

FlexNet[®] SmartPoint[®] Module

FOR ACLARA i210+c

The Sensus FlexNet[™] SmartPoint[®] module provides wireless communication capability to electric utility meters. The Aclara i210+c[™] meter is an electronic, single-phase or network, demand and time-of-use (TOU) electricity meter intended primarily for residential applications.

Technical Overview

The FlexNet communications network offers a simple, reliable, and secure system that is economical for mass meter deployments, strategic deployments, and rural applications while providing a multi-application solution for all AMI end points. The FlexNet network enhances the i210+c meter by providing AMI capability.

The FlexNet SmartPoint module is a printed circuit board which provides wireless communication capability to the Aclara i210+c electric meter. The SmartPoint module interrogates the meter registers on a programmable interval from five minutes to daily readings. The SmartPoint module then transmits the meter consumption and status information at regular intervals.

The module mounts into the existing i210+c meter and acts as a “third party AMR board.” It is designed to mount mechanically into the meter with no additional mechanical modification required.

The module communicates via the FlexNet fixed wireless telemetry network to provide electric meter readings and diagnostic data from the meter to the utility provider via radio.

The module contains both a receiver and transmitter to allow for two-way communications over the FlexNet network.



Board Location

Specifications

The i210+c meter with the FlexNet module will have a visible label containing the following information:

- Contains Model: FLXI2102
- Contains FCC ID: SDBFLXI2102
- Contains IC: 2220A-FLXI2102



Warnings & Hazards

WARNING

Sensus devices are for professional installation only. They are to be serviced by professional personnel only. This product is NOT for consumer installation or servicing.

WARNING

The antenna used for this transmitter must not be co-located in conjunction with any other antenna or transmitter.

ATTENTION

Note: 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, which can be determined by turning the equipment off and on, 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

WARNING

If you are not sure of the rated power of your radio, contact your Sensus representative or dealer and supply the product model number found on the product label. If you cannot determine the rated power out, then assure 3-foot separation from the body to the device.

WARNING

TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

RADIATION HAZARD

In order to satisfy the FCC RF exposure limit for transmitting devices, a separation distance of 20cm (7.87 inches) or more should be maintained while operating the Sensus FLXI2102. To ensure compliance, operation at closer than this distance is not recommended. This minimum safe distance is required between personnel and the antenna of this device.

RADIATION HAZARD

In order to satisfy the ISED RF exposure limit for transmitting devices, a separation distance of 27cm (10.63 inches) or more should be maintained while operating the Sensus FLXI2102. To ensure compliance, operation at closer than this distance is not recommended. This minimum safe distance is required between personnel and the antenna of this device. Afin de satisfaire à la limite d'exposition RF pour les appareils de transmission, une distance de séparation de 27cm (10.63 pouces) ou plus doit être maintenu pendant le fonctionnement du Sensus FLXI2102. Pour assurer la conformité, un fonctionnement à distance inférieure à celle est pas recommandée. Cette distance minimale de sécurité est nécessaire entre le personnel et l'antenne de cet appareil.

ATTENTION

Any modifications made to this device that are not approved by Sensus may void the authority granted to the user by the FCC to operate equipment.

ATTENTION

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.

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.

ATTENTION

This radio transmitter the Sensus FLXI2102 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.

Le présent émetteur radio (Sensus FLXI2102) 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.

- 1/4 wave printed monopole with peak gain of 2.77dBi

ATTENTION

Under Industry Canada regulations, this radio transmitter may only operate using an 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. Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

ATTENTION

ICES-003 Class B Notice–Avis NMB-003, Class B

This Class B digital apparatus complies with Canadian ICES-003 Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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