



OAKTON® Temperature/Humidity/Process Dataloggers

Compact, durable housing guarantees operation in busy or rugged areas!

- Automatically log temperature (°F or °C) or temperature and humidity (%RH) readings for months, then download data to your computer or printer
- Sample from once per 10 seconds to once per 2 hours—built-in clock and calendar track your data in real time
- Quickly document min/max values on site with optional IR printer

These loggers store up to 16,000 measurements, allowing you to track important temperature, humidity, and other process data for months. Loggers are ideal for shipping, storage, laboratories, factories, refrigerators, freezers, incubators, desiccators, greenhouses, and more. The two-digit LCD shows current conditions—minimum and maximum readings are available at the touch of a button. Display flashes if set limits are passed.

Model 35710-00 records temperature and features a water-resistant and dustproof IP65-rated housing. Model 35710-10 records temperature and humidity and features a dustproof IP60-rated housing.

Optional external sensors (sold separately below) allow an additional parameter to be recorded. Connect current and voltage sensors with a transmitter to log other processes such as pressure, flow, pH, and level.

Software lets you set sampling rate, create graphs, and customize logging parameters. Software/cable package is required for use with loggers (sold separately below).

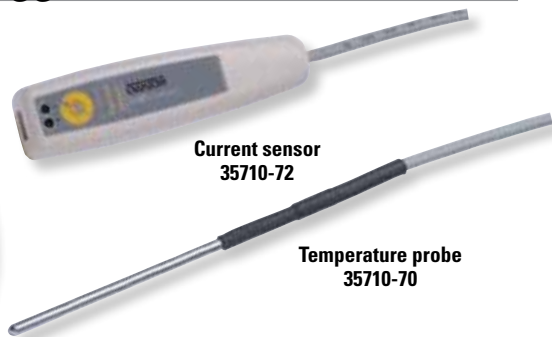
Kits include: datalogger, software, and cable.



35710-00

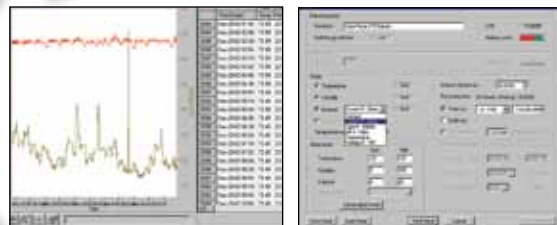


35710-10



Current sensor
35710-72

Temperature probe
35710-70



Software 35710-50

Need Technical Assistance?

Contact our expert Application Specialists to assist you.
Call 800-323-4340 or go online to e-mail or chat live



Specifications

Memory: 16,000 data points

Sampling rate: selectable via software from once per 10 seconds to two hours

Display: 2-digit LCD; 3/8" H (1.0 cm)

Power: 3.6 V lithium battery (included)

Dimensions: 1" D x 2 3/4" dia (2.5 x 7.0 cm)

Output

Infrared: IRDA (infrared data assembly) interface to printer or computer with IRDA port
RS-232: cable connection to your computer (order cable/software package separately)



Parameters	No. of channels	Range	Resolution	Accuracy	Datalogger		Datalogger kit	
					Catalog number	Price	Catalog number	Price
Temperature	One internal, one external	-22 to 122°F (-30 to 50°C)	1°F (0.5°C)	±1.1°F (±0.6°C)	SN-35710-00		SN-35710-60	
Temperature	One internal, one external	-22 to 122°F (-30 to 50°C)	1°F (0.5°C)	±1.1°F (±0.6°C)	SN-35710-10		SN-35710-62	
Humidity		0 to 100% RH†	1% RH	±3% RH from 0 to 90% RH; ±6% RH from 90 to 100% RH				

†Noncondensing environment

Accessories

SN-92600-40 Infrared printer includes one roll of paper and four AA batteries. Use infrared port to quickly download data to your portable printer.

SN-35710-50 Microlab software and 8-ft (2.4-m) cable. Required for dataloggers. Set sampling rate; view data graphically; store/export data in spreadsheet format (CD-ROM). Windows® 95/98/2000NT compatible.

SN-35710-65 Replacement datalogger battery

External Sensors can be plugged into a port located on each logger. Select from temperature, current, voltage, contact, or pH sensors. Each can be used to log and display additional external readings on your computer.

Temperature sensor is made of stainless steel and can be immersed in liquids or soil or used to measure the temperature of air. Current, voltage, and contact sensors can be scaled to match range and units of your transmitter or instrument output—use to log pH, conductivity, pressure, and more! Each sensor includes an 8.2-ft (2.5-m) cable.

INNOCAL®
INNOVATIVE CALIBRATION SOLUTIONS

SN-17002-20 NIST-traceable calibration for temperature datalogger

SN-17030-24 NIST-traceable calibration for temperature/humidity datalogger

Catalog number	Description	Price
SN-35710-70	Temperature probe, -60 to 212°F; 3/4" L x 1/4" dia (8.3 cm L x 0.6 cm dia); 6-ft (1.8-m) cable	
SN-35710-72	Current sensor: 0 to 20 mA	
SN-35710-74	Voltage sensor: 0 to 10 V	
SN-35710-76	Contact closure sensor: open/close	
SN-35710-78	pH adapter, 0 to 14 pH. pH electrode required	

Compact USB Dataloggers

Direct-to-USB connection and easy-to-use functionality

- User-programmable alarm thresholds
- All dataloggers come with software

NEW



23039-54



23039-51



23039-64



23039-58



23039-65



23039-59



23039-66

This selection of USB dataloggers measures and records a variety of parameters including temperature, humidity, voltage, current, and carbon monoxide. Simply insert any of these compact, 4.5" (11.4 cm) L loggers into your computer USB port, name it, choose your required sampling rate, select high and low alarms if required, and set the logger start time. Once configured, the logger can be removed from the computer to log independently. Data is downloaded back onto the PC where it can be analyzed and viewed as a graph using included software.

Temperature. The low-cost model 23039-51 stores over 4000 readings and has a fixed 30-minute sampling rate and a measurement range of 14 to 122°F (-10 to 50°C). For ambient temperature measurements between -31 to 176°F (-35 to 80°C), model 23039-50 stores over 16,000 readings. For application requiring an extended temperature range, model 23039-66 measures from -40 to 257°F (-40 to 125°C), stores over 32,000 readings, and features a stainless steel enclosure for more hostile environments.

