



American Certification Body Inc.
6731 Whittier Ave, C110, McLean, VA 22101

June 22, 2018

Our Ref: ATCB022595

**Zinwave Ltd
Harston Mill
Harston
Cambridge, UK**

Attention: John Prentice

Dear Sir/Madame:

ACB, Inc. has reviewed the related documents and is pleased to advise that this application meets the Innovation, Science and Economic Development (ISED) Canada's Certification and Engineering Bureau procedural and specification requirements for certification. Copies of the original submission documents should be maintained for 10 years. The radio equipment is certified as described on the attached certificate(s).

We have notified the Bureau so they may record this equipment in the Department's Radio Equipment List (REL). Please note that certified equipment shall not be distributed, leased, sold, or offered for sale in Canada before the details of the certification appear in the REL. Status of this listing in the ISED's REL list may be found at the following web address:

<https://sms-sgs.ic.gc.ca/equipmentSearch/searchRadioEquipments?execution=e2s1&lang=en>

Please note that IC labeling as of Issue 11 of RSP-100 involves use of the IC Certification Number, Product Marketing Name (PMN), Hardware Version Identification Number (HVIN), and in some instances the Firmware Version Identification Number (FVIN) as follows.

- a) The assigned IC certification number and HVIN number must be shown on the exterior of the product or displayed electronically according to IC's E-labelling requirements.
- b) The PMN must be displayed electronically (E-labelling) or indicated on the exterior of the product, product packaging, or product literature available with the product or online.
- c) The IC Certification Number, PMN, and HVIN are permitted to be etched, engraved, stamped, printed on the product, or permanently affixed to a permanently attached part of the product in a way that is legible, indelible, and tamper proof.
- d) When the FVIN is the only differentiation between product versions (PMN and HVIN remain identical) listed in the REL within a family certification, the FVIN shall be displayed electronically or stored electronically and be easily retrievable.
- e) Any Modular Approval or Limited Modular Approval shall meet the labeling requirements above. In addition the Host Model Number (HMN) must be displayed by E-labeling or indicated at any location on the exterior of the host product and the host product shall be labeled to identify the modules within the host product according to RSP-100 Section 3.2.

Sincerely,

Michael F. Violette
Director



**TECHNICAL ACCEPTANCE
CERTIFICATE**

**CERTIFICAT D'ACCEPTABILITÉ
TECHNIQUE**

CERTIFICATION No.
No. DE CERTIFICATION

► **6791A-3050007 (New Single Certification)**

ISSUED TO
DÉLIVRÉ A

► **Zinwave Ltd
Harston Mill
Harston
Cambridge, UK**

TYPE OF EQUIPMENT
TYPE DE MATÉRIEL

► **Amplifier and/or Band Translator**

PRODUCT MARKETING NAME (PMN):
NOM DU PRODUIT MARKETING

► **305-0007**

HARDWARE VERSION IDENTIFICATION NUMBER (HVIN):
MATÉRIEL NUMÉRO D'IDENTIFICATION DE VERSION

► **305-0007**

FIRMWARE VERSION IDENTIFICATION NUMBER (FVIN):
FIRMWARE NUMÉRO D'IDENTIFICATION DE VERSION

► **<Not Specified>**

FREQUENCY RANGE
BANDE DE FRÉQUENCES

► **150 MHz to 2690 MHz
** See Annex 1 for Complete Detail ****

EMISSION DESIGNATION, R.F. POWER RATING, AND ANTENNA
DESIGNATION D'ÉMISSION, PUISSANCE NOMINALE H.F., ET L'ANTENNE

► **** See Annex 1 for Complete Detail ****

CERTIFIED TO :
CERTIFIÉ SELON LE :

SPECIFICATION / ISSUE
CAHIER DES CHARGES / ÉDITION

► **** See Annex 1 for Complete Detail ****

TEST LABORATORY
LABORATOIRE D'ESSAI

► **RN Electronics Ltd.
Arnolds Court, Arnolds Farm Lane
Mountnessing, Essex. CM13 1UT
United Kingdom
Contact: Daniel Sims
Telephone: +44 1277 352219 E-mail: sales@rnelectronics.com**

SITE NUMBER ► **5612A-2, 5612A-3**
NUMÉRO DE SITE

Certification of equipment means only that the equipment has met the requirements of the above noted specification. License 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.

