

X2 Iridium Data Logger

The Iridium X2 Data Logger behaves similarly to the cellular model, but there are a few minor differences in setup which are outlined here.



X2 Iridium Data Logger – Web Setup

Follow the procedure outlined in the [Getting Started Document](#) to accomplish the following:

Create a free WQData LIVE account

Create a new project on the data center

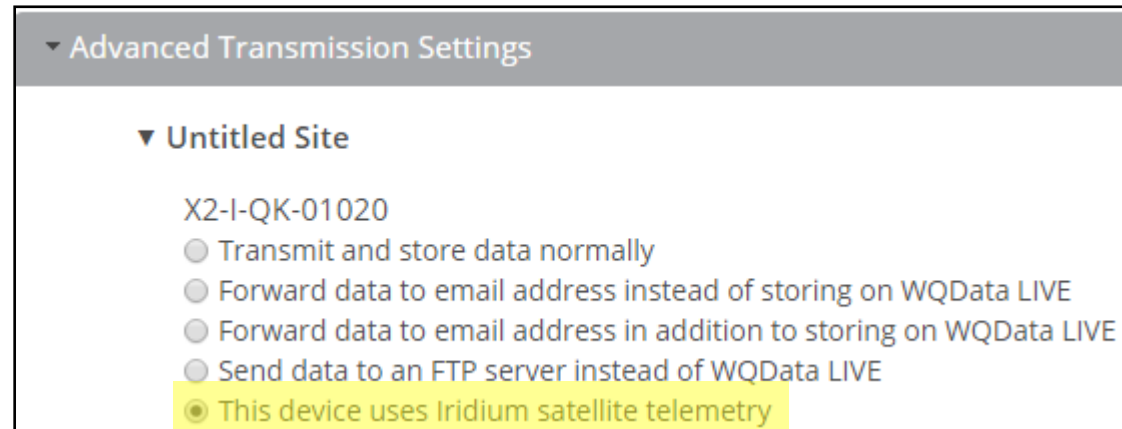
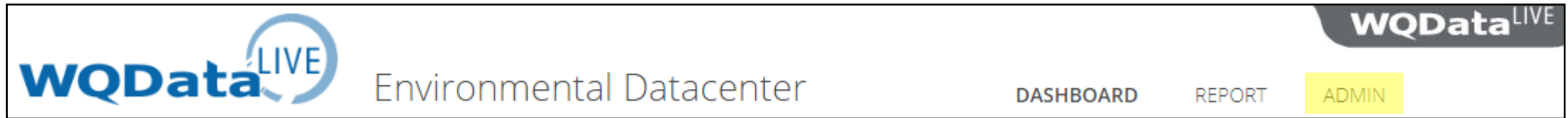
Use the Claim Code included with each X2 to add the logger profile to the project



X2 Iridium Data Logger – Web Setup

Navigate to the **Admin | Advanced Transmission Settings** menu on the project page once the loggers have been claimed.

For each Iridium X2, select the **'This Device uses Iridium satellite telemetry'** option



X2 Iridium Data Logger – Web Setup

If Iridium communications were provisioned through NexSens/Fondriest:

Enter in the 15-digit IMEI number listed on the X2's serial label and select **Save**

▼ Advanced Transmission Settings

▼ Untitled Site

X2-I-QK-01020

- Transmit and store data normally
- Forward data to email address instead of storing on WQData LIVE
- Forward data to email address in addition to storing on WQData LIVE
- Send data to an FTP server instead of WQData LIVE
- This device uses Iridium satellite telemetry

IMEI

XXXXXXXXXXXXXXXXXX

Use custom email settings

SAVE

X2 Iridium Data Logger – Web Setup

If the X2 Iridium services were set up independently:

Enter in the 15-digit IMEI number listed on the X2's serial label

Select the **'Use custom email settings'** box

Fill out all of the email server information associated with the primary Iridium Account and select **Save**



▼ Advanced Transmission Settings

▼ Untitled Site

X2-I-QK-01020

- Transmit and store data normally
- Forward data to email address instead of storing on WQData LIVE
- Forward data to email address in addition to storing on WQData LIVE
- Send data to an FTP server instead of WQData LIVE
- This device uses Iridium satellite telemetry

IMEI

XXXXXXXXXXXXXXXXXX

Use custom email settings

Email Server

IMAP Port (usually 143, or 993 when using SSL)

143

Email Address

Password

Use SSL for IMAP

SAVE

X2 Iridium Data Logger – Sensor Detection

Upon power up, an auto-detection process will identify any connected sensors:

Move the X2 outdoors to a location with an unobstructed view of the sky. This is required for successful satellite communication.

Connect all sensors that will be deployed with the X2 to any of the 3 available 8-pin UW ports at its base.

Record which ports (P0, P1, P2) each sensor is connected to- to read properly port connections must be kept consistent

