



INTRODUCTION

In locations where cellular service is inconsistent, inadequate, or nonexistent, the SymphoniePRO logger can use satellite communications to send data files and establish remote connections. This document details the steps required to use the RockREMOTE Mini Iridium satellite terminal (NRG item # 21395) with a SymphoniePRO logger and iPackACCESS. The iPackACCESS with RockREMOTE Mini device can be powered by the standard NRG 15 W PV panel for typical resource assessment applications.





Associated Items

NRG Item #	Item Description	Qty	Lookup ID
21396	Modem, Satellite, RockREMOTE Mini	1	5
19869	Antenna, RockREMOTE	1	3
20358	Antenna, GPS, Active, Mag Mount, 3 Meter, Cable, SMA Male	1	4
19820	Bracket, Magnetic, Ground Control, Welded	1	2
3129	Screw-#6x.5", Self Tapping, Pan Head, Phillips, 18-8SS	4	1
21413	Cable, Ethernet, Waterproof 9 PIN to RJ45, RockREMOTE Mini, 2M	1	-
21397	Cable, Antenna, LMR240, TNC-N, 2.5m	1	-
8206	NRG Systems SymphoniePRO Data Logger	1	-
7169	NRG Systems iPackACCESS	1	-



iPackACCESS Compatibility

An iPackACCESS with serial number 716900300 or higher is required for use with the RockREMOTE Mini device. Compatible iPackACCESS units have smart-switched 12 V power-out terminals for the RockREMOTE Mini module, as well as double the battery capacity. Older iPackACCESS units cannot be retrofitted or be made compatible for use with the RockREMOTE Mini.



iPackACCESS with RockREMOTE Mini Satellite Terminal

Account Setup and Confirmation

The RockREMOTE Mini satellite terminal includes an Iridium SIM card and activation form for Ground Control's Cloudloop IoT data service. Upon receipt of a RockREMOTE Mini, use the details found on the included activation sheet to activate RockREMOTE Mini Iridium service through the [Cloudloop portal](#). To create a new user account, visit and review the information on the [Ground Control website](#) and [Cloudloop Subscription Manager](#).



It is strongly advised to activate the account several days before field installation.

Account activation can be completed on the registration page: <https://www.groundcontrol.com/nrg-account-registration/>

After account activation, Ground Control will deliver information via email including a public static IP address that can be used to access the system remotely through a Metlink connection. This information is critical for the RockREMOTE Mini terminal set-up and enabling MET station communications.

Register Now

Please complete the NRG Systems RockREMOTE Mini Activation Form. On receipt, our team will set you up on Cloudloop, which is our cloud-based platform for subscription and device management.

You will be able to add multiple users to your Cloudloop account once you receive your login details (these will be emailed to the admin details provided in the form).

If you have any questions or need any support completing the form, please email help@groundcontrol.com.

Company Name *

Address *

Address Line 1

Address Line 2

City

State / Province / Region

Postal Code

Country

— Select country —

Admin Name *

First

Last

Admin Email *

Admin Phone *

 (201) 555-0123

Existing Cloudloop Account

Yes

RockREMOTE Serial Number *

Activation Date (billing begins on this date)

Activation Plan (scroll down for pricing) *

— Select Choice —

IP Address (for whitelisting)

(If you're not sure, please write 'Unsure')

Send Form

Pre-Installation Considerations

The Iridium Certus network consists of a constellation of 66 geostationary satellites in Low-Earth-Orbit (LEO). In complex terrain or in installations near structures, it is recommended to keep as clean a line of sight as possible to the north and south of the installation to establish and maintain connection between



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the antenna and satellites. Placing the antenna on the east or west side of the tower is preferable to north or south as satellites orbit from pole to pole.

Required Tools and Materials

- Laptop with SymphoniePRO Desktop App installed
- SymphoniePRO Product Manual
- RockREMOTE Mini User Guide
- Ground Control Infopack & confirmation email (with static IP details)
- Iridium SIM card (pre-installed in RockREMOTE Mini)
- USB-A to USB-B cable
- Ethernet cable
- Universal iPack charger (NRG item #3614) or suitable 15 VDC power supply
- (2) 7/16" wrenches
- Cordless impact driver
- 5/16" nut driver bit (1/4" hex)
- 3mm flat blade screwdriver
- P2 stubby screwdriver

Configuration Procedure

After completing the [Cloudloop account setup and Ground Control activation](#), proceed with the following process to configure the RockREMOTE Mini with SymphoniePRO and iPackACCESS. Refer to each sub-section below for details.