Temperature, Thermocouple. Models 23039-60 and -64 accept type J, K, and T thermocouples via a connector in the base of the unit and are supplied with one type K thermocouple rated from 32 to 752°F (0 to 400°C). These loggers store more than 32,000 readings. Model 23039-64 offers the additional feature of a 4-digit LCD.

Temperature/Humidity. These loggers measure temperature and humidity from 31 to 176°F (-35 to 80°C) and 0 to 100% RH, calculate dew point, and store over 16,000 readings per parameter. Models 23039-65 and -67 offer increased accuracy. Models 23039-62 and -65 feature a 2½-digit LCD showing latest log and min/max log and have immediate, delayed, and push-to-start logging.

Real-Time Temperature/Humidity. Model 23039-59 stays permanently connected to your computer USB port—displaying real-time ambient temperature, humidity, and calculated dew point on the PC monitor. Ideal for server room applications, this datalogger can be programmed to send an e-mail or text message when a user-selectable alarm has been reached.

Process. Model 23039-54 has a 0 to 30 VDC measurement range and stores over 32,000 readings. Current measurement is provided by model 23039-56 which stores over 32,000 readings covering the 4 to 20 mA measurement range. Both units can be connected to external sensors via screw terminals located in their caps.

Carbon Monoxide. Use model 23039-58 for a 0 to 1000 ppm range and model 23039-68 for a 0 to 300 ppm measurement range; both store more than 32,000 readings. A bright red LED will flash and an audible alarm will sound when the user-determined level is exceeded.

What's included: configuration software and battery.



Catalog number	No. of channels	Range	Resolution	Accuracy	Readings	Display	Battery life (typical)	Price
Temperature dataloggers								
SN-23039-51	1	14 to 122°F (-10 to 50°C)	2°F (1°C)	±2°F (±1°C)	4080	No	1 month	
SN-23039-50	1	-31 to 176°F (-35 to 80°C)	1°F (0.5°C)	±2°F (±1°C)	32,510	No	1 year	
SN-23039-66	1	-40 to 257°F (-40 to 125°C)	0.2°F (0.1°C)	±0.4°F (±0.2°C)	32,510	No	3 years	
Temperature dataloggers, include a type K thermocouple								
SN-23039-60	1	Type K: -328 to 2462°F (-200 to 1350°C)	1°F (0.5°C)	±2°F (±1°C)	32,510	No	6 months	
SN-23039-64		Type J: -328 to 2174°F (-200 to 1190°C) Type T: -328 to 734°F (-200 to 390°C)				Yes		
Temperature/humidity dataloggers								
SN-23039-52	2	-31 to 176°F (-35 to 80°C), 0 to 100% RH	1°F (0.5°C), 0.5% RH	±1°F (±0.5°C), ±3.0% RH	16,382	No	1 year	
SN-23039-62					16,379	Yes		
SN-23039-67	2	-31 to 176°F (-35 to 80°C), 0 to 100% RH	1°F (0.5°C), 0.5% RH	±0.6°F (±0.3°C), ±2.0% RH	16,382	No	1 year	
SN-23039-65					16,379	Yes		
Real-time temperature/humidity datalogger								
SN-23039-59	2	-4 to 158°F (-20 to 70°C), 0 to 100% RH	0.1°F (0.1°C), 1% RH	±3°F (±1.5°C), ±4.5% RH	7 days worth†	No	—	
Process dataloggers								
SN-23039-54	1	0 to 30 VDC	50 mV	±1% of reading	32,510	No	1 year	
SN-23039-56	1	4 to 20 mA	0.05 mV	±1% of reading	32,510	No	1 year	
Carbon monoxide dataloggers‡								
SN-23039-58	1	0 to 1000 ppm	0.5 ppm CO	±6 ppm	32,510	No	3 months	
SN-23039-68	1	0 to 300 ppm	0.5 ppm CO	±4 ppm	32,510	No	3 months	

†Data file is overwritten at the beginning of each new logging session. Software provides the option to save the data permanently to the hard drive.

‡Not a life-saving device.

Large Display Dataloggers

Large 1 3/8" (3.5 cm) tall display can be seen from up to 25 feet (7.6 meters) away!

- Up to 32,000 data points can be stored in memory

These dataloggers feature high/low alarms, min/max readings, delayed start times, three-button keypad, and are °F/°C selectable. Download data to your PC via the USB or 9-pin serial port, or use the portable FLASH memory card.

Order software (80009-50 or 23036-50) to view and zoom logged data in a graphical or tabular (numeric table) format. Optional 21 CFR Part 11 software (23033-30 or 23036-51) meets pharmaceutical requirements and features password protection, electronic signatures, encrypted data in secured files, auditable trails to identify users, date and times, and actions taken. Loggers with external temperature measuring capability accept type K thermocouple probes with miniconnectors (order probes separately).

Specifications



Memory: 32,000 data points

Sampling rate: 1 second to 24 hours

Power: four AA batteries (included), or optional 115 VAC adapter

Dimensions (W x H x D): 4" x 3" x 1 1/2" (10.2 x 7.6 x 3.8 cm)



Temperature datalogger (23036-00) with one internal sensor



Temperature datalogger (23036-20) with two external sensors



Temperature/humidity datalogger (23036-40) with one internal and one remote sensor (included)

Catalog number	Parameters	No. of channels	Range	Resolution	Accuracy	Display	Price
SN-23036-00	Temperature	One internal	-4 to 158°F (-20 to 70°C)	0.1°F (°C)	±1.8°F (1°C)	4-digit LCD	
SN-23036-10		One internal, one external					
SN-23036-20		One internal, two external					
SN-23036-30	Temperature	One internal	-4 to 158°F (-20 to 70°C)	0.1°F (°C)	±1.8°F (1°C)	4-digit LCD	
	Humidity						
SN-23036-40	Temperature	One external	-4 to 158°F (-20 to 70°C)	0.1°	±1.8°F (1°C)	4-digit LCD	
	Humidity						

- SN-80009-50 Software and 9-pin serial cable for Windows® 95/98/2000/NT
- SN-23033-30 Software and 9-pin serial cable for Windows® 95/98/2000/NT, 21 CFR Part 11 compliant
- SN-23036-50 Software and USB cable for Windows® 95/98/2000/NT
- SN-23036-51 Software and USB cable

