※ **Thanks for selecting the eLOG01- G3 logger; please read this manual carefully before using the product.**

※ **Please keep this manual for future reference.**

PRODUCT INTRODUCTION

eLOG01-S-G3 || eLOG01-M-G3

1. Overview

The eLOG01-G3 series data logger is developed according to our latest communication technology standards, and can record device parameter in real-time through RS485 communication. The eLOG01-S-G3 is a single-channel logger that can only be connected to one device, and the eLOG01-M-G3 is a multi-channel logger that can connect up to 8 devices at the same time. All of them are simple to operate and easy to use.

Features

➢ Record & download system data

➢ Compatible with PC software & APP for real-time monitoring

➢ Connect to PC via USB interface with high compatibility

➢ Powered up by inverter communication interface

➢ LED Indicator design, more intuitive display

2. Characteristics
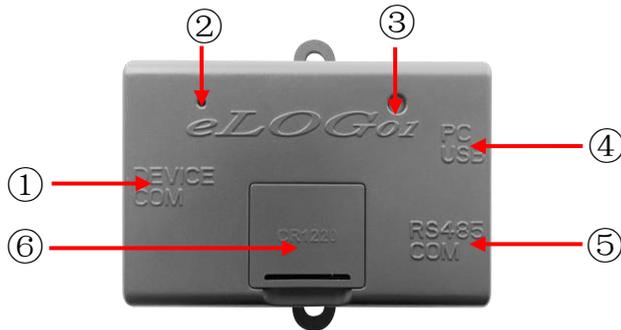
No.	Port	Instruction
①	DEVICE COM interface (RJ45)	To connect the solar controller, inverter, and inverter/charger.
②	Reload button	One key to clear log records and restore to factory settings.
③	WORK indicator	Indicate the device working status.
④	PC USB interface (Micro USB)	To set parameters of the eLOG01-G3 logger.
⑤	RS485 COM interface(RJ45)	To connect with PC, Bluetooth and other accessories, used for transparent transmission and data download.
⑥	Coin cell battery holder	To install the coin cell battery (CR1220), the eLOG01-G3 logger's internal clock will still function normally even after it is powered off.

⚠ **NOTE:** After restarting the eLOG01- G3, please adjust the clock accurately; otherwise, it will lead to eLOG01-G3 time disordered.

⚠ **NOTE:** The eLOG01-G3 logger must be equipped with a coin cell battery (customer-supplied parts); otherwise the stored data timestamps will be abnormal after the logger is powered off and restarted.

3. Button Instruction

Button	Operation	Instruction
Reload button	Press and hold for 5s	Clear log records and restore to factory settings.

4. Indicator Instruction

Indicator	Status	Instruction
Green LED	Blink once every 2.5 seconds	Normal working
Red LED	Blink once every 1 second	Device not connected, or abnormal communication with device
Green LED/Red LED	Blink once every 1 second	When multiple devices are connected at the same time, one or more devices are abnormally communicating.
Red LED	Fast flashing (2Hz)	Clear log records

5. Operation Instruction

5.1 Communication Cable

Name	Model	Picture	Function
① Communication cable	CC-USB-MINIUSB-150U (Included accessory)		To connect the PC, for logger's parameters setting.
② RS485 communication cable	CC-RS485-RS485-200U (Included accessory)		To connect the solar controller, inverter, and inverter/charger etc.
③ PC communication cable	CC-USB-RJ45-150 (Included accessory)		To connect the PC for real-time monitoring, data download and export.

Note: The standard cable ② CC-RS485-RS485-200U is only suitable for RJ45 type products, if the communication port is not RJ45, please purchase an additional communication cable.

5.2 Download Software

Name	Model	Picture	Function
PC software	Solar Guardian		Configure the logger's parameters, real-time monitoring the device, or download the records.
Download website	https://www.epever.com/support/softwares/		

5.3 Configure Parameters

Note: Before downloading data records, please configure the parameters of eLOG01-G3 correctly by the PC software "Solar Guardian."