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.

This certificate is issued on condition that the holder complies and will continue to comply with the requirements of the radio standards specifications 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.

Le présent certificat est délivré à 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 jugé conforme à la spécification ci-dessus.

ORIGINAL DATE OF ISSUE: June 22, 2018
REVISED DATE OF ISSUE: N/A

**Michael F. Violette
Director**



TECHNICAL ACCEPTANCE CERTIFICATE (ANNEX 1)

Technical Features and Characteristics

The device includes the following features and characteristics:

RSS Standard		Frequency Band (MHz)	Modulation Method	Minimum RF Output Power Level	Maximum RF Output Power Level	Emission Designator
RSS #	Issue #					
RSS-131	3	150 - 174	C4FM (QPSK)	0.001 W conducted	0.032 W conducted	G1E
RSS-131	3	150 - 174	FM ± 2.5 kHz dev'n	0.001 W conducted	0.032 W conducted	F3W
RSS-131	3	406.1 - 430	C4FM (QPSK)	0.001 W conducted	0.08 W conducted	G1E
RSS-131	3	406.1 - 430	FM ± 2.5 kHz dev'n	0.001 W conducted	0.08 W conducted	F3W
RSS-131	3	406.1 - 430	FM ± 5.0 kHz dev'n	0.001 W conducted	0.08 W conducted	F3W
RSS-131	3	456 - 470	C4FM (QPSK)	0.001 W conducted	0.08 W conducted	G1E
RSS-131	3	456 - 470	FM ± 2.5 kHz dev'n	0.001 W conducted	0.08 W conducted	F3W
RSS-131	3	456 - 470	FM ± 5.0 kHz dev'n	0.001 W conducted	0.08 W conducted	F3W
RSS-131	3	769 - 775	C4FM (QPSK)	0.001 W conducted	0.1 W conducted	G1E
RSS-131	3	799 - 805	C4FM (QPSK)	0.001 W conducted	0.1 W conducted	G1E
RSS-131	3	716 – 756	QPSK	0.001 W conducted	0.1 W conducted	W9W
RSS-131	3	716 – 756	16-QAM / 64-QAM	0.001 W conducted	0.1 W conducted	W9W
RSS-131	3	851 - 869	C4FM (QPSK)	0.001 W conducted	0.1 W conducted	G1E
RSS-131	3	851 - 869	FM ± 5.0 kHz dev'n	0.001 W conducted	0.1 W conducted	F3W
RSS-131	3	869 - 894	QPSK	0.001 W conducted	0.1 W conducted	F9W
RSS-131	3	869 - 894	16-QAM / 64-QAM	0.001 W conducted	0.1 W conducted	W9W
RSS-131	3	929 - 930	FSK	0.001 W conducted	0.1 W conducted	F3E
RSS-131	3	931 - 932	FSK	0.001 W conducted	0.1 W conducted	F3E
RSS-131	3	1930 - 1995	QPSK	0.001 W conducted	0.1 W conducted	F9W
RSS-131	3	1930 - 1995	16-QAM / 64-QAM	0.001 W conducted	0.1 W conducted	W9W
RSS-131	3	2110 - 2180	QPSK	0.001 W conducted	0.1 W conducted	F9W
RSS-131	3	2110 - 2180	16-QAM / 64-QAM	0.001 W conducted	0.1 W conducted	W9W
RSS-131	3	2345 - 2360	QPSK	0.001 W conducted	0.037 W conducted	F9W
RSS-131	3	2345 - 2360	QPSK	0.001 W conducted	0.037 W conducted	F9W
RSS-131	3	2345 - 2360	16-QAM / 64-QAM	0.001 W conducted	0.037 W conducted	W9W
RSS-131	3	2500 - 2690	QPSK	0.001 W conducted	0.1 W conducted	F9W
RSS-131	3	2500 - 2690	16-QAM / 64-QAM	0.001 W conducted	0.1 W conducted	W9W

ORIGINAL DATE OF ISSUE: June 22, 2018

REVISED DATE OF ISSUE: N/A



TECHNICAL ACCEPTANCE CERTIFICATE (ANNEX 1)

ANTENNA INFORMATION	
ANTENNA DESCRIPTION	GAIN (dBi)
Ceiling mount omni directional	8 (maximum)

ORIGINAL DATE OF ISSUE: June 22, 2018
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