

LI-1500 Light Sensor Logger



The LI-1500 Light Sensor Logger provides a direct digital readout and data logging from up to three LI-COR sensors at the same time. Log manually or set up one-time, daily, or continual logging routines. Take advantage of the intuitive, menu-driven interface, optional GPS system, high frequency measurements up to 500 Hz, and built-in math functions.

Why choose the LI-1500?

- Large 1-GB memory for storing data and up to 100 sensor-specific multipliers
- Rugged, weather-resistant housing and optional GPS for outdoor use or transect measurements
- Eight math functions, including integration, natural logarithm, and underwater attenuation

LI-1500 Specifications

Current Inputs: 3 BNC connectors for LI-COR sensors

Output Channels:

- Light
- 8 Math Channels: addition, subtraction, multiplication, division, natural logarithm, integration, daily integration, attenuation
- GPS (optional)
- Prompt
- Battery Voltage

Input Channel Specifications:

- Frequency Rejection: >70dB at 50 or 60 Hz (1 input channel @ sampling rates of 1, 2, 5, 10, 20Hz)
- Current Accuracy: $\pm 0.3\%$ of full scale reading @25 °C
- Signal Ranges:

Range #	Current Range	Resolution (Typical)
1	0 – 0.250 μ A	0.0305 nA
2	0 – 2.50 μ A	0.1525 nA
3	0 - 25 μ A	1.525 nA
4	0 - 250 μ A	15.25 nA

- Raw Mode (1 – 500 Hz): Selectable Range
- Standard Modes (Continual, Manual, Daily, One Time):
 - Auto range for total sampling rate ≤ 3 Hz (e.g. 1 Hz sampling on three input channels)
 - Fixed range (selectable) for total sampling rates > 3 Hz (e.g. 2 Hz sampling on two input channels)

Sampling Rates:

- Standard Modes: 0.01 Hz, 0.1 Hz, 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz
- Raw Mode: 1 – 500 Hz (1 Hz through 500 Hz in whole number increments)

Logging Rates:

- Standard Modes Sampling: Every Sample, 100 msec, 200 msec, 500 msec, 1 sec, 5 sec, 10 sec, 15 sec, 30 sec, 60 sec, 100 sec, 5 min, 15 min, 30 min, 1 hr, 2 hr, 3 hr, 6 hr, 12 hr, 24 hr
- Raw Mode Sampling: Every sample (1 – 500 Hz)

Averaging:

- Multiple averaging windows available with standard mode sampling

Display: 128 x 64 graphics display

Real-Time Clock:

- Year, Month, Day, Hour, Minute, Seconds
- Accuracy of ± 3 minutes per month

Data Storage Capacity: 1 GB (FAT16 file system)

Communications: USB (as mass storage device)

Global Positioning System (Option): GPS RADIONOVA® RF Antenna Module

Power Supply Options:

- 4 "AA" size batteries
- USB, AC-DC power adapter
- USB, external battery power pack (customer supplied)

Battery Life:

- 80 hours life (typical usage with 1 Hz sampling and logging rate)
- 40 hours life (typical usage with GPS option on)

Environmental Conditions:

- Operating Temperature Range: -20 to 50°C
- Humidity Range: 0 to 95% RH (non-condensing conditions)
- Storage Temperature Range: -40 to 65°C

Size: 20.9 x 9.8 x 3.5 cm (8.2" x 3.9" x 1.4")

Weight: 0.454 kg (1.0 lb) with batteries

Specifications subject to change without notice.