# EL-CC-1 Series Cold Chain Goods Data Loggers







- ✓ Data loggers designed for monitoring chilled, frozen or ripening food environments
- ✓ Encapsulated packaging seals out dust and water up to 1 meter of immersion (IP67)
- ✓ Samples and records temperature with a time and date stamp once every 10 minutes
- ✓ Built-in alarm LED set to trigger at pre-configured temperature limits
- ✓ Reusable with over a 12-month battery life
- ✓ Data export options include PDF, Excel, JPEG image
- ✓ All software is included
- ✓ Sold in packages of 10 data loggers



### **EL-CC-1 Description**

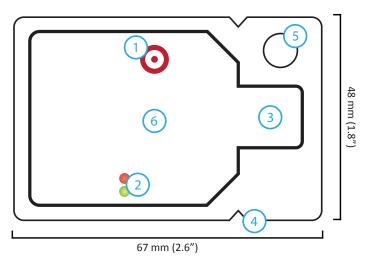
Simplicity defines the EL-CC Data Logger approach to ensure that food stuffs of any type were not exposed to dangerous temperature extremes during transit and handling. Packaged in their own hermetically sealed bag, EL-CC data loggers are offered as three individual models each configured to alarm at a specific temperature range: one model each for frozen, chilled, and ripening food stuffs. The data loggers can be initiated on-the-spot and placed into service without the need for configuration software. A preprogrammed 30-minute delay prevents alarms from triggering until the logger is fully saturated in the ambient temperature it's monitoring. The logger samples at a fixed rate of one sample every 10 minutes, and contains enough memory to provide 220 days of total record time. At any time during the recording process the logger's control button can be pressed to activate built-in LEDs. That action saves a marker in the recorded data stream to indicate the event. At the same time the LEDs illuminate to indicate devices status and alarm states. If pre-programmed temperature extremes were breached, the LEDs provides an instant visual indication of the problem without the need to download and review recorded data. After deployment the logger may be connected to the USB port of a PC to upload all recorded temperatures and events, each correlated with a specific date and time of acquisition. Data can be sent to a PDF, Excel, or JPEG image file. Software is downloadable and provided at no extra charge. Finally, EL-CC-1 Series data loggers are reusable. EL-CC-1 Series' built-in battery provides at least 12 months of service. And since the logger's integral protective sheath must be torn to upload data via the USB port, the water-tight IP67 integrity of future deployments can be preserved by placing loggers in model EL-CC-BAG (sold separately).

	Food Type		
	Frozen	Chilled	Ripening
High temperature alarm	-16 °C	8°C	14°C
Low temperature alarm	-20°C	2 °C	12°C
Logging interval (record time)	10 minutes (220 days)		
Model	EL-CC-1-002	EL-CC-1-001	EL-CC-1-003

<sup>\*</sup> Each model is sold as a package of 10 data loggers

## **EL-CC-1 Series Close-up**

1	Start /Status button. Press and hold until the LED lights green to begin recording. Alarms are automatically held off for 30 minutes to allow the logger to settle into the environment. Press again at anytime to see alarm and device status.
2	Status LEDs. Two LEDs indicate device and alarm status (see next section.)
3	USB interface connector for uploading temperature and date and time data to a PC.
4	Hermetically-sealed packaging designed for IP67 exposure. Drop the entire logger into the environment you want to measure without damage.
5	Mounting hole for convenience.
6	Model information including model number, its targeted use (frozen, chilled, or ripening) and its specific alarm limits.



#### EL-CC-1 Series Alarm and Status LED

After the EL-CC-1 Series logger is deployed and monitoring temperature, its Start/Status button may be pressed at any time to instantly reveal both the status of the device and the temperature alarm state through two LEDs. This action simultaneously inserts an event marker in the recorded data stream for future reference. The logger is preprogrammed to suppress alarms until 30 minutes after deployment, allowing full exposure to ambient temperature to prevent a false alarm.

	Description	Comment
	Green, single flash The data logger is currently logging data. An alarm HAS NOT been triggered.	No action required.
•	Red, single flash The data logger is currently logging data. An alarm HAS been triggered.	Check alarm condition in PC software
••	Green, double flash The data logger has stopped logging data because its memory is full. An alarm HAS NOT been triggered.	Plug the EL-CC-1 data logger into a PC to download data, and begin a new deployment.
• •	Red, double flash  The data logger has stopped logging data because its memory is full. An alarm HAS been triggered.	Plug the EL-CC-1 data logger into a PC to download data, check alarm condition, and begin a new deployment.
$\circ$	No LEDs flash The data logger is not logging, or the battery is dead.	Check logger status using PC software.

