



The Measure of the Future

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## **FlexNet KV2c Transceiver Installation Guide**

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*8 July, 2010*

**Sensus**

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### REVISION SUMMARY

<b>Date</b>	<b>Version</b>	<b>Author</b>	<b>Change Description</b>
08 JUL 2010	0.1	T.G.	

Section

# 1

## 1 Flexnet KV2c Transceiver Overview

The Flexnet KV2c Transceiver (“device” in this guide) is a printed circuit board which provides wireless communication capability to the GE KV2c family of electric utility meters.

The device will mount into the existing GE meters and act as the “Third Party AMR Board”.

The device shall monitor meter reading and diagnostic information via a C12-21 serial interface to the GE main board.

The device will communicate 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 device has receiver capabilities to allow for two-way communication over the FlexNet network.

Section

# 2

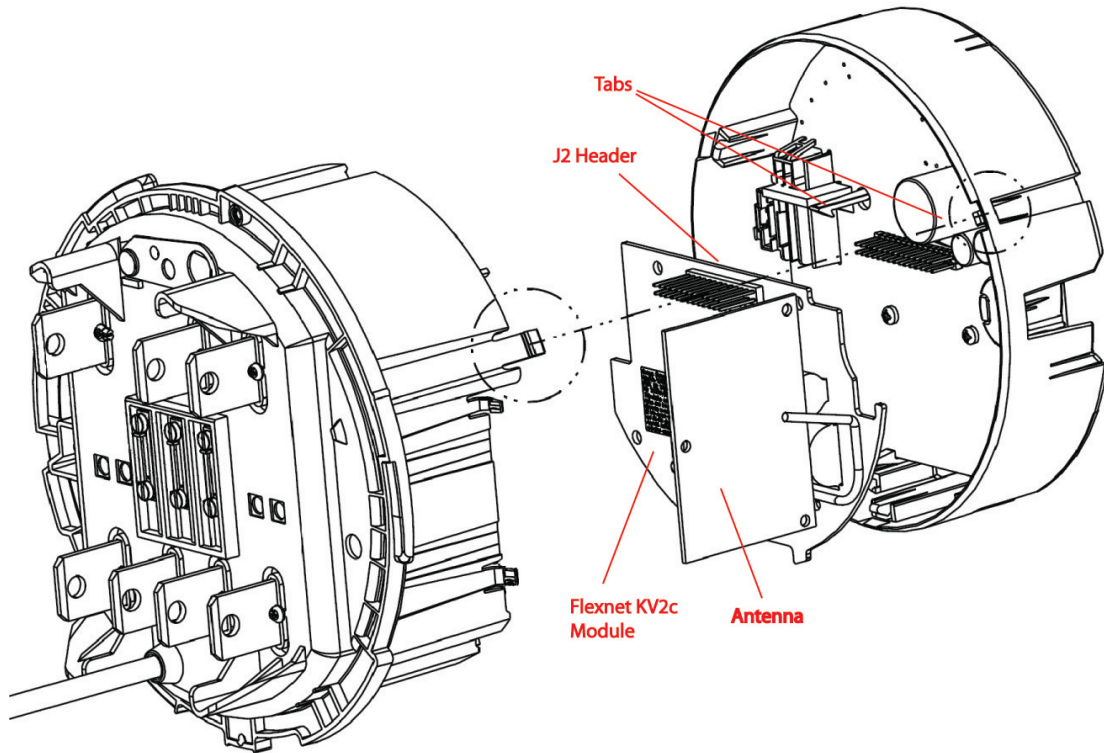
## 2 Mechanical Requirements

The device is designed to mount mechanically into the existing GE KV2c meter into the “AMR” position with no mechanical modification required.

## 2.1 Mechanical Overview

### 2.1.1 Device Installation Flexnet KV2c Module and Antenna:

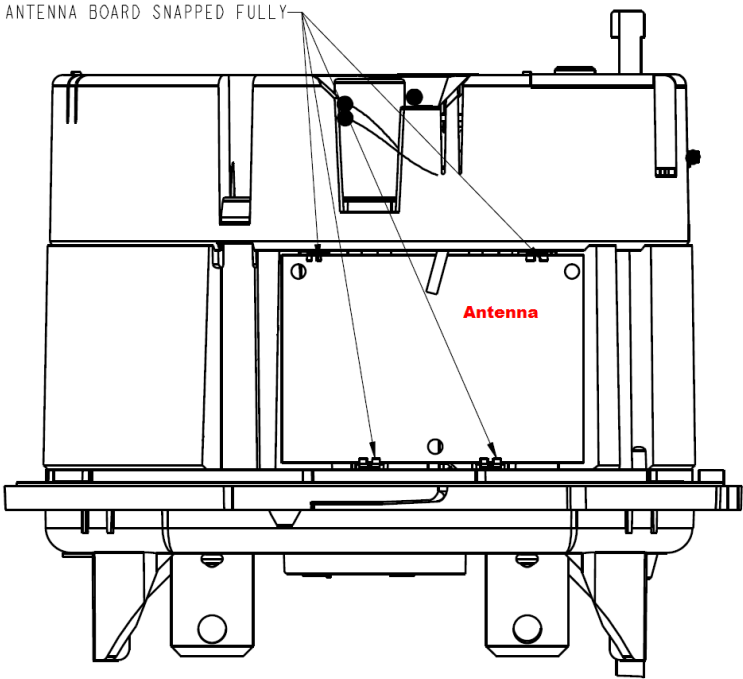
Flexnet KV2C module will mount using two tabs protruding from the bottom of the Flexnet module, and the insertion of the J2 header. There are two additional snaps (tabs) on the GE meter housing which will allow the top portion of the Flexnet KV2c module to be secured.



