

# NETWORK SENSORS WITH THE MOST ADVANCED ANALOG DEVICE SERVER

Monitor, data log and chart real-time readings from any analog I/O device using a web browser.

xSenso™ is a compact DIN-rail or wall mount solution that enables sensors with analog outputs (voltage or current) to easily and transparently send real-time data to any node on the network or over the Internet.

xSenso is an ideal solution for remote monitoring and data logging of critical events in process control and automation applications. With its low port density, xSenso can be affordably installed in dispersed locations. In applications where analog sensors and controllers are used, xSenso can be configured to send alarms via emails or text messages when readings are outside predefined ranges. These alarms allow control engineers to take immediate corrective action when certain thresholds are met.

Its embedded web server makes it possible to monitor the input readings, chart or log the data using browsers on computers, smartphones, and tablets from anywhere in the world.

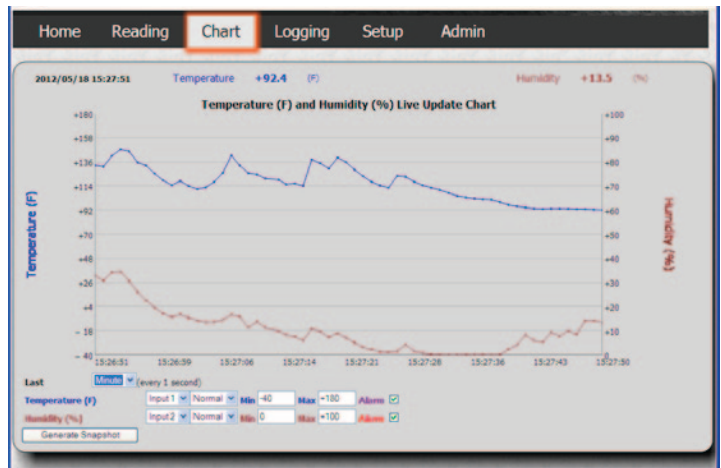
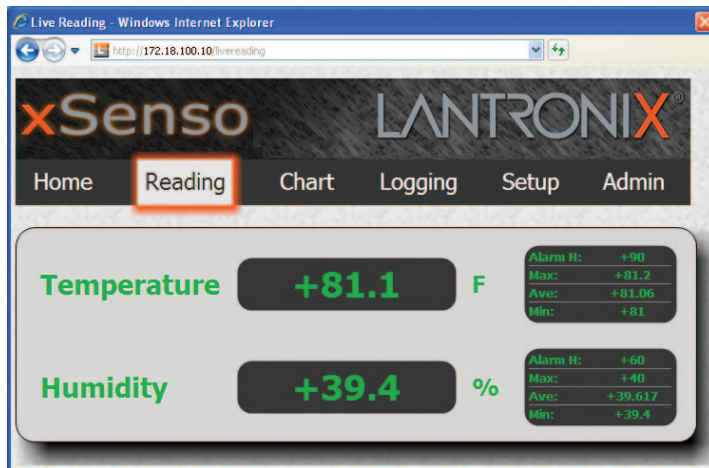
Some examples of sensors that can be connected to xSenso are temperature, humidity, pressure, flow, level, force, weight, gas/air quality, etc.



## xSenso™ Highlights:

- Two analog inputs
- Ethernet port for communication
- USB port for configuration
- Dynamic web based monitoring, charting and data logging
- Redundant input power
- Email and text message alert notification
- Authentication, up to 256-bit encryption, SSL, SSH
- Operational temperature of -40° to +85° C
- 5-Year Limited Warranty

## View live data using a browser on tablets, smartphones or computers.



## Features and Specifications

### > Analog Inputs

- Channels: (2) Differential inputs (screw terminal connections)
- Resolution: 16 bits
- Sigma-Delta A/D conversion
- Input Mode: Voltage/Current
- Input Range:  $\pm 100\text{mV}$ ,  $\pm 1\text{V}$ ,  $\pm 10\text{V}$ ,  $\pm 20\text{mA}$
- Scaling: Configurable offset or scale and offset
- Alarm Triggers: Low, high, or range watermarks
- Accuracy:
  - $\pm 100\text{mV}$  Range accuracy =  $\pm 0.3\text{mV}$  max
  - $\pm 1\text{V}$  Range accuracy =  $\pm 3\text{mV}$  max
  - $\pm 10\text{V}$  Range accuracy =  $\pm 30\text{mV}$  max
  - $\pm 20\text{mA}$  Range accuracy =  $\pm 0.06\text{mA}$  max
- Excitation: 15VDC, 10mA per channel or 20mA total
- Sampling Rate: 10 per second, per channel
- Input Impedance: Voltage 1M ohm, Current 10 ohms min
- Galvanic Isolation: 3000 VDC