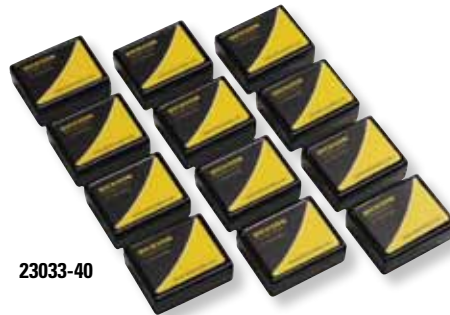
- for Windows® 95/98/2000/NT, 21 CFR Part 11-compliant
- SN-23036-53 Replacement FLASH memory card
- SN-23036-52 Card reader kit
- SN-23032-70 AC adapter, 115 VAC

Compact Temperature and Humidity Dataloggers

Extra compact and economical dataloggers in packs of 12

- Log conditions while goods are in storage or transit

These dataloggers are so compact that they can be used just about anywhere. Place these loggers in shipping containers, refrigerators, freezers, coolers, ventilation ducts, or just about anywhere where temperature conditions need to be monitored. The delayed start feature lets you select how much time passes before logging begins. The customized graphical software calculates minimum, maximum, and averages of all the data collected. The data can also be exported to other programs such as Excel® or PowerPoint®. Software and cable sold separately below.



23033-40

Specifications

Memory: 3,840 data points

Sampling rate: 10 seconds to 24 hours

Power: 3.6 V lithium cell battery (included)

Dimensions (W x H x D): 1 1/4" x 1" x 1/2" (3.2 x 2.5 x 1.3 cm)

Catalog number	Parameters	No. of channels	Range	Resolution	Accuracy	Display	Qty/pk	Price/pk
SN-23033-40	Temperature	One internal	-4 to 158°F (-20 to 70°C)	—	±1.8°F (±1°C)	—	12	
SN-23033-50	Temperature	One internal	-4 to 158°F (-20 to 70°C)	—	±1.8°F (±1°C)	—	12	
	Humidity							

- SN-80009-50 Software and 9-pin serial cable for Windows® 95/98/2000/NT

- SN-23033-30 Software and 9-pin serial cable for Windows® 95/98/2000/NT, 21 CFR Part 11 compliant

DataNet Wireless Datalogging Systems

Minimal costs thanks to wire-free infrastructure which can expand to 65,000 units

NEW

- Reliable transmission ensuring no data loss
- Transmission range can be constantly expanded with additional network units

DataNet is a 16-bit system for direct measurement and recording of PT-100, thermocouple (J, K, T), voltage, current, frequency, and pulse. Data transmission from units to the central computer utilizes the brand new ZigBee wireless telemetry protocol. ZigBee wireless protocol uses a 2.4 GHz license-free frequency RF Band. Build your DataNet system to start logging your application by purchasing a DataNet Receiver, the type of DataNet logger suited for your application, and DataNet software. It's that easy.

Required System Components

- Receiver/Repeater
- Datalogger(s)
- Software
- USB cable

Receiver/Repeater

The primary function of this unit is to receive the signal from all the dataloggers and send them to your PC via a USB cable. It also has a Repeater function for dataloggers in distant areas of the facility where it can be configured to act as a signal relay between them and another Receiver unit. Keep in mind, each DataNet unit also serves as a transmission repeater to neighboring units, forming a reliable mesh network of up to 65,000 units, so to use the Repeater functionality, these units would need to be isolated quite a distance away from any other dataloggers.

Dataloggers

You can mix-and-match the models of dataloggers based on the applications being monitored in your system. The standard DataNet loggers feature an LCD for local indication and are available for temperature (four external sensor inputs) or temperature/RH (four external inputs as well as built-in temperature and humidity sensors). The Mini DataNet loggers reduce potentially redundant costs of the four-channel monitoring system. There is a single-channel version which supports an external NTC sensor, providing an easily extended solution, and a dual-channel version with internal temperature and humidity sensors for cost-effective data acquisition.

Software

The DataNet software package will help you configure each datalogger's monitoring parameters through set-up Wizard procedure which allows you to set their limit values, measuring cycles, and individual measuring tasks.

Specifications

Datalogging: 59,000 samples

Radio frequency: 2.4 GHz

Data rate: 250 Kbps

Transmission distance: 262 ft (80 m); with built-in amplifier: 2624 ft (800 m)

Display: 2-row LCD, 16 characters (no display on Mini DataNet modules)

Power: 4.8 V internal rechargeable NiMH battery

Dimensions (W x H x D): 3.8" x 3.6" x 1.1" (9.7 x 9.3 x 2.7 cm)



Catalog number	Description	External input types	Internal temperature sensor	Internal humidity sensor	Sampling resolution	Price
SN-30000-10	DataNet receiver/repeater with built-in amplifier and power adapter	—	—	—	16 bit	
SN-30000-00	DataNet temperature RF logger	4 to 20 mA, 0 to 50 mV, 0 to 1 V, PT 100 (2 wires), thermocouple (J, K, T), pulse counter (Input 4 only), frequency (Input 4 only), and user-defined sensors	—	—	16 bit	
SN-30000-05	DataNet temperature/humidity RF logger	4 to 20 mA, 0 to 50 mV, 0 to 1 V, PT 100 (2 wires), thermocouple (J, K, T), pulse counter (Input 4 only), frequency (Input 4 only), and user-defined sensors	Range: -20 to 50°C; Resolution: 0.1°C; Accuracy: ±0.3°C	Range: 5 to 95%; Resolution: 0.5%; Accuracy: ±3% from 10 to 90%	16 bit	
SN-30000-20	Mini DataNet temperature RF logger	NTC (10 KΩ)	—	—	16 bit	
SN-30000-15	Mini DataNet temperature/humidity RF logger	—	Range: -20 to 50°C; Resolution: 0.1°C; Accuracy: ±0.3°C	Range: 5 to 95%; Resolution: 0.5%; Accuracy: ±3% from 10 to 90%	16 bit	

SN-30000-50 DataNet software CD includes cable and manual.....

SN-30000-55 DataNet software CD that meets 21 CFR Part 11 compliance, includes cable and manual.....

SN-30000-60 DataNet Mini USB cable (required for receiver/repeater).....

SN-30000-25 GSM modem, RS-232 EZ-10 (for SMS alerts).....

SN-30000-30 Two-wire PT 100 sensor; PTFE cable, 8.2 ft (2.5 m) long.....

SN-30000-35 Two-wire PT 100 sensor; PTFE cable, 13 ft (4 m) long.....