1. Configure the SymphoniePRO logger and iPackACCESS settings in the .LGR instrument configuration file using the [SymphoniePRO Desktop Application](#) software. For complete .LGR file configuration information and details, refer to **Section 5** of the [SymphoniePRO® Data Logger - Wind](#) manual.
 - a. Email Scheduling
 - b. Networking
2. Complete the physical installation of the SymphoniePRO logger, iPackACCESS, and RockREMOTE Mini terminal into the shelter box, as well as the necessary wiring, and cable connections.
3. Mount the antenna and bracket to the tower.
4. Connect the Iridium antenna cable to the Iridium terminal on the modem. Connect the GPS antenna to the GNSS terminal on the RockREMOTE Mini.
5. Confirm successful setup by initiating a test call from the SymphoniePRO logger. Confirm receipt to the intended address.

SymphoniePRO Configuration

Schedules Tab – Email Schedule Section



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The Schedule's tab needs to be configured for use with the RockREMOTE Mini system using the SymphoniePRO Desktop Application software.

Because the RockREMOTE Mini handles the SMTP portion of the data transfer through an IMT connection, individual account programming in the Schedule's tab is not required.

Note: RockREMOTE Mini takes care of SMTP, Username, Password and Sender's Email in the pre-configuration of the modem, prior to shipping. Utilizing the parameters shown below for all RockREMOTE Mini installations is preferred. Enter a trusted CC email address to receive the daily .rld data file from the SymphoniePRO logger.

MetLink Logger Initiated Schedule ⓘ	Time Service ⓘ
Frequency: Disabled ▾	☐ Use SNTP ☐ Use GPS
Time (Logger Local): 20:01 ⌚	Time Server: 192.168.250.1
Duration: 30 Minutes	
Primary Host Name: wind.nrgsystems.com	
Port: 30406	
Secondary Host Name: wind.nrgsystems.com	
Port: 30406	
☒ Enable Diagnostic Check-In ⓘ	

MetLink Logger Listening Schedule	Email Schedule
Frequency: Daily ▾	Frequency: Daily ▾
Time (Logger Local): 09:00 ⌚	Time (Logger Local): 09:00 ⌚
Duration: 30 Minutes ▾	SMTP Server: 192.168.250.1
	SMTP Port: 25
	User Name: RR_Mini
	Password: ●●●●●●●●
	Sender's Email: data@data.com
	Sender's Name: data@data
	Recipient's Email: cloud@nrgsystems.com
	Recipient's Name: Enter recipient's name
	CC Email: xxx@nrgsystems.com
	CC Email 2: xxy@nrgsystems.com
	Subject Line: RR Mini Data



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Time Server and Email Schedule programming:

- Time Server: 192.168.250.1
- SMTP Server: 192.168.250.1
- SMTP Port: 25
- Username: RR_Mini
- Password: rockremote
- Sender's Email: data@data.com
- Sender's Name: data@sitename

Note: Sender's email address and sender's name can be anything wanted. SymphoniePRO requires that these boxes have something programmed. Ultimately, the RockREMOTE Mini pushes the data via an IMT connection.

MetLink Logger Listening

A Public Static IP address is an available option through the Cloudloop activation process. If remote access to the station is required, MetLink Logger Listening must be enabled with a **daily** frequency within the SymphoniePRO Schedules tab configuration. It is recommended to schedule the timing for a convenient logger-local time, for a duration of 30 minutes per day. Utilizing longer listening windows will affect the data usage on the Iridium SIM card account.

iPackACCESS Configuration

iPack Tab—Network Section

The best practice is to configure the iPack settings in an .LGR configuration file prior to field installation.

All iPackACCESS installations using the RockREMOTE Mini Iridium modem require the programming to match the details below.

- *Enable Comms Module Power Terminals* must be **checked**.
- *Enable DHCP* box should **NOT** be checked.

iPack Static IP Address	192.168.250.90
Subnet Mask	255.255.255.0
Gateway	192.168.250.1
Primary DNS Server	8.8.8.8
Secondary DNS Server	8.8.4.4

The Modbus Server Window can be left blank.