(1) Install the PC software "Solar Guardian." For detailed installation, please refer to the "Solar Guardian Installation," which is stored in the installation package by default.
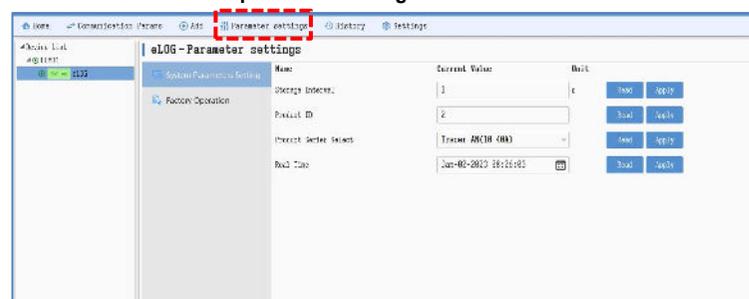
(2) Connect the eLOG01-G3 to PC by standard cable ①.

eLOG01-S-G3 connection

eLOG01-M-G3 connection
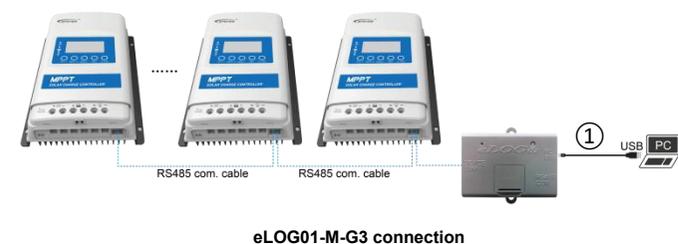
Note: The RS485 communication cables connected to eLOG01-M-G3 need to be purchased additional.

(3) Add the eLOG01-G3 and connected devices to the PC software "Solar Guardian". For specific instructions, please refer to the "Solar Guardian PC" user manual.

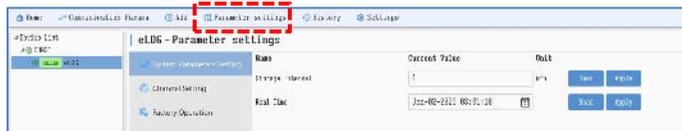**Note：The "Comm ID (device communication ID)" for eLOG01-G3 is fixed as 1.**

(4) On the main page of the PC software "Solar Guardian," click "Parameter settings" in the upper navigation bar to enter the parameter setting page.

➢ **eLOG01-S-G3 parameter settings:**

Screen	Parameter	Instruction
System Parameters Setting	Storage Interval	Interval time between every two records. The range can be set from 1 to 3600 seconds.
	Product ID	Communication ID of the connected devices. **Note: The controller and hybrid power default to 1, the inverter defaults to 3, UP-HI and UPower default to 10, and other inverter/chargers default to 1. If you have modified the communication ID, please enter the actual value.**
	Product Series Select	Click ▼ in the "Current Value" to select the product series that corresponding to the "Product ID." Note: Before modifying the product series, download the original data for backup and click "Clear Log Data" to empty the database. Because the storage fields of different product series are different, if the database is not cleared, errors can occur when exporting data.
	Real Time	Restarting or power off without installing the coin cell battery will cause the date to reset, set "Real Time" accurately to ensure the record timestamp is accurate.
Factory Operation	Clear Log Data	Clear all data records, **please operate with caution！**
	Factory Data Reset	All parameters are restored to factory defaults, **please operate with caution！**

➢ **eLOG01-M-G3 parameter settings:**

Screen	Parameter	Instruction
System Parameters Setting	Storage Interval	Interval time between every two records. The range can be set from 1 to 60 minutes.
	Real Time	Restarting or power off without installing the coin cell battery will cause the date to reset, set "Real Time" accurately to ensure the record timestamp is accurate.
Channel Setting	Channel m Product ID	Communication ID of the device connected to channel m. Note: The eLOG01-M-G3 supports up to 8 devices simultaneously. Product ID of each channel cannot be repeated (refer to "Solar Guardian PC" user manual to modify product IDs). When less than 8 devices are connected, only the corresponding channel records are set as valid, other channel records should be set as invalid, otherwise the data acquisition frequency will be affected.
	Channel m Product Series	Click ▼ in the "Current Value" to select product series of the device connected to channel m. Note: Before modifying the product series, download the original data for backup and click "Clear Log Data" to empty the database. Because the storage fields of different product series are different, if the database is not cleared, errors can occur when exporting data.
	Channel m Record Valid	Valid: Device of current channel communicates with eLOG01-M-G3, and data is recorded and stored after the communication is normal. Invalid: Device of current channel does not communicate, and data will not be recorded and stored.
Factory Operation	Clear Log Data	Clear data records for all channels, **please operate with caution！**
	Factory Data Reset	All parameters are restored to factory defaults, **please operate with caution！**