## Included EL-CC-1 Series EasyLog Software

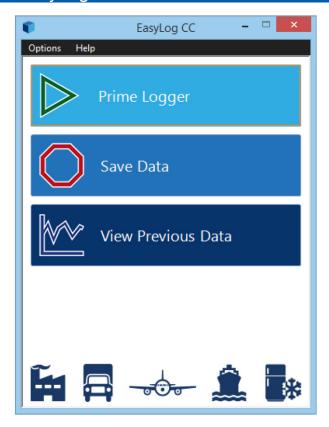
EasyLog CC software is free to download and install on as many computers as necessary. It supplies all the features you need to initialize a recording, stop it, download data, and generate a report. The software is compatible with all Windows versions.

EasyLog CC software features a point and click interface that's intuitively easy-to-use. Even the most tech-challenged user can easily initialize a recording session, or download and interpret recorded data.

**Prime logger** initializes a data logger for a new recording session after data is uploaded.

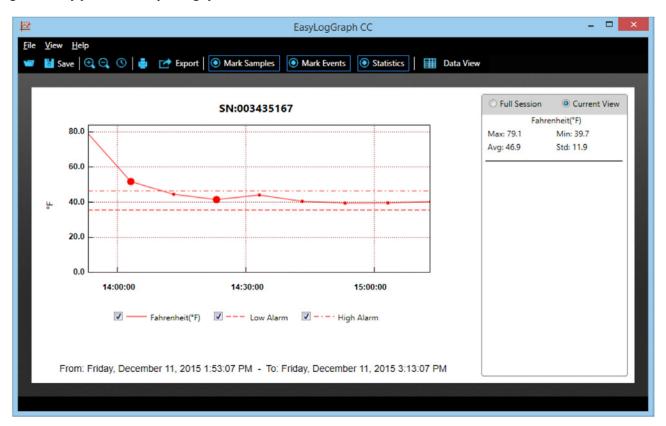
**Save data** retrieves recorded data from an EL-CC-1 data logger and allows you to store it in an archive on the PC's disk drive.

**View previous data** allows archived data to be viewed using a built-in plotting utility, exported to Excel for analysis and report generation, or converted to a concise PDF report.



## Included EL-CC-1 Series EasyLog Software (continued)

The screenshot below shows a typical display of data uploaded from an EL-CC-1 Series data logger using EasyLog CC software. Radio buttons on the user interface configure the display to show any combination of samples (small red dots), event marked samples (large red dots), and statistics. The Statistics option calculates and displays average, minimum, maximum, and temperature standard deviation. The Export button allows data to be exported to a PDF file of data and events, or only, or graphics with statistics. A CSV file can also be created suitable for importing to Microsoft Excel. Finally, a JPEG image formatted output provides the most portable way that data can be exchanged with any platform and operating system.



Specifications				
Measurement range	-30 to +60°C (-22 to +140°F)			
Resolution	0.1°C (0.1°F)			
Accuracy (overall error)	±0.5°C maximum (±1°F)			
Battery life	12 months (minimum)			
Environmental protection	IP67*			
Readings	32,600			

<sup>\*</sup> The data logger is protected against moisture to the IP67 standard when housed in its original, unopened packaging, or an optional EL-CC-BAG or equivalent.

Ordering Guide				
Description	Order No.			
EL-CC-1-001 Cold Chain logger for CHILLED foods. Low alarm at 2°C (35.6°F). High Alarm at 8°C (46.4°F).	EL-CC-1-001*			
EL-CC-1-002 Cold Chain logger for FROZEN foods. Low alarm at -20°C (-4°F). High Alarm at -16°C (3.2°F).	EL-CC-1-002*			
EL-CC-1-003 Cold Chain logger for RIPENING foods. Low alarm at 12°C (53.6°F). High Alarm at 14°C (57.2°F).	EL-CC-1-003*			
Optional Accessories				
EL-CC-BAG Pack of 5 spare bags for logger re-use. IP67 rating.	EL-CC-BAG			

<sup>\*</sup> Each model is sold in a package of 10 units

#### Included



EL-CC-1 Logger (choose from 3 options)



Software via download

#### **Optional Accessories**

EL-CC-BAG Spare Bags (5)



241 Springside Drive Akron, Ohio 44333 Phone: 330-668-1444 Fax: 330-666-5434

#### **Data Acquisition Product Links**

(click on text to jump to page)

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