SN-30000-40 Two-wire PT 100 sensor; PTFE cable, 20 ft (6 m) long.....

SN-30000-75 NTC temperature probe.....

SN-30000-45 Replacement battery pack; 4.8 V, 800 mAh NiMH.....

SN-30000-70 External antenna; 2.4 GHz, SMA 5 DBI.....



30000-15



30000-00



30000-05



30000-10

Please visit ColeParmer.com for full specifications.



Compact Digital Temperature/Humidity Datalogger Kit

Place in small areas without AC outlets: refrigerators, freezers, vans, trucks, and storage crates

- Use included software for programming, storing, and analyzing data

Program multiple dataloggers and download their data from a single docking station with this versatile, low-cost kit. Datalogger stores up to 16,000 readings and includes a real time clock. Program an immediate or delayed start time and high and low set points. LED lights on the front panel flash when the datalogger is recording and reaches the set points. Set the flexible datalogging interval to collect sample data from 2 seconds to 2 hours in 1 second increments.

What's included: datalogger, docking station, RS-232 cable, Windows® 95/98/2000/NT/XP compatible software, wall mounting bracket, and one 3.6 V lithium battery. Order additional dataloggers (model 26842-91) for multiple measuring locations in your plant or lab.



26842-90

Specifications

Memory: 16,000 data points **Sampling rate:** 2 seconds to 2 hours in 1 second increments **Power:** one 3.6 V lithium battery **Dimensions (W x H x D):** 2³/₁₆" x 3¹/₈" x 7¹/₈" (5.6 x 7.9 x 2.2 cm)
Output: RS-232

Catalog number	Parameters	No. of channels	Range	Resolution	Accuracy	Display	Price
SN-26842-90	Temperature	One internal	-40 to 185°F (-8 to 85°C)	0.1°F / °C	±1°F (-4 to 122°F); ±2°F (-40 to -4°F; 123 to 185°F) ±0.6°C (-20 to 50°C); ±1.2°C (-40 to 20°C; 51 to 85°C) ±5%RH	3-digit LCD	
	Humidity		0 to 100% RH	0.1% RH			

SN-26842-91 Additional datalogger

Compact Temperature Dataloggers

Monitor two channels simultaneously with one compact unit

- User-friendly operation and convenient analysis
- Collect data on-site, then upload to PC and analyze
- Reset and reboot on-site
- 1- or 2-channel models available

NEW

Temperature dataloggers are ideal for accompanying goods because they guarantee uninterrupted documentation of the complete refrigeration chain. Both the single- and dual-channel models provide a quick overview of current reading, last value saved, max/min value, and number of times limits exceeded. Nonvolatile memory ensures data integrity even if the battery is spent.

Use optional infrared printer 92600-40 for fast on-site documentation, providing proof that the goods have adhered to the specified temperature. Fast-action mechanism prints up to six lines per second in a numerical and graphical format.

Optional data collector 92600-41 allows the information from datalogger(s) to be gathered in the field and then transferred to a PC. Transfer up to 10 memory-full dataloggers.



Data collector 92600-41



68511-24

68511-25

68511-26

Model 68511-24 features a single internal sensor.

Model 68511-25 provides a single temperature measurement option with an additional external probe connection. You can monitor two temperatures simultaneously and receive a fast overview of the current reading, the value last saved, the max/min values, and the number of limits exceeded just like the single-channel model. **Model 68511-26** logs temperature at two different channels with external probe connections simultaneously over a period of several days, weeks, or even months and is especially suited to measuring low and high temperatures.

What's included: wall holder and calibration document supplied by the manufacturer.

Specifications

Sampling rate: 2 seconds to 2 hours **Battery life:** 2.5 years at a measuring cycle of 15 min
Power: lithium battery (included) **Dimensions (L x W x H):** 3¹/₄" x 2" x 1¹/₄" (82 x 52 x 30 mm)



Cat. no.	No. of channels	Range	Resolution	Accuracy	Memory	Price
SN-68511-24	One internal	-31 to 158°F (-35 to 70°C)	0.6°F (0.3°C) from -31 to -4°F (-35 to -20.1°C), 0.18°F (0.1°C) from -4 to 158°F (-20 to 70°C)	0.6°F (±0.3°C) from -31 to -4°F (-35 to -20°C), 0.9°F (±0.5°C) from -4 to 158°F (-20 to 70°C)	7800 points	
SN-68511-25	One internal	-31 to 158°F (-35 to 70°C)	0.18°F (0.1°C) from -4 to 158°F (-20 to 70°C), 0.6°F (0.3°C) for remaining range	0.9°F (±0.5°C) from -4 to 158°F (-20 to 70°C), 1.8°F (±1°C) for remaining range	16,000 points	
	One external	-40 to 248°F (-40 to 120°C)	0.18°F (0.1°C) from -13 to 158°F (-25 to 70°C), 0.6°F (0.3°C) for remaining range	0.6°F (±0.3°C) from -13 to 158°F (-25 to 70°C), 0.9°F (±0.5°C) for remaining range	16,000 points	
SN-68511-26	Two external	Type T (Cu-CuNi): -58 to 752°F (-50 to 400°C)	0.18°F (0.1°C)	0.9°F (±0.5°C) from -58 to 158°F (-50 to 70°C), ±0.7% of m.v. from 158 to 1852°F (70 to 1000°C)	16,000 points	
		Type K (NiCr-Ni): -58 to 1852°F (-50 to 1000°C)				

- SN-92600-40 Infrared printer
- SN-92600-45 Thermal paper for printer. Box of 6 rolls
- SN-92600-41 Data collector with RS-232

- SN-92600-47 Interface cable, RS-232
- SN-92600-49 Software with data management
- SN-17030-20 NIST-traceable recalibration

Mini Temperature and Humidity Dataloggers

Provide concise measurements for critical environmental conditions

- Includes simple user-configurable software
- Accurate to $\pm 1^\circ\text{F}$ ($\pm 0.5^\circ\text{C}$)

These mini dataloggers are ideal for recording temperature and humidity conditions in labs, medical and food storage facilities, warehouses, refrigerators, freezers, museums, greenhouses, and more. Features include high/low alarms, PC delayed start or push-button control, user-selectable stop on memory full, or memory rollover for continuous recording. Software (included) allows you to view graph and text simultaneously and provides the ability to calibrate dataloggers.

What's included: Standard USB interface with 6-ft (1.8-m) USB cable, software (Windows® 95/98/2000/NT/ME/XP compatible), and one 3 V lithium battery.



