NTS Silicon Valley
www.nts.com
41039 Boyce Road
Fremont, CA 94538
510-578-3500 Phone
510-440-9525 Fax

Application Form for NTS TCB FCC and Industry Canada Certification Services

Only required if making an FCC application

Only required if making an Industry Canada application

Section 1. Contact and Product Details

1.1. Main Contact Details (the Applicant)

Company Name:	Safemine Ltd.		
Full Address:	Lindenstrasse 4 Baar 6340 Switzerland	Contact Name:	Lukas Herzog
		Email Address:	lukas.herzog@safe-mine.com
		Telephone Number:	+41417698563
		Fax Number:	+41417608565
Applicant's FCC Registration Number (FRN) : 0020866158		TCB FRN:	0004972030
FCC Grantee Code : ZKS		FCC Product code (limited to 14 characters) :	QC250A
Canada Company Number : 9849A		Canadian Unique Product Number:	QC250A

1.2. Certificate Holder's Contact Details (if different from 1.1)

Company Name:			
Full Address:		Contact Name:	
		Email Address:	
		Telephone Number:	
		Fax Number:	

1.3. Technical Contact (if different from 1.1)

Company Name:	National Technical Systems – Silicon Valley		
Full Address:	41039 Boyce Road Fremont, CA 94538	Contact Name:	David W. Bare
		Email Address:	svdoc@nts.com
		Telephone Number:	510 578 3500
		Fax Number:	510 440 9525

1.4. Non-Technical Contact (if different from 1.1)

Company Name:			
Full Address:		Contact Name:	
		Email Address:	
		Telephone Number:	
		Fax Number:	

1.5 Test Facility

Company Name:	National Technical Systems – Silicon Valley		
Full Address:	41039 Boyce Road Fremont, CA 94538	Contact Name:	David W. Bare
		Email Address:	svdoc@nts.com
		Telephone Number:	510 578 3500
		Fax Number:	510 440 9525

1.6 Previous Application

☒ This is the first filing for the scope of this application; it has not been filed previously with another agency.

☐ An application for the subject equipment has been previously filed with (TCB/ Agency name) on (date).

Please initial here: dwb

1.7. Product Name(s) / Model Number(s): Note¨ Industry Canada do not allow the use of wildcards in the model number so list all variants	QC250

LINKS TO RULE PARTS / EQUIPMENT TYPES FCC Equipment Class List. Industry Canada radio classes

I, the applicant (or authorized agent) identified below, state that, to the best of my knowledge, the information contained within this application form is correct.

David W Bare

Name/Title: David W. Bare, Chief Engineer Company Name: NTS - Silicon Valley Date September 8, 2014

Section 2A. FCC Certification Details

Type of application Select only one

☒ Original ☐ Class 2 Permissive Change ☐ Change in ID, original FCC ID:

Modular Approval: Not Applicable

Confidentiality

Does this application include a request for **confidentiality** for any portion of the data contained in this application pursuant to 47 CFR 0.459 of the FCC rules? : ☒ Yes ☐ No

Does this application include a request for **temporary confidentiality** for any portion of the data pursuant to 47 CFR 0.459 of the FCC rules? Expiration date: (specific date or #days from grant date) ☐ Yes ☒ No

Relationship to Other Equipment/Applications

Is the equipment a composite device subject to an additional equipment authorization? ☐ Yes ☒ No

Does the equipment operate with, or is it marketed with, another device that requires equipment authorization? ☐ Yes ☒ No

FCC ID and filing statues for all of the related applications *(If more than 4, please include information in the application cover letter)*	Description	Filing Status	FCC ID

If there is a related KDB enquiry please enter the KDB number here and provide all associated documents, including a copy of the enquiry and FCC's response(s) with the application. KDB:

Section 2B. Industry Canada Certification Details

Type of application Select only one

☒ New Certification ☐ New Family Cert. ☐ Multiple Listing ☐ Transfer ☐ Existing Family ☐ Reassessment

Does this application include a request for confidentiality? : ☒ Yes ☐ No

Canadian Representative Contact (Note Industry Canada recommends that you provide a letter from the Canadian Contact acknowledging responsibility as your local representative to avoid delays in having the REL updated)

Company Name:	AetherWind Techniologies Inc.		
Full Address:	Unit #1, 306 Tait McKenzie Drive Almonte, Ontario, K0A 1A0 Canada	Contact Name:	Todd Gallagher
		Email Address:	tgallagher@aetherwind.ca
		Telephone Number:	613-461-0084
		Fax Number:	613-461-0462

Canadian Representative Canadian Company Number: 4858A (if known, not mandatory)

Manufacturer's Contact Details

Company Name:			
Full Address:		Contact Name:	
		Email Address:	
		Telephone Number:	
		Fax Number:	

Manufacturer's Canadian Company Number: (if known, not mandatory

☐ Manufacturing Facility Quality Assurance (e.g. registration against ISO/IEC 9001) – if checked please provide a copy of the certificate or similar evidence.