### > Network Interface

- Interface: (1) Ethernet 10Base-T or 100Base-TX (Auto-sensing)
- Magnetic Isolation: 1500 VAC
- Protocols: TCP/IP, UDP/IP, ARP, ICMP, Telnet, DHCP, BOOTP, HTTP, HTTPS, DNS, AutoIP, SSH, SSL, RSS, XML, FTP, Syslog

### > Management

- (1) USB port
- Web Configuration (HTTP/HTTPS)
- XML
- CLI (Telnet/SSH)
- DeviceInstaller - Windows based utility for device discovery and system recovery

### > Security

- Username/Password Authentication
- 128, 192, 256-bit AES Encryption
- SSL, SSH

### > Software

- Customizable real-time reading and chart view
- Analog input data can be logged on the PC from which the browser connection is made.
- Configurable Data Acquisition format for selectable network connectivity modes (TCP, UDP, SSL, SSH, TCP-AES)
- Configurable Alarms - connect to send streaming data, send email and text message via email
- In field firmware upgrades via FTP, HTTP/HTTPS and USB Port

### > Power\*

- (1) Terminal screw block
- (1) Barrel locking connector  
Both may be used simultaneously for power redundancy
- Input Voltage: 9-30VDC
- Consumption: 3W without excitation, 3.5W with excitation

\* Power supplies sold separately

## Ordering Information

### United States

Call: 800.422.7055

Email: sales@lantronix.com

Buy Online: <http://www.lantronix.com>

### Asia/Pacific

Call: +852 3428.2338

Email: asiapacific\_sales@lantronix.com

### Europe

Call: +31 (0) 76.52.3.6.74 4

Email: EMEA@lantronix.com

### Japan

Call: +81.3.6277.8802

Email: japan\_sales@lantronix.com

### > Part Number

XSO210000-01-S

### > Description

xSensio2100 Two analog input device server, DIN-Rail, 10/100, terminal block and locking barrel input power range 9-30VDC, RoHS

### > Accessories

520-113-R

520-114-R

520-115-R

520-116-R

X3024DR00-01

500-205-R

Calibration Cert

### > Description

Barrel locking power supply, 12VDC 1A/0.5A,  $-40^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ , 2.1MM, US/CAN/JP, RoHS

Barrel locking power supply, 12VDC 1A/0.5A,  $-40^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ , 2.1MM, EU, RoHS

Barrel locking power supply, 12VDC 1A/0.5A,  $-40^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ , 2.1MM, UK, RoHS

Barrel locking power supply, 12VDC 1A/0.5A,  $-40^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ , 2.1MM, AUS, RoHS

30 Watts 24VDC output, hardened DIN-Rail power supply

USB console management cable, USB type A to mini USB type B cable, 1.5m

3 point NIST traceable calibration certification available. See Lantronix website for details

### > Environmental

- Operating Temperature:  $-40^{\circ}$  to  $+85^{\circ}\text{C}$
- Storage Temperature:  $-40^{\circ}$  to  $+85^{\circ}\text{C}$
- Relative Humidity: 5 to 95% (non-condensing)

### > Physical Characteristics

- Dimensions: 5.25 x 3.50 x 1 in (L x W x H)
- Weight: .12 kg (.26 lb)
- Mounting: DIN rail, wall-mount, desktop

### > Regulatory Certifications

- Emissions - FCC Part 15 Class B, EN61326, EN55022, EN55024 Class B, C-Tick
- Safety - UL508, CE EN61010-1, cUL 60950-1, IEC 60950-1, AS/NZS 60950:2000, CSA 22.2 950
- REACH, RoHS

### > Warranty

- 5-Year Limited

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