X2 - WI-FI DATA LOGGER

QUICK START GUIDE

IMPORTANT - BEFORE FIELD DEPLOYMENT: Completely configure new X2 systems with sensors and a web connection in a nearby work area. Operate the system for several hours and ensure correct sensor readings. Use this test run to become familiar with the features and functions.

Figure 1: X2 Environmental Data Logger

Overview

The X2 with integral Wi-Fi includes an embedded Wi-Fi hotspot for smartphone, tablet, or PC connection. Three sensor ports provide industry standard protocols including SDI-12, RS-232, and RS-485. The center port offers direct communication (serial to PC) and power input.

Data is accessed and stored on the WQData LIVE web datacenter. An easy-to-use dashboard and built-in sensor library automatically facilitate setup and configuration.

What's Included?

(1) X2 data logger
(1) X2 grounding kit
(3) Sensor port plugs, spare orings
(1) Power port plug, spare oring
(1) Oring grease
(1) Screwdriver with magnet tip
(1) Quick start guide

Wi-Fi Specifications

Note: The X2 embedded web does not support 5GHz networks. Connect the X2 Wi-Fi to a 2.4GHz network.

Wi-Fi Communications: 802.11b/g/n (Direct to X2 or Connect X2 to an existing network)

Wi-Fi Range: 250 ft. maximum[1]

[1]Range varies based on many factors including obstructions, other wireless signals in the area, elevation change, and more.

X2 Embedded Wi-Fi user guide link below:
nexsens.com/x2eweb

1. To get started:
   a. Go to WQDataLIVE.com
   b. Create a new account or sign into an existing account.
   c. Choose or create the project that will contain the data logger by selecting the Projects link from the bottom right footer of the page.
   d. Open the project and go to the ADMIN tab located at the top of the project dashboard and click Settings.
2. From there, choose the Project/Site pull down menu and select the site for the new data logger.
   a. If a site has not been created, select New Site.
3. Enter the claim code listed below into the space provided under Assigned Devices.
4. Click Add Device.
   a. The new device should be visible in the Assigned Devices list.
5. Remove the center power plug and required outer port plugs (1 for each sensor to connect).
6. If ports are labeled, match and connect the sensors with the proper outer ports (8 pin).
   a. If the X2 and sensors were integrated at NexSens, the sensors must be connected to the same port for proper communication.
   b. If connecting a new sensor, use the included USB cable and the CONNECT software to ensure the sensor script is enabled. The article below describes this process.
      - nexsens.com/conncss
7. Connect power (5 to 24VDC) to the center port (6 pin).
   a. Place the X2 Wi-Fi in an area with adequate Wi-Fi connection to the configured network.

8 Using a PC or mobile device, connect to the X2's Wi-Fi network.

a. If the X2 network is not visible, disconnect and re-apply power to the logger and refresh the PC or mobile device's network list.

9 Navigate to **192.168.1.1** with a web browser to connect with the X2 embedded web.

a. Access the **Main Menu** (Three horizontal bars at the top left of the interface)

b. Go to **Settings | Network**

10 Toggle the Wi-Fi mode to Network and in the spaces provided enter:

a. Local network SSID (case sensitive)

b. Network security settings

c. Network password

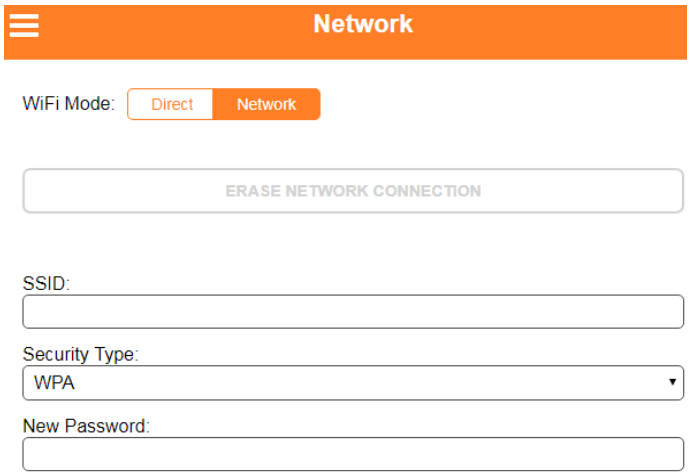

Figure 2: X2 embedded web network settings.

11 Click **Save Settings**.

a. Reset the Wi-Fi using the magnet swipe.

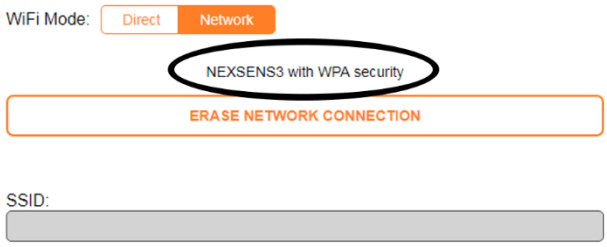

Figure 3: Successfully saved network settings.

12 Disconnect from the logger network and allow up to 15 minutes for sensor detection and data acquisition.

a. At this time the updated X2 Wi-Fi profile is sent to WQData LIVE.

b. At the next 10-minute transmit interval, refresh WQData LIVE and confirm all sensor parameters are shown and valid sensor readings appear.

LED Light Indicators

Figure 4: X2 LED light indicators located above the X2 logo on the clear top lid.

Table 1: X2 Wi-Fi Data Logger LED Indicators.

LED Color	1 Second Interval	3 Second Interval	5 Second Interval	3 Blinks Per 5 Seconds	Solid
Green	Primary power heartbeat	Secondary power heartbeat	Backup power heartbeat	N/A	N/A
Blue	N/A	N/A	Weak/No cell signal	Strong radio signal	WQData LIVE setup successful[1]
Yellow	N/A	N/A	Data acquisition in progress	N/A	Sensor calibration in progress
Red	Significant system error[2]	N/A	N/A	N/A	N/A

[1]WQData LIVE setup is automatically done after sensor detection.

[2]System errors can result from internal sensors detecting high current, humidity, or pressure. These errors can be indicative of a leak or other major problem with the system that requires attention.

For additional information, please reference the X2 Resource Library on the NexSens Knowledge Base.

nexsens.com/x2kb

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