23039-72



23039-74

Specifications

Memory: 43,344 data points (temperature only);
21,672 data points (temperature, humidity, and dew point)

Power: 3 V lithium battery (included)

Dimensions (W x H x D): 1/2" x 3" x 1/2"
(1.3 x 7.6 x 1.3 cm)

Sampling rate: 1 second to 18 hours

Catalog number	Parameters	No. of channels	Range	Resolution	Accuracy	Display	Price
SN-23039-74	Temperature	One internal	-40 to 185°F (-40 to 85°C)	1°F (0.5°C)	$\pm 1^\circ\text{F}$ ($\pm 0.5^\circ\text{C}$)	—	
SN-23039-72	Temperature	One internal	-40 to 160°F (-40 to 70°C)	0.01°F (0.01°C)	$\pm 1^\circ\text{F}$ ($\pm 0.5^\circ\text{C}$)	—	
	Humidity		0 to 99% RH, noncondensing	0.01% RH	$\pm 2\%$ RH from 10 to 90% RH		

Portable 8-Channel Temperature Monitor

Replace your paper chart recorder with an easy-to-read LCD display

- Memory capacity of up to 64,000 data points

This handheld instrument combines datalogging with the convenience of a large, graphic LCD screen. Features audible and visual out-of-tolerance alarms, RS-232 connectivity, selectable $^\circ\text{F}/^\circ\text{C}/\text{K}$, date and time stamped data, and separate parallel port for printing. View data on the display, printed out, or download to a PC using the optional software and cable. Accepts thermocouple probes (sold separately below) with mini-connectors.



90025-60

Specifications

Input type: thermocouple types J, K, T, R, S, E, B

Output: RS-232

Dimensions (W x H x D): 7 1/2" x 5 1/2" x 1 3/4"
(19.1 x 14.0 x 4.4 cm)

Memory: 64,000 data points

Power: four AA batteries (included)
or optional 115 VAC adapter

Sampling rate: 10 seconds to 99 hours, selectable

Catalog number	Parameters	No. of channels	Range	Resolution	Accuracy	Display	Price
SN-90025-60	Temperature	8	-328 to 2500°F (-200 to 1372°C)	0.1°F (°C)	$\pm 0.1\%$ of reading, $\pm 0.4^\circ\text{F}$ (0.2°C)	Monochrome LCD, 240 x 128	

SN-08466-82 Thermocouple probe, type K; flexible 10-ft (3-m)

SN-90025-67 RS-232 computer cable

SN-08517-55 Thermocouple probe, type K with handle

SN-90025-68 AC adapter, 115 VAC

SN-90025-65 Software for Windows® 95/98/2000/NT

SN-90025-69 Carrying case

SN-90025-66 Printer cable

Cole-Parmer Disposable Temperature Recorders

Economically monitor continuous temperatures for critical shipments

Easy to use single-use recorders create a permanent record of in-transit temperature conditions. Simply pull the start tab out to activate recorder; start-up indicator confirms activation.

Each recorder has identification serial number and bar code for computer tracking. Tamper-proof wire seal ensures data remains secure until retrieved. Mount recorders onto any surface with flexible hanger or adhesive strip. Housing is water- and shock-resistant.

Specifications

Range: -20 to 100°F (-28 to 38°C)

Accuracy

Temperature: $\pm 2^\circ\text{F}$ ($\pm 1^\circ\text{C}$)
Time: ± 20 seconds per month average

Chart: pressure-sensitive 36" strip chart

Temperature sensor: bimetal coil

Power: one AA alkaline battery (included)

Dimensions (W x H x D): 4" x 5 1/2" x 2 1/2"
(10.2 x 14.0 x 6.4 cm)

Catalog number	Chart speed	Price
DY-80150-40	5 days	
DY-80150-50	10 days	
DY-80150-60	20 days	
DY-80150-70	30 days	



Create a permanent record of temperature conditions during shipment.



In-Transit Temperature Dataloggers

Monitor critical temperatures in shipments and storage rooms

- Select single or multi-use versions
- Small compact units fit almost anywhere

These compact temperature dataloggers allow you to easily monitor temperature fluctuations over time during shipment or storage of goods. Units are ideal for high volume, low cost in-transit datalogging. The all-in-one, portable, easy-to-use devices will measure and record up to 8191 measurements ensuring quality control compliance. Activate the dataloggers from a computer with the required software (18002-10) or by holding down the recessed push button. Dual LED's provide device status and alarm conditions for immediate validation. The green LED blinks four times when the datalogger has been started and continues to blink in ten second intervals while logging data. If an alarm condition occurs, the red LED blinks in ten second intervals and will blink four times when the datalogger stops taking data. Software allows you to set start/stop times, sample rates, alarm ranges, and helps analyze or archive data. Easily download your data by plugging in the dataloggers to your computers COM port.



18003-26

18003-27

Specifications

Memory: 8191 data points **Power:** 3 V lithium; 2 year life typical (non-replaceable)
Sampling rate: one sampling every 5 seconds to every 30 minutes **Dimensions (W x H x D):** 2" x 2 1/2" x 1/2"
 (5.1 x 6.4 x 1.3 cm)

Catalog number	Parameters	Description	No. of channels	Range	Resolution	Accuracy	Display	Price
SN-18003-26	Temperature	Single-use	One internal	-4 to 158°F (-20 to 70°C)	0.1°F (0.1°C)	±1.7°F (±1.0°C) from 14 to 104°F (-10 to 40°C); ±1.0°F (±1.0°C) from -4 to 158°F (-20 to 70°C)	—	
SN-18003-27		Multi-use	One internal					

SN-18002-10 Required software and RS-232 cable for Windows® 95/98/2000

Temperature and Humidity Dataloggers

Ensure perishable goods maintain quality standards during storage and transit

- User-selectable alarm limits
- Use USB docking station for quick data download

NEW

These reliable, easy-to-use dataloggers are equipped with three status LED red/green/yellow indicators for immediate shipping status. No external probes are required since sensors are internal to the logger. Splashproof enclosures have a handle for easy attachment.

Add the docking station (order separately) for quick data download to your computer, providing date-and-time stamped readings. Software lets you view data in graphical or tabular form. Use software to program dataloggers to start immediately, delay start for up to 30 days, or set to start using the magnetic switch. Alarm limits can be programmed through the software. Docking station includes USB connection cable and software.