5.4 Data Storage

Configure the parameters correctly as per section **5.3**, and then, disconnect the eLOG01-G3 and PC. If the working indicator of the eLOG01-G3 flashes green (about once every 2.5 seconds), the data storage is normal. The following diagram takes eLOG01-S-G3 as an example, the indication status of eLOG01-M-G3 is the same.


The working indicator flashes green, data storage is normal.

Note: eLOG01-S-G3 data storage interval defaults to 900 seconds, and eLOG01-M-G3 data storage interval defaults to 15 minutes. The same module can record a maximum of 20,000 data entries.
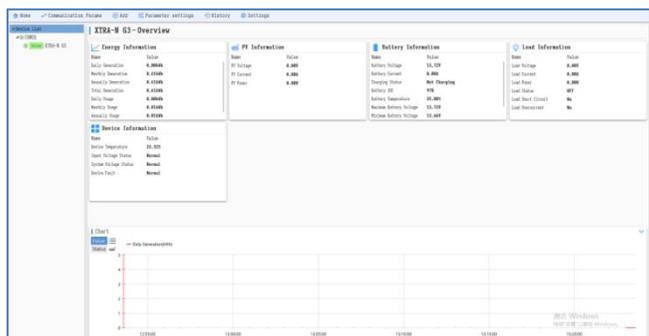
5.5 Real-time Monitoring

Note: Data transparent transmission is mainly aimed at PC software, Bluetooth and other accessories, which realizes real-time monitoring of the system by accessories while storing and recording data.

(1) Connect the eLOG01-G3 to PC by standard cable③.

eLOG01-S-G3 connection

eLOG01-M-G3 connection
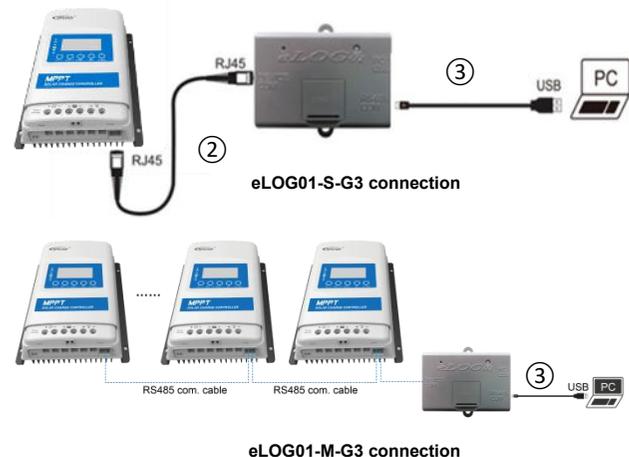
(2) On the "Solar Guardian" main page, double click the device has been added to the COM port to check the real-time status.


Note: Please refer to the "Solar Guardian PC" user manual for details.

5.6 Historical Data Download and Export

(1) Connect the eLOG01-G3 to PC by standard cable ③. The connection diagram is the same as 5.5 Real-time Monitoring.

