

# **Certification Exhibit**

FCC ID: QHC-KVEVDOZ41 IC: 4393B-KVEVDOZ41

FCC Rule Part: 15.247 IC Radio Standards Specification: RSS-210

ACS Project Number: 13-0462

Manufacturer: Itron Model: 570973-001

# **Manual**





# kV2c-AMPZ User Information Manual Itron Model 570973-001



# Labeling

The following requirements will be applied to any products that use this module:

The end product label will include the following text:

Contains:

FCC ID: QHC-KVEVDOZ41 IC: 4393B-KVEVDOZ41 Model: 570973-001

The user's manual for any product that contains this module will contain the following test. If the device is large enough, this information will also placed on the label:

"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."

#### **Regulatory Compliance**

The user's manual for any product that contains this module will contain the following text:

### FCC Part 15, Class B

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 that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



#### **Industry Canada**

This device complies with Part 15 of the FCC Rules [and with RSS-210 of Industry Canada]. 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.

Le présent appareil est conforme aux CNR d'Industrie 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, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using 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.

En vertu de la réglementation d'Industrie Canada, cet émetteur radio peut fonctionner uniquement à l'aide de l'antenne d'un type et maximale (ou moins) obtenir une approbation pour l'émetteur par Industrie Canada. Pour réduire les interférences radio potentielles à d'autres utilisateurs, le type d'antenne et son gain doivent être choisie que la puissance isotrope rayonnée équivalente (p.i.r.e.) n'est pas plus que celui nécessaire à une communication efficace.



#### **RF Exposure**

The antennas used for this transmitter must be installed to provide a minimum separation distance of 20 cm from all persons, and must not be co-located or operate in conjunction with any other antenna or transmitter. End users and installers must be provided with antenna installation procedures and transmitter operating conditions for satisfying RF exposure compliance.

#### **Miscellaneous**

The user's manual for any product that contains this module will contain the following text:

#### **Professional Installation**

This module is intended for professional installation by the integrator. The OEM integrator is still responsible for the FCC compliance requirement of the end product which uses this module.

#### **Modification and Repairs**

To ensure FCC compliance and system performance, this device, antenna and/or coaxial assembly shall not be changed or modified without the express written approval of Itron. Any unauthorized modification will void the user's authority to operate the equipment.

WARNING! This device contains no user serviceable parts. Attempts to repair this device by unauthorized personnel may subject the person to shock hazard if removal of protective covers is attempted. Unauthorized repair will void the warranty and/or any maintenance contract with your company.

### **General Description**

The Itron 570973-001 (kV2c-AMPZ) is an electricity metering module which includes a Cellular EVDO WAN module operating in the GSM 800 MHz and PCS 1900 MHz bands and a HAN transmitter operating in the 2.4 GHz band. The module operates on direct current which is supplied by the host meter device.



#### **ANTENNAS**

4393B-KVEVDOZ41 has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

4393B-KVEVDOZ41 a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

WAN Antenna:

Under Glass Ribbon Gain: +0 dBi 800 & 1900 band

PASSBAND: 824-894 Cellular Band & 1850-1990 PCS Band

External Mono-Pole Gain

+3dBi 800 band +4dBi 1900 band

PASSBAND: 824-894 Cellular Band & 1850-1990 PCS Band

HAN Antenna:

PCB antenna embedded in the module:

GAIN: +3.3dBi

PASSBAND: 2405 to 2480 MHz