**Flexnet KV2c Installation**

Figure 1

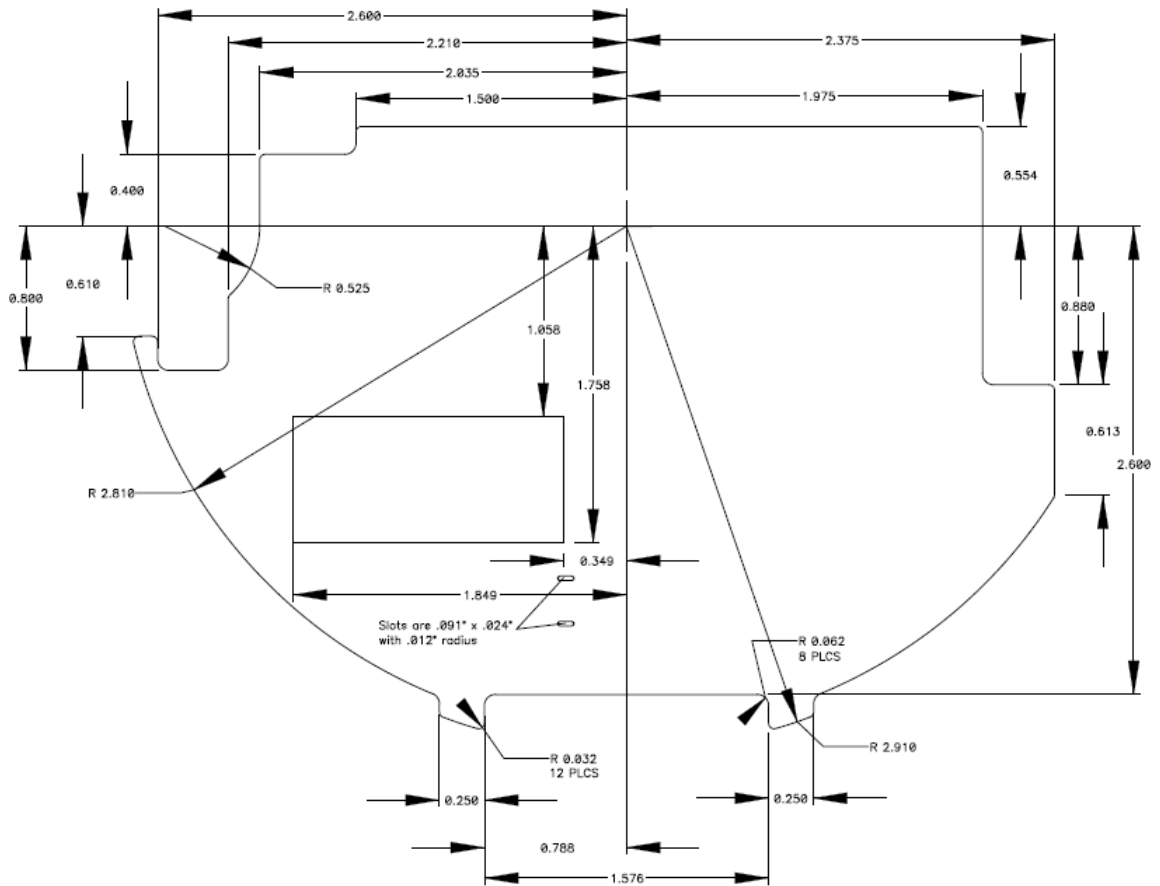
The Flexnet KV2c Antenna will snap into place via 4 tabs on the external side of the GE meter housing.



**Flexnet KV2c Antenna Installation**

Figure 2

**2.1.3 Device Dimensions:** The device printed circuit board (PCB) shall have the following dimensions as shown below.



# Appendix A Regulatory Information




## A.1 Compliance Information

### A.1.1 FCC

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

**WARNING: Changes or modifications to this device not expressly approved by Sensus or AMDS LLC could void the user's authority to operate this equipment.**



	Warning	Sensus FlexNET Modules are for professional installation only. They are to be serviced by professional personnel only. This product is NOT for consumer installation or servicing.
	Warning	Hazardous voltages are present: To reduce the risk of electric shock and danger to personal health, follow the instructions.
	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.

### A.1.2 Industry Canada

This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. 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.

## A.2 RF Exposure Statement for Flexnet L&G Focus

	Radiation Hazard	When operating the Sensus FlexNET Module, a minimum distance of 20 cm (7.8 inches) is required between personnel and this antenna to comply with a radio-frequency exposure limit of 1.0 mW/cm <sup>2</sup> .
	Warning	To satisfy FCC RF exposure requirements for transmitting devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.

## A.3 FCC Labeling Requirements

### A.3.1 PCB FCC Label (internal label)

The PCB manufacturer must place an FCC label on the PCB device such as the one shown below.

Sensus, Raleigh, NC 27615  
Model: 570X  
FCC ID: SDBFLEXGE100  
IC: 2220A-FLEXGE100  
This device complies with Part 15 of the FCC  
Rules and Industry Canada requirements.  
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. 70013-086-00001 rev [ ]



### A.3.2 Meter FCC Label (external label)

The meter manufacturer must place an external label on the meter housing such as the one shown below. This must be placed in a clearly visible area.

GE  
KV2C  
570X

Contains FCC ID: SDBFLEXGE100  
Contains IC: 2220A-FLEXGE100  
Sensus - Model 570X

This device complies with Part 15 of the FCC rules and Industry Canada requirements. 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.

P/N 70013-086-00002 rev 01

Sensus, Raleigh, NC 27615