CAUTION statements alert a possibility of damage to the system, software, or individual items or parts of equipment withing a system. However, this damage presents no danger to a person.



NOTE

A NOTE provides a tip, guidance, or advice and can emphasize important information.

Important Regulatory Notices

FCC Communications Notices

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Notice for FCC Class A Equipment - Models: WaveTunnel 2041SM and 2041DC



Caution

This equipment has 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.

FCC Notice for Equipment Modifications

**CAUTION**

Any changes or modifications not expressly approved by Airvine Scientific Inc. could void the user's authority to operate the equipment.

FCC Notice for RF Exposure

**CAUTION**

The antenna used with this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter, except in accordance with FCC multi-transmitter product procedures.

Regulatory Notices for Canada - Model 2041DC

General

**CAUTION**

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

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

L' émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d' Innovation, Sciences et Développement économique 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.

Class A Equipment

**CAUTION**

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. CAN ICES-3(A)/NMB-3(A)

Cet appareil numérique de la class A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada

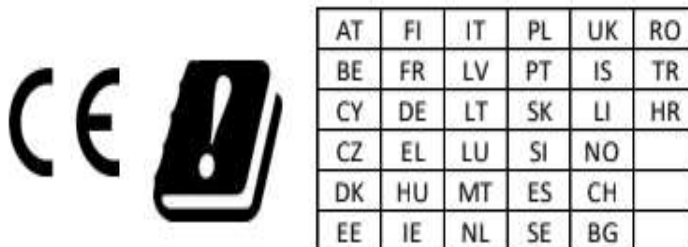
Regulatory Notices for European Union - Model 2041DC

General

This section provides required notices for Airvine products listed as having CE Mark for distribution in Europe.

- 2014 / 53 / EU of the European Parliament and of the Council of 16 April 2014 on the harmonization of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 19 99 / 5/ EC; Radio Equipment Directive (RED) and amendments.
- 2011 / 65 / EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive) and amendments.

CE Compliance



This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20cm between the radiator & your body.

The frequency and the maximum transmitted power (dBm) in EU are listed below:

Europe Maximum Radio Frequency Power

Model	Frequency Band	Maximum Radio Frequency Power (dBm EIRP)
2041SM, 2041AC, 2041DC	2.4 Ghz (2412 to 2464 MHz)	19.98
	60 GHz	35 dBm

Europe Transmitter Power Levels (at antenna port)

Model	Frequency Band	Mode	Channels	Data Rates	Transmit Output Power in dBm (typical)
2041SM, 2041AC	60 GHz (57.24 to 68.04 GHz)	N/A	1-6	All Rates	35 dBm
	2.4 GHz (2.412 to 2.464 GHz)	802.11b	1-11	All Rates	12 +3.0/-2.0
		802.11g	1-11	All Rates	13 +3.0/-2.0
		802.11n ¹	1-11	All Rates	13 +3.0/-2.0

¹ 20 MHz 801.11n Channel

Additional Europe Specific Regulatory Information

Usage of Hazardous Chemicals

Airvine Models that employ the CE Mark comply with European Union Directive 2011/65/EU rules of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive).

Disposal of Airvine Equipment

Airvine Models that employ the CE Mark and WEEE Markings comply with European Union Directive 2012/19/EU rules on Waste Electrical and Electronic Equipment (WEEE Directive).

Instructions on how to dispose of end-of-life Airvine Equipment can be found at:

www.airvine.com/support/regulatory/weee

Customers must always follow national and local regulations regarding the disposal of Airvine Equipment.

Disposal of Product Packaging

Customers must always follow national and local regulations regarding the disposal of product packaging.

Airvine Declaration of Conformity Statements.

DECLARATION OF CONFORMITY

I hereby declare that the product

Product Name: WaveTunnel
Model Number(s): 2041DC

satisfies all the technical regulations applicable to the product within the scope of Council Directives 2014/53/EU, 2014/35/EU and 2014/30/EU: and declare that the same application has not been lodged with any other notified body.

EN IEC 62368-1:2020+A11:2020, EN 62311:2008
EN 301 489-1 V2.2.3, EN 301 489-17 V3.2.4
EN 55032:2015/A11:2020, EN 55035:2017/A11:2020
EN 303 722 V1.2.1
EN 300 328 V2.2.2:2019

All essential radio test suites have been carried out.

NOTIFIED BODY: MiCOM Labs Inc
- **Address:**

575 Boulder Court,
Pleasanton, California 94566
USA
Identification Number: 2280

MANUFACTURER:
- **Address:**

Airvine Scientific, Inc
1500 Wyatt Drive, Suite 9
Santa Clara, CA 95054 USA

IMPORTER:
- **Address:**

We declare that this information will be
provided either here or on accompanying
documentation at the time of importation.

This declaration is issued under the sole responsibility of the manufacturer and, if applicable, his authorised representative.

Point of contact:

Airvine Scientific Inc., TEL: 669-231-4318, FAX: 669-231-4398

Santa Clara, CA 30 January 2024
(Place, date of issue)


(Signature)

Robert Olstad / Sr. Director Product
Management
(Name and title in block letters)