



Integrator Guide

This document is provided as clarification to integrators using the Connected Appliance Wireless Module (the 'radio module') to ensure installations meet operational and regulatory requirements.

Relevant Documentation

Integrators should also should also access and refer to:

- Connected Appliance Wireless Module User Guide
- SZCAT API V4.0 (or latest revision)
- SZCAT API V4.0 Engineering Supplement (or latest revision)
- SZCAT API V4.0 Remote Cloud Service Supplement (or latest revision)

Mechanical & Electrical Considerations

To achieve proper operation of the radio module, OEM integrators should comply with the following:

- DC power should be provided to the radio in the range of 7 ~ 15V
- Mechanical installation should be such that the radio module is solidly secured, particularly in appliances that may have electric motors, etc. that can cause vibration like refrigerators and dishwashers.
- Mechanical installation should consider module and antennae (features along the edge of the radio module circuit board) placement and orientation so as to optimize connections with an intended access point or router. For example: flush-mount of the radio module against metal features, metal plates or metal enclosures is prohibited since it will have a detrimental effect on radio performance.



End-user Installation

When the Connected Appliance Wireless Module is sold for end-user installation:

- It should be clear plug-and-play mechanical installation (RJ-12 for the RS-485 interface) for the end-user with no option to modify it (the mechanical and electrical considerations listed above are considerations and requirements for the OEM integrator, not the end-user installer).
- There should be no user configuration requirements except standard provisioning required on a wireless LAN network to provide an internet connection (this is the case with all connected appliance wireless modules).
- The wireless module should not operate with in-compatible or un-approved RS-485 appliance networks or hosts.
- The wireless module must remain self-contained (usage of the integrated antennae and built-in RF control) with no access to modifying power levels or antennae configurations.

Regulatory Considerations

- No modifications of the radio module are allowed, especially as regards
 - power regulation
 - integrated shielding
 - antennae
 - labelling indicating FCC and IC identification numbers

otherwise regulatory approval is voided for that installation.

- To comply with regulatory exposure limits, the radio module must not be installed in any manner in which the clearance to an end user from the radio module and its integrated antennae is less than 20cm.
- Appliances that contain the radio module are required to be marked in an area easily accessible by an end user as follows:

This device contains the WLAN / Bluetooth radio:

FCC ID: MHI-CONAPPWM2

IC: 3681C-CONAPPWM2

MODEL: CONAPPWM2

*** The final host/module combination may also need to be evaluated against the FCC Part 15B criteria for unintentional radiators in order to be properly authorized for operation as a Part 15 digital device.**



- A user guide with required Regulatory verbiage below (FCC statement and IC notice) for the Federal Communication Commission and Industry Canada must be made readily available to the end user either in hard-copy or electronic form.

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to consult an authorized dealer or service representative for help. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

Responsible party:

Sub-Zero Inc.
4717 Hammersley Road
Madison, WI 53711
Phone (608) 271-2233



Industry Canada Notice for Connected Appliances

This device complies with Industry Canada license-exempt RSS standard(s). 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.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.