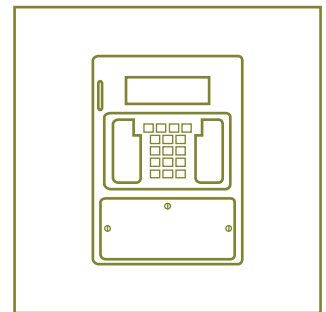




SymphoniePRO

An advanced data logging system that is purpose-built for the renewable energy professional. SymphoniePRO™ is RNRG's most powerful data logger to date, offering significant upgrades in terms of capability and flexibility while building on the unparalleled foundation that is the Symphonie product line; a series of application-specific and user-friendly data loggers.

- Unrivaled ease-of-use via integrated, purpose-built hardware and modern, intuitive desktop software.
- Advanced features + flexibility deliver accurate data as cost-effectively as possible.



Wind Resource
Assessment



Solar Resource
Assessment



Solar
Monitoring



Unrivaled Ease-of-Use

Even with significant advancements in capability and flexibility, SymphoniePRO continues and improves on the Symphonie legacy as a data logger that is simple to use, offering everything you need and nothing you don't.



Integrated Hardware Design

True to the Symphonie name, SymphoniePRO requires limited peripherals and is simple to assemble, meaning fast and easy field installations, every time.

- **Backwards-compatible** with modular communications and autonomous power unit, **iPackGPS**.
- Large wiring panel with integrated bracket mounts quickly and is easily accessible. Color-coded label and dedicated terminals for every wire help ensure **mistake-free wiring**.
- Smart mounting bracket system **speeds physical installation and maintenance** of logger and iPackGPS.
- USB connector for **easy configuration** via PC.
- Logger LCD and keypad with menu-driven navigation are easy to read in all light conditions for real-time data and configuration information.



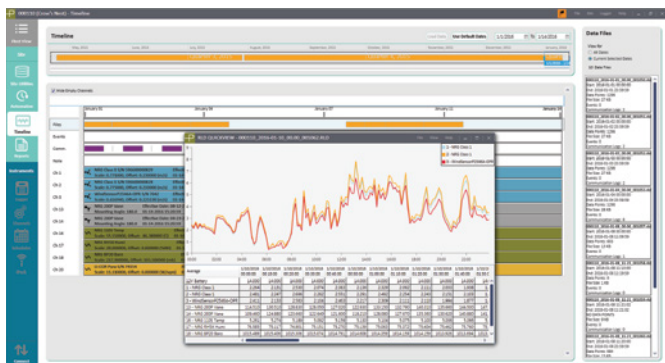
Modern and Intuitive Desktop Software

SymphoniePRO Desktop Application is engineered to work seamlessly with SymphoniePRO data loggers to configure equipment, process data, and manage your fleet of measurement stations.



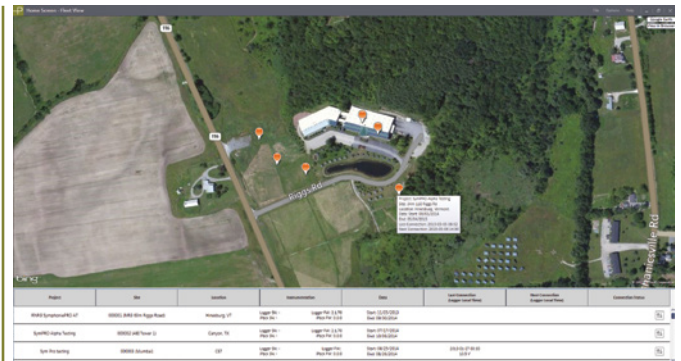
Instrument configuration

No complex programming required – configuration is performed with simple drop-down menus via a USB-connected PC running the SymphoniePRO Desktop Application.



Processing data

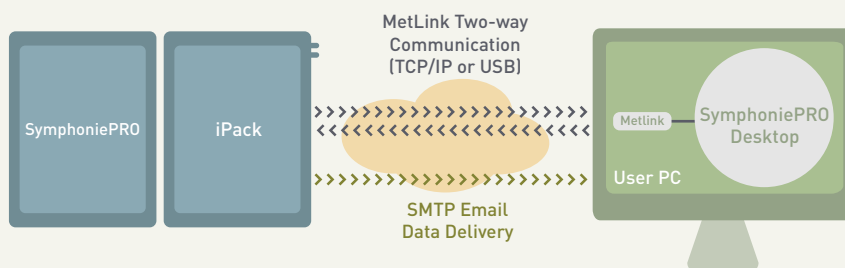
Efficient binary *.RLD files from the logger scale to fit your configuration and budget. SymphoniePRO Desktop Application processes these into versatile tab-delimited text (ASCII) files for analysis in third-party software. Like past Symphonie loggers, delivery of raw data means you can always re-scale and re-export data during processing.



