

# SNX-P4 User Guide

SENSRNET EXPANSION MODULE



Version 2.0  
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## 1 PREAMBLE

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### 1.1 FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference.

This device must accept any interference received, including interference that may cause undesirable operation.

### 1.2 Acceptable Use

It is the responsibility of the user to confirm that any use of the product conforms with all: country, federal, state, county and municipal laws, ordinances and regulations.

## 2 SENSRnet EXPANSION MODULE

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### 2.1 General

The SENSRnet Expansion Module is an accessory for the SENSRnet remote monitoring system. The Expansion Module supports two functions:

- Expand the number of CX1s that can be connected to a SENSRnet Server. Expansion Module supports up to four CX1s. A user can connect two Expansion Modules to a SENSRnet Server and deploy up to eight CX1s.
- Extend the operating distance of a CX1. Expansion modules can be located up to 325' away from a SENSRnet Server and CX1s can be located 325' away from the Expansion Module.

### 2.2 Specifications

|                              |  |
|------------------------------|--|
| Size:                        | 11.28" x 7.15" x 3.74"                       |
| Weight:                      | 6 lbs.                                       |
| Housing material:            | Cast Aluminum                                |
| Connectivity:                | 1 – SENSRnet uplink port and 4 – SENSR ports |
| Power source:                | SENSRnet Server                              |
| Power consumption            | 6 watts                                      |
| Operating temperature range: | -40°F to 176° F (-40°C to 80°C)              |
| Environmental protection:    | IP65   |



## 3 INSTALLATION

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### 3.1 System Requirements

The Expansion Module works with a SENSRnet Server to provide power and communications to SENSR branded sensors and accessories. The Expansion Module must be connected directly to the SENSRnet Server in order for it to operate.

The Expansion Module contains circuitry and components designed to limit the negative consequences related to lightening strikes. In order for these measures to be effective the Expansion Module must be connected to an earth ground.

### 3.2 Mounting the Expansion Module

Location - Several factors need to be considered when deciding where to mount the Expansion Module including:

- Distance from the SENSRnet Server – The Expansion Module uses a special cable to connect to the SENSRnet Server, the length of this cable would have been specified at the time of ordering. The maximum length for this cable is 325’.
- Distance from the sensors - The Expansion Module uses a special cable to connect to the SENSR CX1s, the length of this cable would have been specified at the time of ordering. The maximum length for this cable is 325’.
- Sheltering – The Expansion Module is rated for outdoor environments however, certain locations should be avoided such as those locations that place the unit in the path of run-off or areas that are a risk for puddling or pooling of water. An ideal location is one where the Expansion Module is sheltered from continuous sunlight, falling snow and rain.

Orientation - The Expansion Module can be mounted in a horizontal or vertical position. If the Expansion Module is expected to be rained upon we recommend mounting the Module vertically and orientating the connectors down.

Securing - Mounting tabs are located on the base of Expansion Module, due to the mass of the module we recommend using all four tabs for mounting. A mechanical drawing is included with the module for determining hole coordinates.

Grounding – In order to enable the suppression capabilities of the Module a 4 – 10 Ga wire must be connected to the Expansion Module’s ground receptacle and an earth ground.



## 3.3 Connecting the Expansion Module



To the SENSRnet Server - Insert the weather-proof RJ style connector into the UPLINK port of the Expansion Module and rotate the connector shell ¼ turn to secure.

To the CX1s – Insert the weather-proof RJ style connector into one of the numbered SENSR ports of the Expansion Module and rotate the connector shell ¼ turn to secure.

Note: Mated connectors provide IP66 level of protection.

## 4 MISCELLANEOUS

### 4.1 Maintenance

No periodic maintenance is required.

### 4.2 Technical Support

For questions about the SENSRnet Expansion Module or an application, e-mail support at [support@sensr.com](mailto:support@sensr.com) or call 512.240.5273. Standard hours of operation are 8 am - 5 pm CST, Monday thru Friday.

### 4.3 Product Warranty

SENSR LLC. ("SENSR") warrants to the original Customer ("Customer") that SENSR brand instruments ("Product") are free from defects in material and workmanship under normal use and service for a period of 1 year commencing upon the date of purchase.

This Limited Warranty is conditioned upon proper use of Product by Customer. This Limited Warranty does not cover: (a) defects or damage resulting from accident, misuse, abuse, neglect, unusual physical, electrical or electromechanical stress, or modification of any part of Product, including cables, or cosmetic damage; (b) equipment that has the serial number removed or made illegible; (c) any surfaces or other externally exposed parts that are scratched or damaged due to normal use; (d) malfunctions resulting from the use of Product in conjunction with accessories, products, or ancillary/peripheral equipment not furnished or approved by SENSR; (e) defects or damage from improper testing, operation, maintenance, installation, or adjustment; (f) installation, maintenance, and service of Product, or (g) Product used or purchased outside the United States or Canada. During the warranty period, SENSR will repair or replace, at SENSR's sole option, without charge to Customer, any defective component part of Product. To obtain service under this Limited Warranty, Customer must contact SENSR Customer care at 512.240.5273. Upon receipt, SENSR will promptly repair or replace the defective Product. SENSR may, at SENSR's sole option,



use rebuilt, reconditioned, or new parts or components when repairing any Product or replace Product with a rebuilt, reconditioned or new Product. Repaired or replaced product will be warranted for a period equal to the remainder of the original Limited Warranty on the original Product or for 90 days, whichever is longer. All replaced parts, components, boards and equipment shall become the property of SENSr. If SENSr determines that any Product is not covered by this Limited Warranty, Customer must pay all parts, shipping, and labor charges for the repair or return of such Product.

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