Temperature Datalogger 23000-18 features a highly precise semiconductor temperature sensor and an IP65-rated ABS plastic enclosure. This affordable logger is ideal for monitoring and recording the temperature of all types of perishable products, including food items and medical/pharmaceutical goods, both in storage and in transit.

Temperature/Humidity Datalogger 23000-26 is ideal for monitoring and recording the temperature and humidity of products during storage and shipping. This IP64-rated logger has a humidity resolution of 0.1% RH and typical accuracy of ±3.5% RH at 25°C. It can record up to 16,383 readings per channel.

Ultralow Temperature/Dry Ice Datalogger 23000-27 withstands and monitors temperatures as low as -86°C. Water-resistant enclosure is IP65 rated.



23000-18

Ultralow temperature datalogger 23000-27 shown with docking station 23000-34 sold separately.

Specifications

Display: none **Dimensions:** 3.3" x 2.1" x 0.4" (8.3 x 5.4 x 1.1 cm)



Catalog number	Parameters	No. of channels	Range	Resolution	Accuracy	Readings	Display	Battery life (typical)	Price
SN-23000-18	Temperature	1	-40 to 176°F (-40 to 80°C)	0.18°F (0.1°C)	±0.9°F (±0.5°C)	32,767	—	1 year	
SN-23000-26	Temperature/humidity	2	-40 to 176°F (-40 to 80°C), 0 to 95% RH	0.18°F (0.1°C), 0.1% RH	±0.9°F (±0.5°C), ±5.0% RH	16,383/channel	—	1 year	
SN-23000-27	Ultralow temperature	1	-123 to 95°F (-86 to 35°C)	0.18°F (0.1°C)	±1.8°F (±1.0°C)	32,767	—	1 year	

SN-23000-34 Docking station includes USB connection cable and software.....

Data View Temperature/Humidity Datalogger with Graphic Display

View real-time temperature, humidity, and dew point measurements at a glance

- Relative humidity accuracy of ±2% RH
- Compact design is ideal for any location

This datalogger with graphic display is ideal for monitoring temperature, humidity, and dew point conditions in laboratories, storage facilities, refrigerators, freezers, museums, and more. Unit displays real-time temperature, humidity, dew point, logging summary, sample rate, and memory left/used in text format. Measurement trends, with high/low alarm set points, are graphically displayed for monitoring conditions at a glance.

Included software allows you to set the sampling interval (from 1 second to 18 hours, in 1-second increments), set logger ID, disable channels, select U.S. or metric scales, adjust recording mode, and conduct single-point offset calibration. Calibration is password protected providing additional data security. Unit is USB compatible allowing you to easily export data to text or Excel® files. Software is compatible with Windows® 98SE/ME/2000/XP and above.

What's included: software, 6-ft (1.8-m) USB cable, and three AA batteries.



23039-10

Specifications

Temperature

Range: 15 to 150°F (-10 to 65°C)
Resolution: 0.01°F (0.01°C)
Accuracy: ±1°F (0.5°C)

Humidity

Range: 0 to 99% RH, noncondensing
Resolution: 0.01% RH
Accuracy: ±2%, from 10 to 90% RH

Internal memory storage: 43,344 complete reading sets

Sampling rates: 1 second to 18 hours

Display: backlit graphic LCD

Operating temperature: 15 to 150°F (-10 to 65°C)

Dimensions (W x H x D): 4" x 3" x 1½" (10.2 x 7.6 x 3.8 cm)

Power: three AA batteries (included)

Catalog number	Description	Price
SN-23039-10	Temperature/humidity datalogger	



INNOCAL®
INNOVATIVE CALIBRATION SOLUTIONS

SN-17002-20 NIST-traceable calibration
for temperature datalogger.

SN-17030-24 NIST-traceable calibration
for temperature/humidity datalogger.

SN-09376-01 Batteries, AA. Pack of 4.

Digital Temperature and Humidity Dataloggers

Monitor temperature and humidity conditions simultaneously

- Powerful software enables you to easily program, analyze, and view critical data
- Large backlit LCD is easy to read from a distance

Use this unit to monitor conditions in lab, warehouse, food storage areas, cleanrooms, and more. The eight-button interface provides convenient access to data and allows easy setup. The large LCD is easy to read and displays temperature, humidity, memory, battery power, sampling and recording status, and units of measure. Additional menu accessible data includes: min, max, average, start stop, recording rate, date calibrated, and date for recalibration.

Model 23000-15 also measures atmospheric pressure and has a memory for 87,381 readings per channel.

The required Windows® based software (18200-11 or -12) allows you to easily collect, display, and analyze data. Additional software features include real-time recording, scaling options, statistical calculations, calibration storage, tabular view of data tables, multiple graph selection, and more. Place unit on a bench or mount on a wall.

What's included: one 9 V lithium battery.



18003-60



23000-15

Specifications



Temperature specifications

Range	-4 to 140°F (-20 to 60°C)
Resolution	0.1°F (0.1°C)
Accuracy	±0.5°F (±0.5°C)

Humidity specifications

Range	0 to 95% RH, noncondensing
Resolution	0.1% RH
Accuracy	±3.0% RH

Pressure specifications

Range	0 to 30 psi
Resolution	0.002 psi
Accuracy	±1% (full-scale range)

General specifications

Internal memory storage	131,071 complete reading sets
Sampling rates	2 seconds to 24 hours (user selectable)
Display	Backlit graphic LCD
Operating conditions	-4 to 140°F (-20 to 60°C), 0 to 95% RH
Dimensions (W x H x D)	5" x 3¼" x 1¼" (12.7 x 8.3 x 3.2 cm)
Power	One 9 V lithium battery (included) or optional AC power adapter

Catalog number	Description	Price
SN-18003-60	Temperature/humidity datalogger	
SN-23000-15	Pressure, temperature, and humidity datalogger	

SN-18002-11 Required software with 6-ft (1.8-m) RS-232 cable.

SN-18002-12 Required software with 6-ft (1.8-m) USB cable.

SN-18003-62 Replacement battery, 9 V lithium.

SN-18003-64 Power adapter; 120 VAC, 9 VDC.

SN-18003-66 Power adapter; 230 VAC at 50 Hz, 9 VDC.