Network

☒ Enable Comms Module Power Terminals ⓘ
 ☐ Enable DHCP ⓘ

iPack Static IP Address

Subnet Mask

Gateway

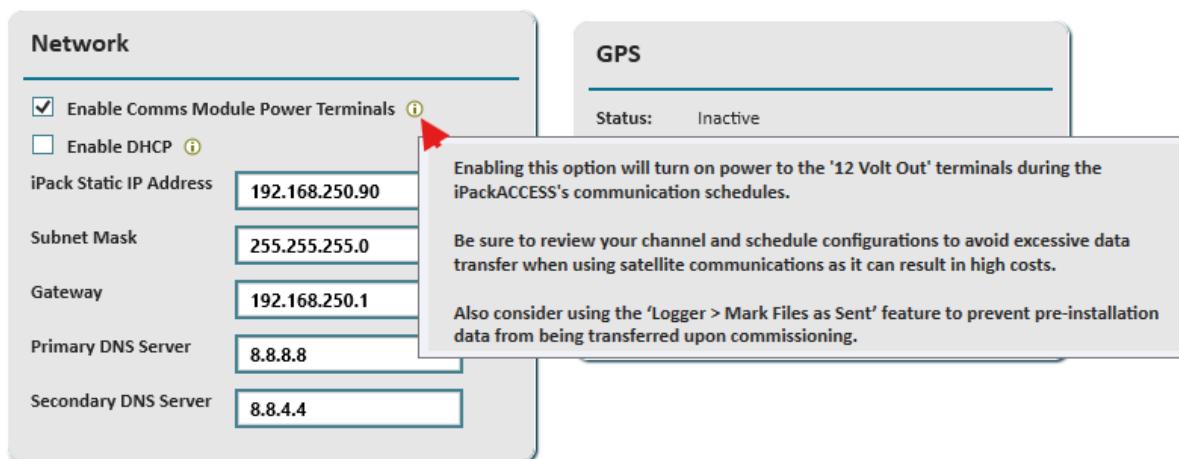
Primary DNS Server

Secondary DNS Server



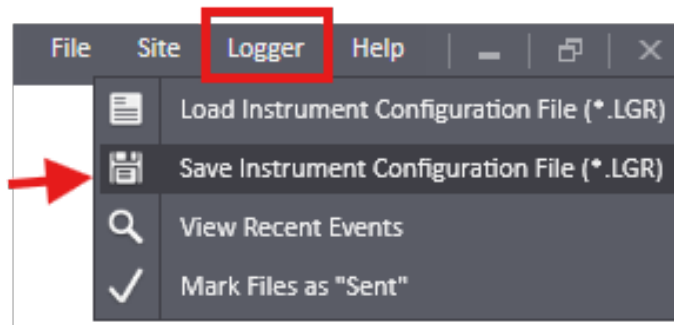
iPackACCESS with RockREMOTE Mini Satellite Terminal

There are several information icons throughout SymphoniePRO Desktop software. Hover over the icon to access more details.



SymphoniePRO logger, iPackACCESS, and RockREMOTE Mini Physical Installation

- Instructions for connecting the SymphoniePRO logger to the iPackACCESS, mounting the products in the shelter box, and connecting the logger wiring panel can be found in Sections 4.3 and 4.4 in the [SymphoniePRO® Data Logger - Wind](#) manual.
 - Once the logger is configured and the settings are confirmed, save the .LGR file locally so it can be shared/referenced later if needed.



- The .LGR file will be saved to the C:\Users\user\Documents\Renewable NRG Systems\Sites folder.



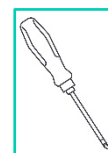
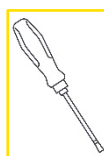
iPackACCESS with RockREMOTE Mini Satellite Terminal

- Mount the RockREMOTE Mini terminal to the shelter box backplate.
 - Utilizing the (4) #6 x 0.5" self-tapping screws provided (PN 3129), mount the terminal vertically with the connectors pointing down, next to the logger.



- Connect the Ethernet cable between the RockREMOTE terminal and the bottom of the iPack.
- Connect the power cable between the RockREMOTE terminal and the bottom of the iPack 12Volt Out +|- terminals.