(2) On the "Solar Guardian" main page, click "History > Device History Export."
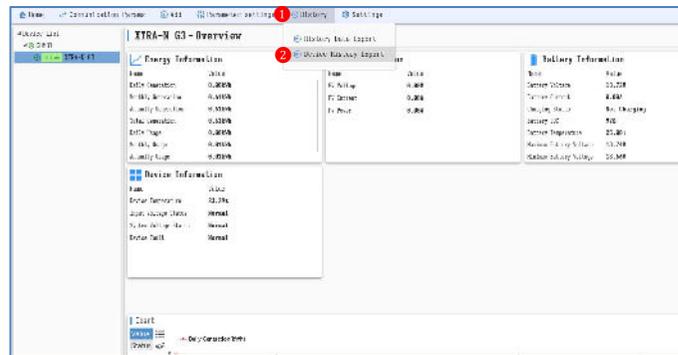
(3) Enter the "Device History Export" page, select "Historical Data" in the "Type" column, and click the "Generate" icon.
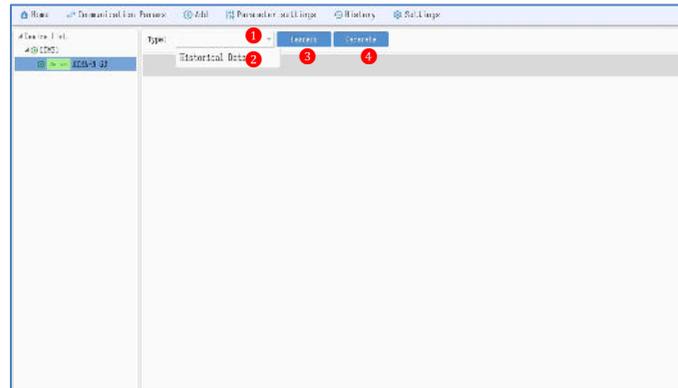

Note: Click "Headers" to select the parameter fields to be exported, and select all by default.

(4) After the historical data is generated, they will be displayed in the form of a list on the page, as shown in the following figure.
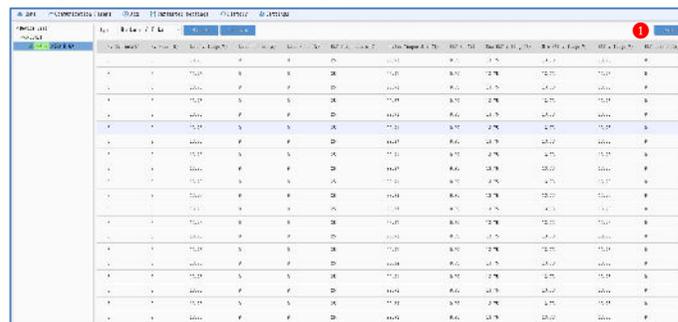
(5) Click the "Export" button in the upper right corner, select the storage location and input the name of the exported file, and click "Save." If the message "Operation succeeded" is displayed on the page, the export is complete. You can view and analyse data by the exported file.

XTRA-N G3.xlsx

Save downloaded data as "xlsx" file
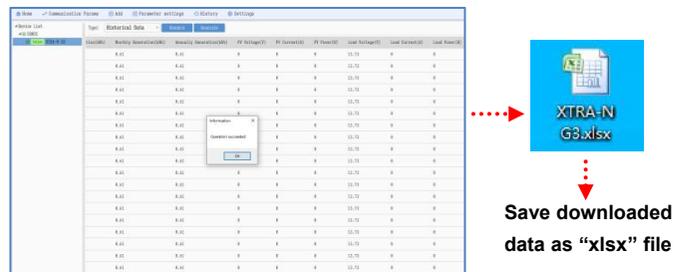
6. Specifications

Model	eLOG01- S-G3	eLOG01- M-G3
Input Voltage	4~10VDC (Powered by RS485 com. port)	
Power Consumption	Power on <35mA, normal work <7mA, data export <20mA	
Configuration Method	Configure and monitor by the PC software	
Baud Rate	115200	
Communication Method	RS485	
Storage Interval	1~3600 seconds (configurable), 900 seconds by default	1~60 minutes (configurable), 15 minutes by default
Interface Type	2 RJ45, 1 Micro USB	
Connection Cable	Standard network cable (parallel line)	
Dimension	71mm x 67.62mm x 25.8mm	
Mounting Size	57.6Mm, Φ4.5	
Work Temperature Range	-25℃~ 75℃	
Relative Humidity	≤ 95% (N.C)	
Enclosure	IP30	
Net Weight	42g	

Any changes without prior notice Version Number：   V1.0