Test Report Number(s) and Date(s):	R95154 dated September 11, 2014
IC OATS Number(s) :	2845B-5 and 2845B-7

3.2. IC Radio Equipment Type Select the appropriate equipment type(s).

Spread Spectrum/Digital Device (902-928 MHz) , , , , ,

Note The pull-down lists above do not contain the complete list of allowed product types. The complete list can be found on the Industry Canada Certification and Engineering Bureau web page *www.ic.gc.ca/certification*. If your product falls under one or more of the categories not included in the pull-down menu please enter those categories here: , ,

2.7 IC Telecom Interface Specifications – *Please complete if applicable*

If the device is required to be listed on Industry Canada's Telecommunication equipment List (TEL) then this registration must take place at the same time the device is listed on the Radio Equipment List when we upload the equipment details to Industry Canada. Please provide a copy of the DC-01 declaration and the following information:

TE Category Number: --- Select from list ---, --- Select from list ---, --- Select from list --- REN:

Interface Code(s): --- Select from list --- , --- Select from list --- , --- Select from list ---

Note – TE categories listed do not represent all possible categories, if your product falls in another category list here:

Section 3. Equipment Specifications / Test Report Cover Sheet

3.1. Description of Product as it is Marketed (this will appear on the FCC grant)	**Collision Avoidance System**
List of operational features:	
List of accessories with which the device was tested:	

The tables below are set up to allow entry multiple frequency bands per FCC rule part and/or RSS standard. Please use a separate table for each rule part / Equipment Class / RSS standard and do not mix rule parts/standards within a table.

US Standards: FCC Rule Part(s):	15.247			
FCC Equipment Class:	DSS - - (Only select one equipment class per table)			
Canadian RSS Standard:	RSS 210 Issue 8			
Mode of operation:				
Type(s) of Modulation:	FHSS with GFSK			
Gain of Antenna(s):	3 dBi			
Frequency Range (MHz):	908.0 to 927.6	to	to	to
RF Power (W) or Field Strength:	0.02 W (conducted)			
Freq Tolerance (%, Hz or ppm):	ppm	ppm	ppm	ppm
Emission Designator:[1]	206KF1D			
Measured Bandwidth:	206 kHz 20dB			
Necessary Bandwidth (if different):				
Microprocessor Model Number(s):				
Transmitter Spurious (worst case)[2]:	51.2 dBuV/m at 3 m	at m	at m	at m
Receiver Spurious (worst case):	at m	at m	at m	at m

US Standards: FCC Rule Part(s):				
FCC Equipment Class:	- - -			
Canadian RSS Standard:	Issue			
Mode of operation:				
Type(s) of Modulation:				
Gain of Antenna(s):				
Frequency Range (MHz):	to	to	to	to
RF Power (W) or Field Strength:				
Freq Tolerance (%, Hz or ppm):	ppm	ppm	ppm	ppm
Emission Designator:				
Measured Bandwidth:				
Necessary Bandwidth (if different):				
Microprocessor Model Number(s):				
Transmitter Spurious (worst case):	at m	at m	at m	at m
Receiver Spurious (worst case):	at m	at m	at m	at m

US Standards: FCC Rule Part(s):				
FCC Equipment Class:	- - -			
Canadian RSS Standard:	Issue			
Mode of operation:				
Type(s) of Modulation:				
Gain of Antenna(s):				
Frequency Range (MHz):	to	to	to	to
RF Power (W) or Field Strength:				
Freq Tolerance (%, Hz or ppm):	ppm	ppm	ppm	ppm
Emission Designator:				
Measured Bandwidth:				
Necessary Bandwidth (if different):				
Microprocessor Model Number(s):				
Transmitter Spurious (worst case):	at m	at m	at m	at m
Receiver Spurious (worst case):	at m	at m	at m	at m

[1] Designator in accordance with FCC 47 CFR 2.201/2.202; TRC 43. For FCC-only applications this information is only required for licensed devices. It is required for all Canadian applications.

[2] It is possible to enter a single worst-case value for the transmitter and receiver spurious emissions in one cell only and that value will then be used for all of the individual frequency bands/modulations.

US Standards: FCC Rule Part(s):				
FCC Equipment Class:	- - -			
Canadian RSS Standard:	Issue			
Mode of operation:				
Type(s) of Modulation:				
Gain of Antenna(s):				
Frequency Range (MHz):	to	to	to	to
RF Power (W) or Field Strength:				
Freq Tolerance (%, Hz or ppm):	ppm	ppm	ppm	ppm
Emission Designator:				
Measured Bandwidth:				
Necessary Bandwidth (if different):				
Microprocessor Model Number(s):				
Transmitter Spurious (worst case):	at m	at m	at m	at m
Receiver Spurious (worst case):	at m	at m	at m	at m

US Standards: FCC Rule Part(s):				
FCC Equipment Class:	- - -			
Canadian RSS Standard:	Issue			
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Gain of Antenna(s):				
Frequency Range (MHz):	to	to	to	to
RF Power (W) or Field Strength:				
Freq Tolerance (%, Hz or ppm):	ppm	ppm	ppm	ppm
Emission Designator:				
Measured Bandwidth:				
Necessary Bandwidth (if different):				
Microprocessor Model Number(s):				
Transmitter Spurious (worst case):	at m	at m	at m	at m
Receiver Spurious (worst case):	at m	at m	at m	at m

US Standards: FCC Rule Part(s):				
FCC Equipment Class:	- - -			
Canadian RSS Standard:	Issue			
Mode of operation:				
Type(s) of Modulation:				
Gain of Antenna(s):				
Frequency Range (MHz):	to	to	to	to
RF Power (W) or Field Strength:				
Freq Tolerance (%, Hz or ppm):	ppm	ppm	ppm	ppm
Emission Designator:				
Measured Bandwidth:				
Necessary Bandwidth (if different):				
Microprocessor Model Number(s):				
Transmitter Spurious (worst case):	at m	at m	at m	at m
Receiver Spurious (worst case):	at m	at m	at m	at m

To be completed by the Testing Laboratories authorized signatory:

DECLARATION OF COMPLIANCE: I declare that the testing was performed or supervised by me; that the test measurements were made in accordance with the above-mentioned departmental standard(s), and that the radio equipment identified in this application has been subject to all the applicable test conditions specified in the departmental standards and all of the requirements of the standards have been met.

Name/Title: David W. Bare, Chief Engineer Test Laboratory Name: NTS - Silicon Valley Date September 8, 2014