SonixIQ

Quick Guide

The SonixIQ is a solid state residential gas meter, providing pinpoint accuracy of ultrasonic measurement and no moving parts to replace or wear out over time. Available with or without an integrated FlexNet® radio, the SonixIQ covers both 250 or 400 CFH needs.

FEATURES

- 250CFH or 400 CFH meter class options
- Live temperature compensation
- Fixed factor pressure compensation
- Alarm notifications
- Configurable volume pulse output
- Configurable scrolling LCD display
- 20-year battery life
- FlexNet SmartPoint® inside (available with or without)

IDENTIFICATION

The SonixIQ meter with the FlexNet module will have a visible label containing the following information:

- Model: SONIXIQ
- FCC ID: SDBSONIXIQ
- IC: 2220A-SONIXIQ

The SonixIQ has an LCD display that supports walk up readings and status, an optical port that can be used with the SonixCom tool for configuration, a pulse output, and an optional integrated radio for communication across the Sensus FlexNet system.

Application and Safety

The SonixIQ should be used with clean, dry natural gas or air only. The meter electronics are enclosed in a vented case that provides both weather and EMC protection.

Only suitable non incendive circuits and non incendive field wiring should be connected to the field wiring terminals via the pulse cable.

Meter Specifications

SonixIQ	250 series	400 series
Capacity	250 to 299 cfh at 1/2" differential	400 to 450 cfh at 1/2" differential
Connections	20LT connections on 6" center to center	30LT connections on 6" center to center
MAOP	10 psig	
Dimensions	9.94" L x 4.38" W x 7.89" H (25.25cm L x 11.13cm W x 20.04cm H)	
Weight	6.3 lb (2.86 kg)	
Operating Temperature	-40° to +150°F (-40° to +66°C)	
Humidity	0 to 95% relative humidity operating and storage (non-condensing and condensing)	

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Basic Installation

Meter options are set at the factory and are determined according to the order specifications.

1. Shut the gas off at the inlet and outlet valves and remove the existing meter if present.
2. Connect the new SonixIQ to the pipe connections using an appropriate wrench.
3. Open the inlet and outlet valves to allow gas to flow through the meter.
4. Read the meter alarm status via the LCD display to confirm there are no active alarms.
5. If an initial reading is required at time of installation, the volume totalizer should be set to initial reading. Connect a handheld tool (HHD) running FieldLogic to the optical port to initiate the meter with a known reading.

Configure the FlexNet SmartPoint Module with FieldLogic

The FlexNet SmartPoint module is embedded in the SonixIQ as an option. If ordered, the SmartPoint module is already configured to the appropriate frequency. Once the SmartPoint module is activated, the SonixIQ can send messages through the FlexNet AMI system.

1. Connect a handheld tool (HHD) running FieldLogic to the optical port of the SonixIQ.
2. Launch FieldLogic Tools.
3. Enter the FlexNet ID of the SmartPoint Module, tap Start Connection, and then Activate and Configure as desired.

Note: The FlexNet ID is on the front cover of the SonixIQ.

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Warnings & Hazards

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

For Class B - Unintentional Radiators:
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.

ATTENTION

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

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 form that to which the receiver is connected*
- *Consult the dealer or an experienced radio/TV technician for help*

RADIATION HAZARD

In order to satisfy the FCC RF exposure limit for transmitting devices, a separation distance of 20cm (7.8 inches) or more should be maintained while operating the Sensus SONIXIQ. To ensure compliance, operations at closer than this distance are not recommended. This minimum safe distance is required between personnel and this antenna of this device.

RADIATION HAZARD

In order to satisfy the ISED RF exposure limit for transmitting devices, a separation distance of 26cm (10.2 inches) or more should be maintained while operating the Sensus SONIXIQ. 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 26cm (10.2 pouces) ou plus doit être maintenu pendant le fonctionnement du Sensus SONIXIQ. 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

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.

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 20cm separation from the body to the device.

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Warnings & Hazards

WARNING

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

ATTENTION

This radio transmitter the Sensus SONIXIQ 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 SONIXIQ) 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.

- *Dipole ~3dBi*

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

Class 1, Division 2, Group D T4
Intrinsically Safe/Sécurité Intrinsèque Type D lithium battery, 3.6 VDC Max.

WARNING

Substitution of components may impair intrinsic safety.
Avertissement: la substitution de composants peut compromettre la Sécurité Intrinsèque.

WARNING

There is danger of explosion if batteries are mishandled or incorrectly replaced. On systems with replaceable batteries, replace only with the same manufacturer and type or equivalent type recommended per the instructions provided in the product service manual.

Do not disassemble batteries or attempt to recharge them outside the system. Do not dispose of batteries in fire.

Dispose of batteries properly in accordance with the manufacturer's instructions and local regulations.

WARNING

DO NOT INCINERATE or subject battery cells to temperatures in excess of 212°F. Such treatment can cause cell rupture.

WARNING

EXPLOSION HAZARD - BATTERIES MUST ONLY BE CHANGED IN AN AREA KNOW TO BE NON-HAZARDOUS.

AVERTISSEMENT-RISQUE D'EXPLOSION - AFIN D'ÉVITER TOUT RISQUE D'EXPLOSION, S'ASSURER QUE L'EMPLACEMENT EST DÉSIGNÉ NON DANGEREUX AVANT DE CHANGER LA BATTERIE.

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a xylem brand

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