Temperature/Humidity Datalogger with Jumbo LED Display

Ideal for recording and monitoring environmental parameters at mission-critical applications

This temperature/humidity datalogger and monitor is designed for wall mounting. With the bright-red LED display, viewing measurements at intervals is easy. An audible alarm sounds if the temperature or humidity parameters move beyond the set range. This unit is ideal for use in areas where temperature and humidity conditions are a critical factor of operation, including labs, electronic manufacturing, incubators, and medical material banks.

Store up to 30,000 data points with a date-and-time stamp. Then download data to a PC via the USB cable interface for analysis. Powered by AC to DC adapter with battery backup to ensure un-interrupted recording and display of ongoing conditions. Unit features an integral probe—order the optional extension probe for an additional 3 ft (1 m) of reach.

What's included: USB cable, software, AC adapter, 9 V battery, and carrying case.

Specifications

Temperature

Range: -40 to 176°F (-40 to 80°C)
Resolution: 0.18°F (0.1°C)
Accuracy: ±1.8°F (±1.0°C) from 23 to 104°F (-5.0 to 40°C), ±3.6°F (±2.0°C) remaining range
Update rate: 1 time per second
Sensor type: diode

Humidity

Range: 5 to 95% RH
Resolution: 0.1% RH
Accuracy (at 25°C): ±2.0% from 35 to 80% RH, ±2.5% from 10 to 35% RH, 80 to 90% RH, ±5.0% <10% RH or >90% RH
Response time: <4 seconds

Datalogging capacity: 30,000 readings

Display: dual-line LED; 8⁵/₁₆" x 4³/₄" (21.4 x 12 cm)

Power: AC to DC adapter

Dimensions (L x W x H): 10³/₁₆" x 7" x 1⁷/₈" (26 x 17.8 x 4.7 cm)

Catalog number	Description	Price
SN-30005-20	Temperature/humidity datalogger with jumbo LED display	

SN-30005-22 Extension probe, 3-ft (1-m) cable
SN-17030-24 NIST-traceable calibration for temperature/humidity datalogger

Temperature/Humidity Datalogger with Bright LED Display

Bright red numbers can be seen from across the room

With a bright-red LED display, this datalogger lets you monitor temperature and humidity environmental factors simultaneously. Record up to 16,000 data points with date-and-time stamp. USB connection lets you download data for later analysis. Easily program the audible alarm in case conditions exceed or fall below acceptable levels.

This economical temp/RH/dew point datalogger/monitor can be placed on your desktop or wall-mounted. Unit is ideal for use in areas where temperature and humidity conditions are a critical factor of operations, such as labs, electronic manufacturing facilities, incubators, and medical material banks.

What's included: USB cable, software, and four AA batteries.

Specifications

Temperature

Range: -4 to 158°F (-20 to 70°C)
Resolution: 0.18°F (0.1°C)
Accuracy: ±1.2°F (±0.6°C)

Humidity

Range: 0 to 100% RH
Resolution: 0.1% RH
Accuracy: ±3% from 10 to 90% RH, ±5% remainder

Datalogging capacity: 16,000 readings

Display: dual-line LED; 2" x 2⁵/₈" (5.1 x 6.6 cm)

Power: four AA batteries

Dimensions (L x W x H): 4¹/₁₆" x 5⁹/₁₆" x 1⁵/₈" (12 x 13 x 4.2 cm)

Catalog number	Description	Price
SN-30005-21	Temperature/humidity datalogger with bright LED display	

SN-09376-01 Replacement batteries, AA. Pack of 4
SN-17030-24 NIST-traceable calibration for temperature/humidity datalogger

NEW



30005-20

MORE online!

Go online for our extensive offering of dataloggers.

ColeParmer.com/dataloggers



NEW



30005-21

Submersible Dataloggers

Durable and waterproof—yet small enough to carry with you!

- Ideal for food, pharmaceutical, medical, and petroleum applications

These loggers were developed to handle extreme temperatures and conditions. They feature a wide temperature range of -40 to 257°F (-40 to 125°C) and are constructed with a food grade, stainless steel waterproof case. Download data to your PC using the required software (sold separately below). Software 23033-30 offers 21 CFR part 11 compliance. Model 23038-10 features a 2½" (6.4 cm) L probe for taking readings in tight places.

Specifications

Memory: 7936 data points
Sampling rate: 10 seconds to 24 hours
Power: 3.6 V lithium cell battery (nonreplaceable)

Dimensions (L x dia)
 Model 23038-00: 3¾" x ¾" (9.5 x 1.9 cm)
 Model 23038-10: 6¼" x ¾" (15.9 x 1.9 cm)

Cat. no.	Parameters	No. of channels	Range	Accuracy	Display	Probe	Price
SN-23038-00	Temperature	One internal	-40 to 257°F	±1.8°F (±1°C)	—	—	
SN-23038-10			(-40 to 125°C)			2½" (6.4 cm) L	

SN-80009-50 Required Software and 9-pin serial cable for Windows® 95/98/2000/NT.....
 SN-23033-30 Software and 9-pin serial cable for Windows® 95/98/2000/NT,
 21 CFR Part 11 compliant.....



High-Temperature Piercing Datalogger

Ideal for HACCP compliance

This rugged datalogger is built for extreme temperatures. The 316 stainless steel enclosure is waterproof—use for a wide range of tough food applications.

Software is required to program datalogger; use to set sampling interval, view downloaded data, and create customized graphs and tables in seconds. Plot data from several loggers on a single graph to compare area conditions. For 21 CFR part 11-compliance, software 23033-30 provides password protection, encrypts data, generates an audit trail of user activity, and labels charts with the logger user ID and serial number.



Piercing probe is 5"L—perfect for any food application.

Specifications

Memory: 7936 sample points
Sampling rate: 10 seconds to 24 hours in 10-second increments

Power: 3.6 V lithium battery (nonreplaceable)

Dimensions (L x dia)
 Probe: 5" x 1/8" (12.7 x 0.3 cm)
 Overall: 8 1/16" x 1 1/16" (22.1 x 1.7 cm)

23038-20

Catalog number	Parameters	Range	Resolution	Accuracy	Display	Price
SN-23038-20	Temperature	-40 to 257°F (-40 to 125°C)	—	From -4 to 212°F (-20 to 100°C): ±1.8°F (1°C)	—	

SN-80009-50 Required software and 9 pin cable for Windows® 95/98/2000/NT.....
 SN-23033-30 Software and 9 pin cable for Windows® 95/98/2000/NT, 21 CFR Part 11 compliant.....