Fleet management made easy, including:

- Fleet view with site-by-site status information, connection status, and integrated map with link to Google Earth.
- Site database and sensor history via Timeline, a chronological view of data files, events, communications, and sensor configuration.
- Automation of file download, import, and firmware uploads to logger and/or iPackGPS.
- Have a standard configuration? Equipment configuration (*.LGR) files can be saved and re-used over and over.

Multiple-language support
Easily select the language you would like to use – SymphoniePRO Desktop Application supports English, Spanish, Portuguese, and Chinese.



Flexible Communications
Multiple data delivery options and real-time, bi-directional communication capability – enables live data viewing for site health checks, configuration changes, and firmware upgrades.

Advanced Features and Flexibility

State-of-the-art technology delivers accurate measurements and provides freedom to perform advanced studies with your preferred configuration.

Advanced Measurements

Accurate, high-resolution analog measurements via 16-bit ADC.

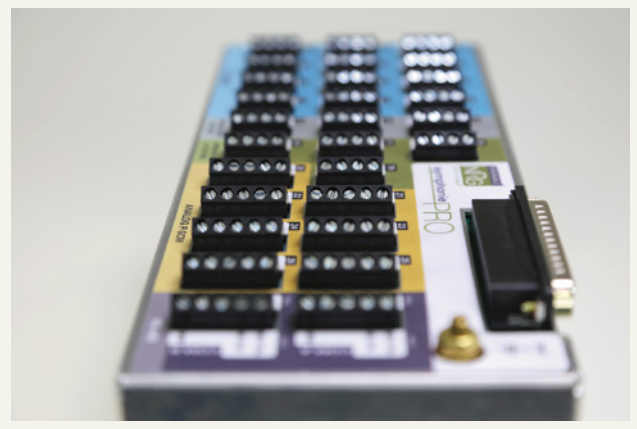
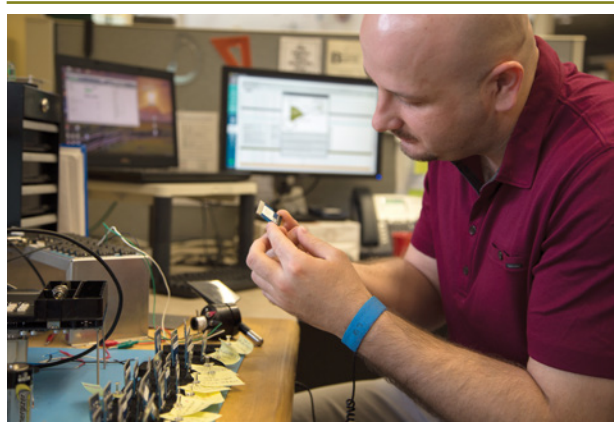
Differential inputs on P-SCM channels improve measurement of small signal sensors, isolating signal from ground noise.

Three-second gust recorded on each wind speed channel in addition to min and max 1-second samples.

Extensive meta data are collected including logger diagnostics, communications information, and events, facilitating intelligent site and fleet management.

Collected data are stored reliably and securely with:

- Redundant storage on internal Flash and industrial-rated SD card.
- Logger access PIN, preventing unauthorized access and data files are 128-bit encrypted.
- SymphoniePRO Wiring Panel, providing channel-by-channel surge protection, tested to IEC 61400-4-5.



Flexible Data Collection

- 26+ channels provide ample capacity for typical resource assessment campaigns or special projects alike; including 12 counter, 14 analog, and two RS-485 ports.
- Record data at the optimal rate for your application with a user-selectable averaging interval (10-minute default).
- IEC-compliant 1 Hz sample rate with optional storage of 1 Hz sample data by channel – facilitates advanced studies like turbine site suitability or ramp rate studies for integration of utility-scale projects on small grids.
- Compatible with a wide array of industry-standard and specialized devices so your measurement campaign's design is not limited by your data logger.
 - Counter channels and built-in analog channels include native compatibility with industry standard sensors – no peripherals required.
 - Signal Conditioning Modules (P-SCMs) customize analog input circuitry to optimize measurements for third-party devices.
 - Two RS-485 ports each support full or half duplex communication with smart sensors like ultrasonic wind sensors.

For more information:
Renewable NRG Sales
110 Riggs Road
Hinesburg, VT 05461 USA
+1 802-482-2255
sales@nrngsystems.com

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SARTELCO® SISTEMI SRL

Via Torri Bianche, 1
20871 Vimercate (MB)

Tel. +39- 039- 62905.1 Fax. +39- 039- 62905.99
e-mail sistemi@sartelco.it Web www.sartelco.it

