

2020 LOWER-COST ENVIRONMENTAL DATALOGGER QUICK COMPARISON CHART

Model, and Manufacturer	Accuracy	Wireless/Bluetooth/USB	Unit Price*‡	Software	Notes
EasyLog EL-USB-2 Lascar www.lascarelectronics.com	T: ±0.55°C from 5 to 60°C RH: ±2.25% from 20 to 80%	USB (direct to computer)	\$74.99	<i>EasyLog</i> Free download	No alarm function
LogTag HAXO-8 Temp and Humidity Recorder www.techinstrument.com	T: ±0.5°C from 0 to 50°C RH: ±3% from 20-80% (at 25°C)	USB via docking station (\$49)	\$79	<i>LogTag Analyzer</i> Free download	Provides alert function
HOBO Low Energy Temp/RH Data Logger MX1101 Onset www.onsetcomp.com	T: ±0.21°C from 0 to 50°C RH: ±2.0% from 20-80% (at 25°C)	Bluetooth	\$135	<i>HOBOMobile App</i> for iOS/Android Free download	Direct data access within 100-foot range
HOBO Temp/RH/Light/External Data Logger U12-012 Onset www.onsetcomp.com	T: ±0.35°C from 0 to 50°C RH: ±2.5% from 10-90% (at 25°C)	USB cable (not included in unit price, but available with HOBOWare Pro package)	\$140	<i>HOBOWare</i> Free download <i>HOBOWare Pro</i> \$75 download	No alarm function, measures light intensity
HOBO 3.5% Temp/RH Data Logger UX100-003 Onset www.onsetcomp.com	T: ±0.21°C from 0 to 50°C RH: ±3.5% from 25-85% (at 25°C)	USB cable (not included in unit price, but available with HOBOWare Pro package)	\$89	<i>HOBOWare</i> Free download <i>HOBOWare Pro</i> \$75 download	Visual alarm thresholds
log-EZ RTR-322 TandD www.tandd.com	T: ±1°C from 0 to 50°C RH: ±6% from 15-90% (at 25°C)	Wireless between logger and Dongle Data Collector (extra USB \$50)	\$109	<i>log-EZ</i> Free download	No alarm function, fixed sampling interval 10 minutes

Model, and Manufacturer	Accuracy	Wireless/Bluetooth/USB	Unit Price*‡	Software	Notes
Conserv SCS-1 Sensor Conserv Solutions https://start.conserv.io/	T: ±0.2°C from -40-85°C RH: ±2% from 0-100%	Remote wireless monitoring, no Wi-fi needed	\$220	No software, just web and mobile app	Real time alerts. Also records light and vibrations
Portable Temperature/Humidity Data Logger with USB Interface OM-141 Omega www.omega.com	T: ±1.0°C from -10-40°C RH: ±3% from 20-80%	USB (direct to computer)	\$70.98	<i>ELusb Software</i> Included on disc	Alarm included in software
Tinytag Ultra 2 TGU 4500 Gemini www.geminidataloggers.com	T: ±0.7°C from -25-85°C RH: ±3.0% from 0-95% (at 25°C)	3-pin plug to USB cable (\$39), bundle with software for \$29 discount.	\$160	<i>Tinytag Explorer</i> \$78 on disc. Bundle with cable for \$29 discount	2 fully programmable alarms
Track-It RH/Temp Data Logger 5396-0203 Monarch Instrument www.monarchinstrument.com	T: ±0.5°C from 0-60°C RH: ±3% from 20-80%	USB (direct to computer)	\$79	<i>Track-It</i> and <i>Track-It Transport</i> <i>Android App</i> Free download	2 alarms, long life battery available for \$30 more
Track-It RH/Temp Data Logger with Display 5396-0201 Monarch Instrument www.monarchinstrument.com	T: ±0.5°C from 0-60°C RH: ±3% from 20-80%	USB (direct to computer)	\$119	<i>Track-It</i> and <i>Track-It Transport</i> <i>Android App</i> Free download	2 alarms, long life battery available for \$30 more

Note: This chart is for reference only. CCAHA does not endorse or recommend any of the above models.

*Price in US Dollars before shipping and tax as of August 2020 from online retailers.

‡All dataloggers should be calibrated routinely per manufacturer's instructions, which may incur an additional fee. See manufacturer's website for information.

Further reading

National Park Service, Comparing Temperature and Relative Humidity Dataloggers for Museum Monitoring.

www.nps.gov/museum/publications/conservoogram/03-03.pdf

Relative Humidity and Temperature Pattern Book, Museums & Galleries Commission.

<https://326gtd123dbk1xdkdm489u1q-wpengine.netdna-ssl.com/wp-content/uploads/2017/03/Museums-Galleries-Commission-Relative-Humidity-and-Temperature-Pattern-Book-2000.pdf>