Current and DC Voltage Datalogger

Dual channels to measure any process

- Monitor readings in real time from your PC

This datalogger automatically converts data into familiar engineering units. Measure and record on two channels—one current channel and one voltage channel, two current channels, or two voltage channels. Use with any powered voltage or current transmitter with specified range. Input connections use removable screw-type terminal block.



23030-30

Specifications

Input types
 Voltage: 0 to 5 V
 Current: 0 to 20 mA

Memory: 32,512 data points

Sampling rate: 10 seconds to 24 hours

Power: 3 V lithium cell battery

Dimensions (W x H x D): 3 1/8" x 2 1/8" x 1/16" (7.9 x 5.4 x 0.2 cm)

Catalog number	Parameters	No. of channels	Display	Price
SN-23030-30	Process	Two external	—	

SN-80009-50 Software and serial download cable; Windows® 95/98/NT compatible.....
 SN-23030-70 Water-resistant pouch.....
 SN-23030-80 Locking wall-mount case.....

Temperature/Humidity/Pressure Dataloggers

Compact dataloggers fit in the smallest areas

All dataloggers feature a time/date stamp. All dataloggers include an internal sensor to record ambient temperatures. Features include programmable start times, calibration and real time monitoring. Data retrieval can be downloaded graphically or exported to other programs (order required software separately below). Use flexible thermocouple probe with datalogger 18003-17 to allow limited exposure in ovens for thermal profiling—order separately below.



18003-19



18003-44



18003-17



Submersible temperature datalogger 18003-20



Standard datalogger 18003-23

Specifications

Memory

Standard: 32,768
Industrial: 16,768

Sampling rate: 2 seconds to 24 hours

Power: 3.6 V lithium cell battery (included)

Dimensions

Standard: 2 1/4" L X 1 1/2" W X 1/2" D (5.7 x 3.8 x 1.3 cm)
Industrial: 4" H x 3/4" dia (10.2 x 1.9 cm)

Catalog number	Parameters	No. of channels	Range	Resolution	Accuracy	Price
Standard						
SN-18003-19	Temperature with push-button start/stop	One internal	-40 to 176°F (-40 to 80°C)	0.18°F (0.1°C)	±1°F (±0.5°C)	
SN-18003-23	Temperature	One internal	-40 to 176°F (-40 to 80°C)	0.18°F (0.1°C)	±1°F (±0.5°C)	
SN-18003-17	Temperature (thermocouple type J, K, T, E, R, S, B, N)	One internal, one external	Internal sensor: -40 to 176°F (-40 to 80°C) Thermocouple: -436 to 3290°F (-260 to 1810°C) [†]	0.18°F (0.1°C)	Internal sensor: ±1°F (±0.5°C) Thermocouple: ±2 to 5°F (±1 to 2.5°C) [†]	
SN-18003-44	Temperature Humidity	One internal	-40 to 176°F (-40 to 80°C) 2 to 100% RH	0.18°F (0.1°C) 0.5% RH	±1°F (±0.5°C) ±0.5% RH	
Industrial						
SN-18003-20	Temperature	One internal	-40 to 176°F (-40 to 80°C)	0.18°F (0.1°C)	±1°F (±0.5°C)	
SN-18003-42	Temperature Humidity	One internal	-40 to 176°F (-40 to 80°C) 2 to 100% RH	0.18°F (0.1°C) 0.5% RH	±1°F (±0.5°C) ±0.5% RH	
SN-18003-33	Temperature Pressure	One internal	-40 to 176°F (-40 to 80°C) 0 to 30 psia	0.18°F (0.1°C) 0.002 psia	±1°F (±0.5°C) ±2.5 psia	

[†]For external hook-up, use thermocouple wire or a thermocouple probe with stripped ends—or call us for a custom-made probe. Range and accuracy depend on the thermocouple used.

SN-18002-11 Required software and cable for Windows® 95/98/2000

SN-08517-90 Flexible insulated wire probe for 18003-17

SN-17002-20 NIST-traceable recalibration for temperature datalogger

SN-17030-24 NIST-traceable recalibration for temperature/humidity datalogger

Shock Dataloggers

Measure and record thousands of measurements per channel

- Units measure both dynamic and static acceleration
- Durable compact design fits almost anywhere

These compact, battery powered, stand alone 3-axis shock dataloggers fit almost anywhere. Each datalogger measures and records shock as the peak acceleration level over the user defined interval. Units are specifically designed for documenting dynamic environments such as moving vehicles, trucks, containers, ships, and more. Devices are ideal for characterizing environments such as production and assembly lines of delicate equipment, IC fabrication, communications, and computer components. The storage medium is nonvolatile, solid-state memory – providing maximum data security even if the battery becomes discharged. Start and stop measuring directly from your computer. Data retrieval is quick and easy. Simply connect to an empty COM port and the required user-friendly software (18002-11 or -12) does the rest.



18003-00



18003-03

Specifications

Memory: 349,525 per axis

(Model 18003-03: 174,762 per axis)

Sampling rate: 1.953 ms/512 Hz

Dimensions (W x H x D): 4 1/2" x 3 1/2" x 1" (11.4 x 8.9 x 2.5 cm)

Cat. no.	Parameters	No. of channels	Range	Resolution	Accuracy	Battery life	Price
SN-18002-99	Shock	3 (X, Y, Z)	-5 to 5 g	0.01 g	0.2 g	7 days (one 9 V included)	
SN-18003-00			-50 to 50 g	0.05 g	1 g		
SN-18002-97			-100 to 100 g	0.1 g	2 g		
SN-18003-02	Shock	3 (X, Y, Z)	-5 to 5 g	0.01 g	0.2 g	60 days (six D cell alkaline included)	
SN-18003-01			-50 to 50 g	0.05 g	1 g		
SN-18002-98			-100 to 100 g	0.1 g	2 g		
SN-18003-03	Temperature	6 (temp, RH, press, X, Y, Z)	-4 to 129°F (-20 to 54°C)	0.1°F/°C	±0.5°F/°C	60 days (six D cell alkaline included)	
	Humidity		0 to 95% RH	0.1% RH	±3% RH		
	Pressure		0 to 30 psia	0.002 psia	±2% RH at 77°F (25°C) ±1.0% FSR at 77°F (25°C)		
	Shock		-50 to 50 g	0.05 g	1 g		



Accessories

SN-18002-11 Required software and RS-232 cable for Windows® 95/98/2000

SN-18002-12 Required software and USB cable for Windows® 95/98/2000