- Red: +
- Black & Bare: -



- Mount the 2 GPS antennas to the top of the shelter box using the self-adhesive metal discs supplied in the iPack kit. The smaller square GPS antenna connects to the iPackACCESS. The larger GPS antenna connects to the GNSS terminal on the RockREMOTE Mini. Route the cables through the base of the shelter box and connect to the antennas to the appropriate ports.
- Mount the satellite antenna to the antenna magnetic mount (PN 19820).



iPackACCESS with RockREMOTE Mini Satellite Terminal

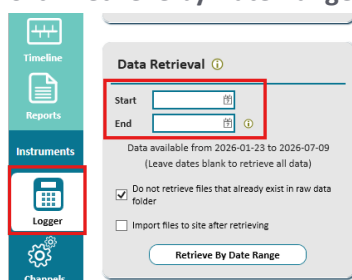
- The bottom section of the antenna comes separated from the top in the bag. Install the thin black gasket into the groove on bottom section of the antenna.
- Thread the large end of the antenna cable up through the antenna mount and lower (small section) of the antenna, then connect to the top section antenna terminal.
- Carefully screw the white antenna base onto the threaded pipe. **Take extra precautions to ensure this does not cross-thread.**
- Close the antenna base, fastening the (4) screws, using the supplied Allen key.
- Connect the other end of the antenna cable to the Iridium port on the RockREMOTE mini terminal.



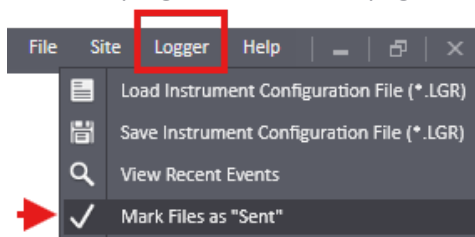


Test Call Initiation

- **Important!** To prevent the modem from sending every data file that is saved in the SymphoniePRO logger internal memory during the first call attempt, it is **highly** recommended to mark all files as “sent” before attempting a test call. If any of the internal data needs to be shared or saved prior to marking all files as sent, now is the time to save the files locally.
 - Connect to the SymphoniePRO logger via USB A-B cable.
 - Log into the site from the Fleet View home page.
 - Navigate to the **Logger** tab on the left margin.
 - In the **Data Retrieval** window, enter the start and end dates for data files to be saved locally.



- Click **Retrieve by Date Range**.
- Files will be saved to the C:\Users\Documents\Renewable NRG Systems\Raw folder location.
- To complete the process of marking files as sent, follow these simple steps.
 - On the top right corner of the page click on **Logger > Mark Files as “Sent”**.



- Answer **yes** to the questions.
- After 10 minutes have passed, allowing the logger to write a new file, press **[Home][2][2][1][6]** to send a single data file.
 - Observe the LCD screen of the logger during the test call process.
 - Confirm that the green power light on the RockREMOTE Mini is illuminated.
 - Once the call is complete, check the recipient email addresses to confirm that an .rld data file was received.

Metlink Listening Schedule and Public IP Address Connection Test

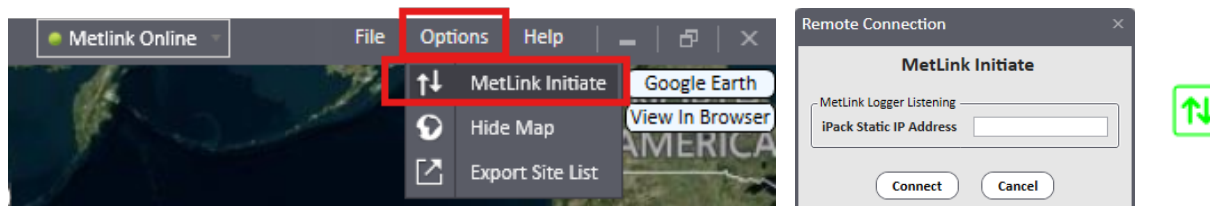
The Metlink Listening schedule can be programmed to listen for a short time each day to enable a remote connection to the system via the Public Static IP address supplied through the activation of the SIM card account from Ground Control.



iPackACCESS with RockREMOTE Mini Satellite Terminal

Once programmed and saved to the logger, test the Metlink connection using the supplied Static IP address.

- At the logger keypad, press **[Home][2][2][1][3]** to force a Metlink Listening event.
- From the SymphoniePRO Desktop App Fleetview home screen, choose **Options>Metlink Initiate**. Then enter the supplied Static IP Address and select **Connect**.
- If the SIM card is activated and the antenna signal is connected to the Iridium network, the SPD software will connect to the device and illuminate the two arrows Green for the site.



- Make sure to **disconnect** from Metlink following the test so the modem does not stay connected to the Iridium network utilizing data.

Take the time to organize the shelter box and cable connections. Finish documentation as needed and take lots of pictures.

Additional Details

RockREMOTE Mini Specifications can be downloaded from the Ground Control website:

<https://www.groundcontrol.com/wp-content/uploads/2025/04/RR-Mini-Web-UK-2025.pdf>