X2-CBMC-C BUOY-MOUNTED 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-CBMC Buoy-Mounted Data Logger

Overview

The X2-CBMC buoy-mounted data logger with cellular telemetry includes an integrated modem. Five sensor ports provide industry standard protocols including SDI-12, RS-232, and RS-485. The SOLAR/COM port offers direct communication (serial to PC) and power input. All connections are made using MCIL/MCBH wet-mate connectors. The X2-CBMC is powered from the CB-Series buoy's solar rechargeable battery reserve.

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-CBMC buoy-mounted data logger
(5) Sensor port plugs
(1) Power port plug
(1) Wireless antenna (installed on telemetry units only)
(1) Quick start guide

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. 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. Create and save the site before entering the claim code.

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 If cellular service is not purchased through NexSens, visit the article link below for steps on how to setup the cell modem.

    a. nexsens.com/x2apn

⑥ Use the CONNECT software to ensure the proper scripts are enabled for each sensor.

    a. nexsens.com/conncss

⑦ Remove one blank sensor plug from an MCIL-8-pin port (i.e., P0, P1, or P2) for each sensor.

    a. Connect all sensors to the desired ports.

Note: Only one RS-232 sensor can be plugged into each P0, P1, or P2 port, (i.e., either P0-A or P0-B.). Ensure that all SDI-12 and RS-485 sensors have unique addresses.

8. For direct communication or power application, connect a UW6 direct communication, solar, or charging cable to the MCIL-6 to UW6R connector.

   a. The device will beep once when powered.

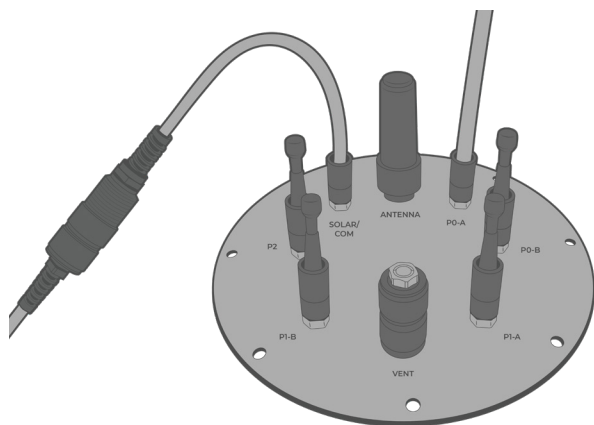   b. Caution: The O-ring within the UW6R connector may fall out when removing the yellow cap.

Figure 2: Steps 7 & 8 - Connect sensors to the 8-pin ports and connect the solar panel plug to the 6-pin port.

9. Wait up to 60 seconds for the system to check cellular coverage.

   a. Two consecutive beeps = adequate signal

   b. Three consecutive beeps = no signal

      · If three beeps are heard, move the X2-CBMC into an area with strong cellular coverage.

      · Check cellular coverage through CONNECT using the link: nexsens.com/x2apn

10. After 20 minutes, refresh WQData LIVE and confirm all sensor parameters are shown and valid sensor readings appear.

    a. The device will beep for a duration of three seconds when detection is complete.

Buzzer Pattern Indicators

Table 1: X2-CBMC Buzzer Pattern Indicators.

Buzzer Event	Beep Type	Status
When power is applied	One short beep	System boot successful
During telemetry connection	Two short beeps	Connection successfully established
During telemetry connection	Three short beeps	No signal/connection failed
During sensor detection	Three second beep duration	WQData LIVE Setup Successfully[1]

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

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

nexsens.com/x2cbmckb