

RTU-C REMOTE TELEMETRY UNIT

QUICK START GUIDE

IMPORTANT - BEFORE FIELD DEPLOYMENT: Completely configure an RTU-C unit for cellular telemetry using the embedded Wi-Fi in a nearby work area. Operate the system for several hours and ensure proper transmission. Use this test run to become familiar with the features and functions.



Figure 1: NexSens RTU-C Remote Telemetry Unit

Overview

The NexSens RTU-C Remote Telemetry Unit acts as the main cellular or iridium telemetry device for X2 data loggers, while allowing for fallback to the internal data logger telemetry. RTU-C units are watertight and able to operate in extreme environments. The internal settings allow users to adjust transmission settings via the embedded Wi-Fi. The RTU-C can be powered by any 12VDC source, including a direct connection with a NexSens CB-series buoy battery or SP-series power pack. The RTU-C accepts sensor measurements from NexSens X2 data loggers and can transmit this information to the WQData LIVE cloud datacenter.

What's Included?

- (1) RTU-C Remote Telemetry Unit
- (1) RTU-C Mount
- (1) Quick Start Guide

SIM Card Installation

- 1 Remove the front green wire from the base of the RTU-C and gently pull off the front plate.

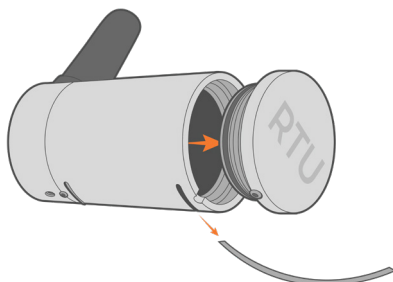


Figure 2: Remove the front plate.

- 2 Orient the SIM card as shown below and insert the card into the open slot.
 - a. Push the SIM card in fully until a click is heard.



Figure 3: Insert the 2FF mini SIM card.

- 3 Reinstall the front plate, aligning the notch on the plate with the blue set bolt.
 - a. Insert the green wire back into position.

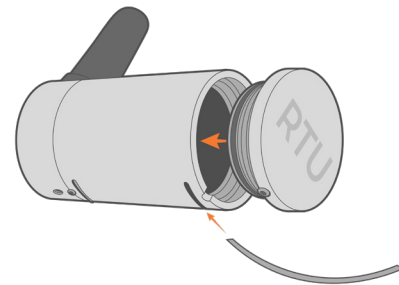


Figure 4: Reattach the front plate.

Establish RTU-C Communication

Follow the link below to access the NexSens RTU-C Remote Telemetry Unit User Guide. There, users will learn how to establish connection to the RTU-C to adjust the transmission settings, set up cellular communication, and push data to the WQData LIVE Cloud Datacenter.

- nexsens.com/rtucremote

Power Down the RTU-C

The RTU-C contains a capacitor capable of holding power for 30 minutes after the 12VDC power source is disconnected. To cycle power completely, follow the process below.

- 1 Disconnect the 6-pin connector from the RTU-C.
 - a. Remove the cap covering the green LED.

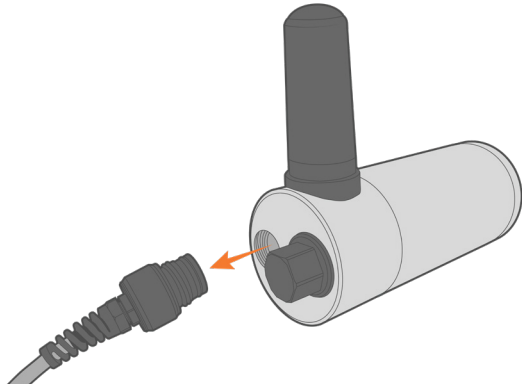


Figure 5: Remove the 12VDC power source.

- 2 Hold the button for ~1 minute to completely drain power from the unit.
 - a. The green LED will not be visible when power is fully drained.

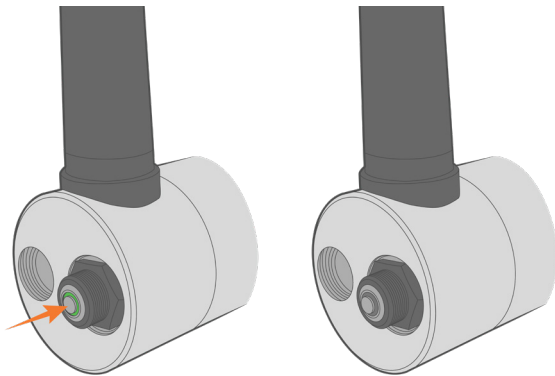


Figure 6: Remove power from the system.

RTU-C Mounting

- 1 Use the included Philips head screw to connect the camera mount to the base of the camera.

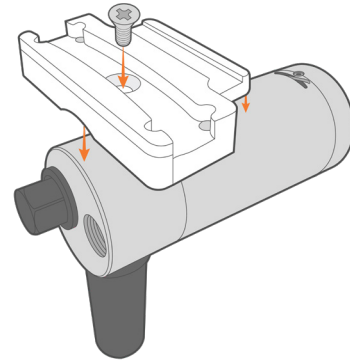


Figure 7: Attach the mount to the camera base.

- 2 Use the included U-bolts, flat washers, lock washers, and hex nuts to attach the camera and mount to the solar tower.
 - a. Ensure to align the rounded interior of the mount with the solar tower.
 - b. Tighten each side of the mount and U-bolts evenly using a 7/16" socket wrench.

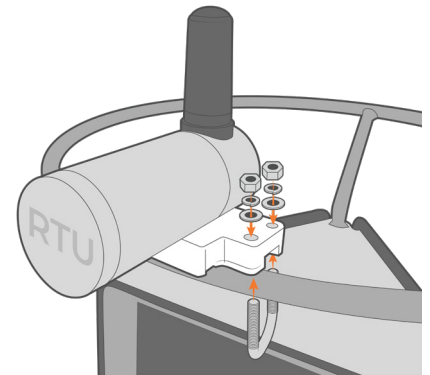


Figure 8: Mount the camera to the solar tower.