

FlexNet SmartPoint

Installation Instructions for Model 510M - Non Pit Unit

IMPORTANT

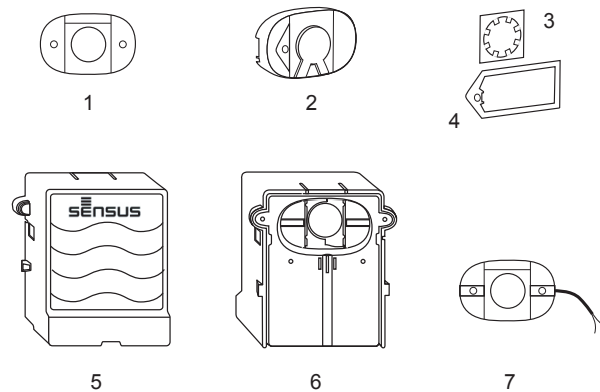
The following information contains installation instructions for the Sensus Model 510M SmartPoint.

Note: This installation sheet is only for installation of the Sensus Model 510M. For instructions on installing other AMI devices, please request and refer to the individual installation instruction for those devices.

GENERAL INFORMATION

The Model 510M SmartPoint is designed for non pit, non submersible applications and is available for both a single port and dual port operation. The Model 510M should be mounted outdoors where it is not subject to submergence and to maximize performance in fixed base applications. The Model 510M is not intended for outdoor meter pits or vaults. The unit can be installed with either a TouchCoupler connection or wire connection. Please refer to the Aquasense water-compatibility document, WAMDS-40000, for compatibility and AMI-495 for programming instructions.

DEFINITIONS



1. Sensus TouchPad
2. TouchPad Cover Assembly Complete
3. TouchPad Fastener
4. TouchPad Cover Locking Clip
5. Model 510 Radio (Front View)
6. Model 510 Radio TouchCoupler Enabled Assembly (Rear View with TouchPad Cover)
7. TouchPad Extension Assembly

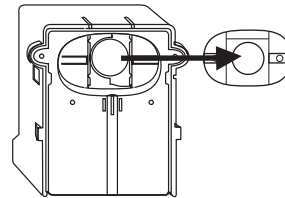
RECOMMENDED TOOLS AND MATERIALS

- Wire stripping tool
- Screwdriver - Small standard head for terminal connections
- Power drill and bit (1/4")
- 8 x 1" sheet metal screws
- TouchPad extension cable
- Seal wire (optional)

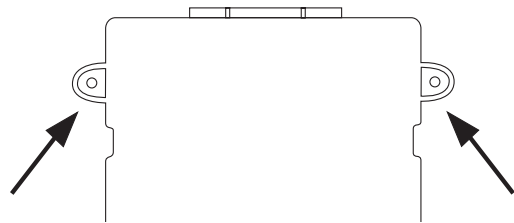
TOUCHCOUPLER - INSTALLATION INSTRUCTIONS

SINGLE PORT – TOUCHCOUPLER INSTALLATION

1. Perform a TouchRead on TouchPad(s) to insure TouchRead to the encoder works.
2. Taking a completely assembled Model 510M SmartPoint and TouchCoupler Spacer with TouchPad Cover, align the TouchPad Cover over an installed Sensus TouchPad.
3. Place the unit over the TouchPad and press firmly until secure.



4. For additional support (optional), remove the front cover and pre-drill the holes designed to fasten the unit to the wall. (Holes indicated in diagram below.) Secure the unit to the wall with screws. Once secured, replace front cover of unit.

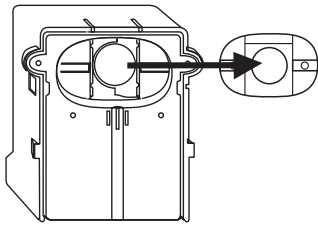


5. Once the unit is closed and secured, begin the activation process. (Refer to AMI-495 for programming instructions).
6. For security (optional), a seal wire may be used on the bottom of the unit for tamper evidence.
7. Coil excess wire and then secure to the body of the meter or service line in a presentable manner.

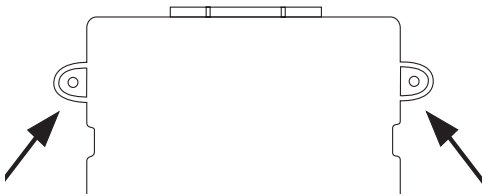
SINGLE PORT – REMOTE TOUCHCOUPLER INSTALLATION

Remote TouchCoupler installations are an option when a direct TouchCoupler (Sensus only) connection cannot be completed due to physical limitations. Before proceeding with the installation of a remote TouchCoupler application, be sure to find a location free from obstacles that would interfere with the connection from the TouchPad Cover to the transmitter.

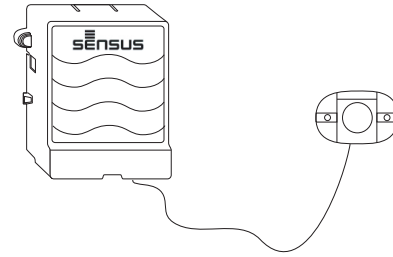
1. Perform a TouchRead on TouchPad to insure TouchRead to the encoder works.
2. Remove current TouchPad.
3. Replace current TouchPad with TouchPad extension assembly.



4. Connect current TouchPad to wires extending from the TouchPad extension assembly.
5. Mount current TouchPad in a location free from obstruction for SmartPoint to be mounted over it.
6. Perform TouchRead to verify integrity of wiring.
7. Taking a completely assembled 510M TouchCoupler SmartPoint, place over the Sesus TouchPad and press firmly to secure.
8. For additional support (optional), remove the front cover and predrill the holes designated to fasten to the wall (Holes shown in diagram below.) Secure the unit to the wall with screws and snap on the front cover.