Connect the included Iridium antenna to the X2

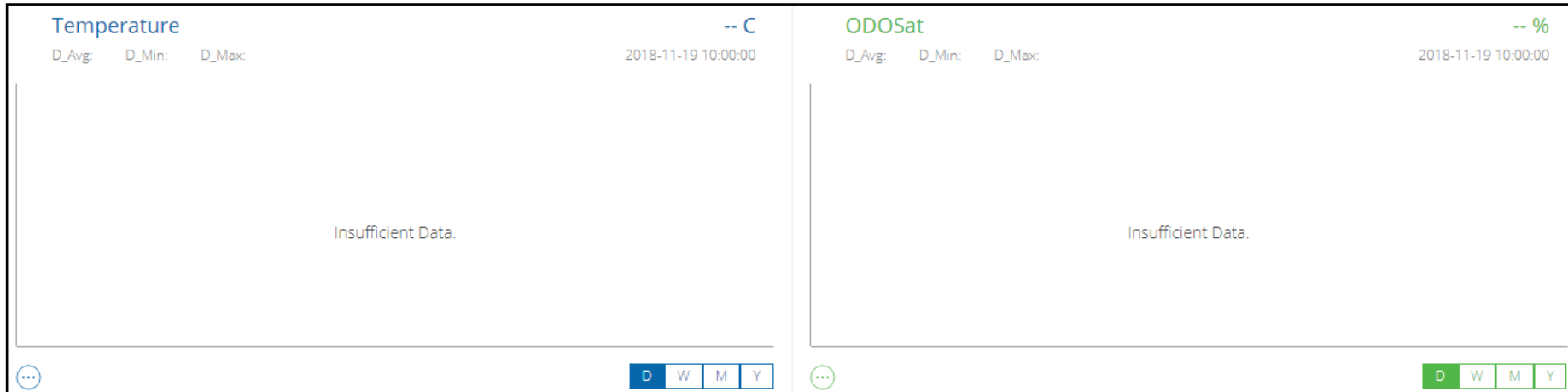
Apply power to the X2's center 6-pin port by connecting an SP6/12 or UW6-PW AC Power Adapter



X2 Iridium Data Logger – Sensor Detection

Wait approximately 20 minutes for the auto-detection process and sensor configuration update to finish.

Refresh the project page to confirm that graphs for all sensor parameters, as well as the X2's diagnostic parameter suite are now displayed.



Diagnostic Data		
✓	Last Contact	
	2018-11-19 09:02:04	⋮
✓	Primary Power (V)	13.3
	2018-11-19 08:00:00	⋮
✓	Internal Humidity (%)	5.9
	2018-02-09 14:00:00	⋮
⚠	Cell Signal Strength (dB)	1
	2018-11-19 08:00:00	⋮
✓	Cell Status ()	0
	2018-11-19 08:00:00	⋮

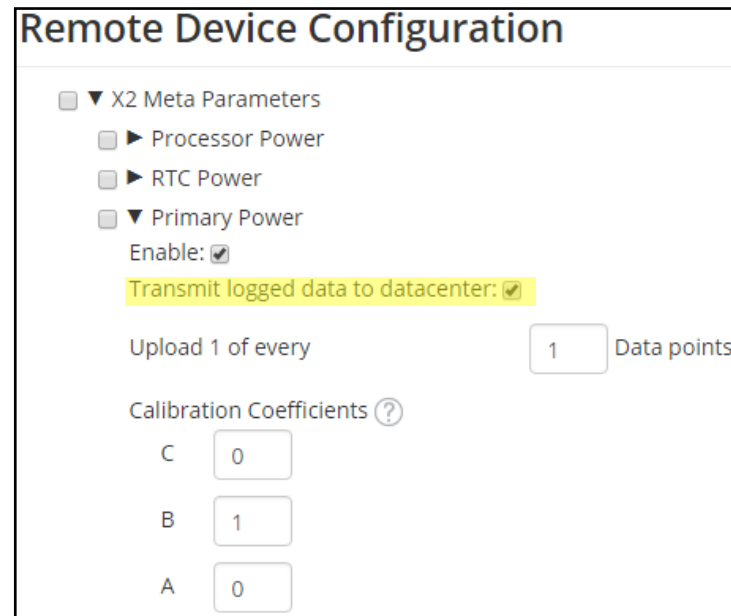
X2 Iridium Data Logger – Enable Data Transmission

Following the detection update, the X2 will not transmit any data until parameters are manually enabled for transmission.

This prevents un-intentional data overages being incurred by the transmission of un-needed data.

Enable transmissions of the desired parameters via the [Remote Device Configuration](#) menu for each logger.

Enable only the Primary Power, Cell Signal Strength, and Cell Status X2 Meta Parameters



Remote Device Configuration

- ▼ X2 Meta Parameters
 - Processor Power
 - RTC Power
 - ▼ Primary Power
 - Enable:
 - Transmit logged data to datacenter:
 - Upload 1 of every Data points
- Calibration Coefficients (?)
 - C
 - B
 - A

Caution: Only enable parameter transmissions and set log frequencies budgeted for in the data plan. NexSens/Fondriest is not responsible for any data overages incurred by excessive data usage.

X2 Iridium Data Logger – Enable Data Transmission

Once the prescribed sensor and diagnostic parameters have been enabled for Transmission, set the following according to the Iridium data plan allowances in the [Remote Device Configuration](#) menu:

Independent Sensor Logging Intervals

▼ EXO1

Log data every min

Starting at

Averaging settings:

X2 Meta (Diagnostic) Parameter Logging Interval- recommended 2 hours

▼ X2 Meta Parameters

Log data every hour

Starting at

Averaging settings:

X2 System Transmission (Data Upload) Interval
Set 'Starting at' time in the past

Time Based Transmission

Transmit every min

Starting at

Caution: Only enable parameter transmissions and set log frequencies budgeted for in the data plan. NexSens/Fondriest is not responsible for any data overages incurred by excessive data usage.



X2 Iridium Data Logger – Enable Data Transmission

Click **Save** and verify that all of the transmission and logging frequency changes appear in the queue at the bottom of the [Remote Device Configuration](#) menu.

All changes in the queue will be applied during the next X2 transmission (default 10 minutes, or when power is removed/re-applied)

Command Queue ?

- X2 Meta Parameters Average Interval: 0 day to 1 hour
- 6920V2-1 Average Interval: 0 day to 30 min
- 6920V2-1 Sample Interval: 0 day to 30 min
- X2 Meta Parameters Sample Interval: 0 day to 1 hour

REMOVE