9. Once all the connections are complete, snap on the front cover and for tamper prevention place a seal wire on the bottom of the unit.
10. Once the unit is secured, begin the activation process. (Refer to AMI-495 for programming instructions).

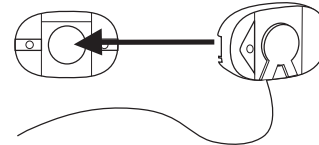


DUAL PORT – TOUCHCOUPLER INSTALLATION

1. Perform a TouchRead on TouchPad(s) to insure TouchRead to the encoder works.
2. For new installations of dual ports, find a suitable location for an installation where two TouchPads can be installed that will be free from interference. The optimum distance should be less than 12"; otherwise wires may require field splicing. (For existing TouchPad connections when a second port is added, select a location for the second TouchPad installation that will be free from interference).
3. Determine which of the two TouchPads will use the TouchPad Cover only and which will use the TouchCoupler unit as the primary connection.

Note: If TouchPad is not already installed, install TouchPad allowing enough room for the TouchPad Cover to be securely placed over the installed TouchPad.

4. Place the remote TouchPad Cover firmly over the Sensus TouchPad until secured.

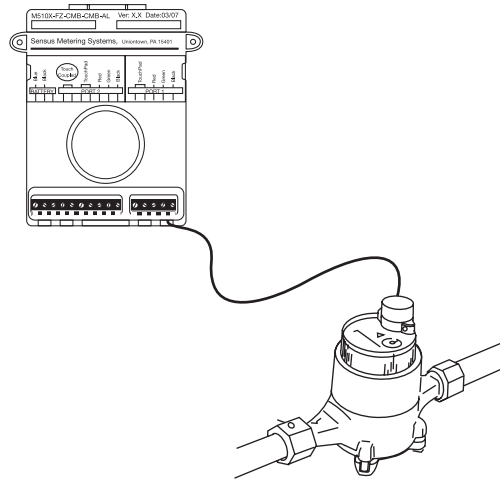
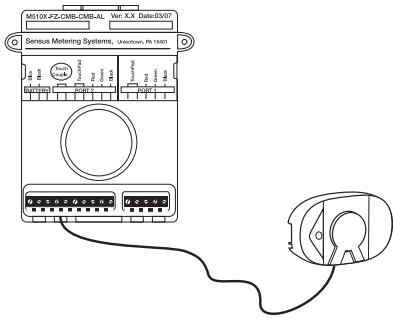


5. Place the SmartPoint over the second TouchPad location and press firmly until the unit is secured to the TouchPad. For additional support (optional), pre-drill the holes designed to fasten the unit to the wall. Secure the unit to the wall with screws.

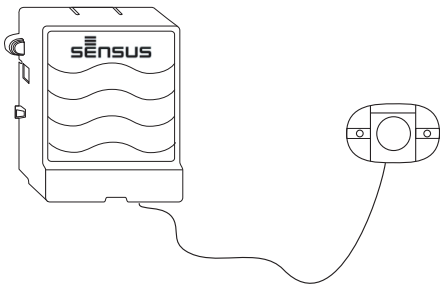
Note: If not already installed, install the second TouchPad allowing enough room to connect the transmitter to the TouchPad.

6. Strip wires prior to inserting into terminal strip.
7. Connect the wires from the TouchPad Cover to the coordinating port terminals in the SmartPoint labeled TouchCoupled.

Note: Red and black wires are non-polarized.



8. Once all the connections are complete, snap on the front cover and for tamper prevention place seal wire on bottom of unit.
9. Once the unit is closed and secured, begin the activation process. (Refer to AMI-495 for programming instructions.)

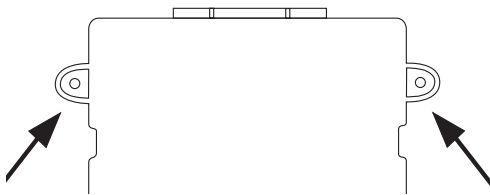


Note: See the encoder wiring reference chart for proper color-coded wiring connections. Badger, Neptune and Elster registers must be wired directly to a 510M port and not through a MultiRead module connected to the 510M.

Encoder wiring reference:				
SmartPoint Terminal	Sensus Register	Badger ADE	Neptune ProRead	Elster Encoder
Black	Black	Black	Green	Black
Red	Red	Red	Black	Green
Green	Green	Green	Red	Red

SINGLE AND DUAL PORT – WIRED INSTALLATION

1. Place the SmartPoint at the location for installation. With the front cover removed, mark the location to pre-drill the holes designed to fasten the unit to the wall. (Holes shown in figure below).



2. Remove the SmartPoint from the wall and use a 1/4" drill bit to pre-drill the fastener holes.
3. Place the unit on the wall and align the pre-drilled holes with the fastener locations.
4. Secure the unit to the wall with screws.
5. Strip wires prior to inserting into terminal strip.
6. Connect the wires from the register to the coordinating port terminals in the SmartPoint.

7. Once all terminal connections are complete, snap on the front cover and for tamper prevention place seal wire on bottom of unit.
8. Once the unit is closed and secured, begin the activation process. (Refer to AMI-495 for programming instructions.)

FCC COMPLIANCE

This equipment has been tested and found to comply with the limitations 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 these 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 and 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 device
- 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/TC technician



Warning!

No party shall make any modifications or changes to the Sensus Model 510M transmitter (the equipment) without express written consent of Sensus. Doing so could result in the equipment becoming non-compliant with the requirements of the Federal Communications Commission Rules CFR47 part 15 and could void the user's authority to operate the equipment.

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