

Cat.No.8161-10.

Datalogger Model SK-L200TIID (AC/DC type)



Model

SK-L200TIID

Datalogger for temperature measurement in use of AC and DC powers. AC adaptor in 100 to 240VAC use is available at option. 10 optional probes are sold separately.

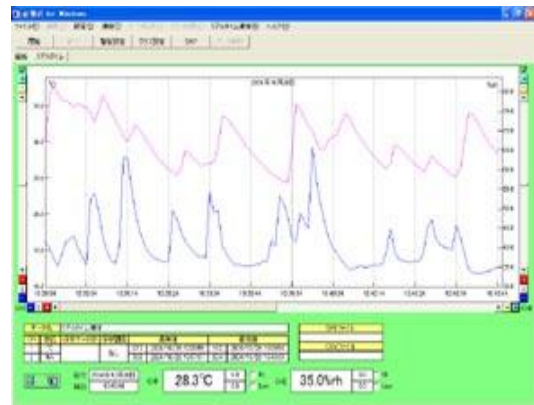
Features

- Memory capacity is 8100 lines of data per channel.
(It is possible to store data for about 506 days with log interval of 90 minutes and about 168 days with log interval of 30 minutes.)
- The method of storing data is selectable among four logging options :
 1. Once (default)
When Once is chosen, the datalogger keeps logging until the memory becomes full. The datalogger stops logging when 8100 lines of data are recorded.
 2. Repeatability (overwriting)
The datalogger overwrites the existing data from the start once the 8100 lines of data are recorded. This is ideal for collecting data during a certain period.
 3. Ends at (limited amount)
With this logging option, you can specify the end-point for the datalogger to stop logging. This setting is ideal when you want to limit the amount of data to be collected.
 4. By page (partitioning)
The storage memory is partitioned into blocks, each having the capacity to store 200 lines of data. This enables the datalogger to perform four different tasks in sequence while storing each task's data in one of the four different memory blocks (pages). This is ideal when you want to collect data from multiple sites using one datalogger.
- The software for data analysis and realtime transmission is attached as standard accessories.
- The date and time to start logging automatically can be specified by setting the preset start.

- The measurement data can be transmitted in realtime to a personal computer.
 - USB transmission is adopted .
 - The upper and lower thresholds for warning can be set. When the temperature or humidity threshold is triggered, the alarm mark (Hi or Lo) will light.
 - Probes are interchangeably used with main units.
 - The storage memory can be verified with the memory indicator.
 - The log interval can be selected from 14 options: 1 sec, 2 sec, 5 sec, 10 sec, 15 sec, 30 sec, 1 min, 2 min, 5 min, 10 min, 15 min, 30 min, 60 min. and 90 min.
 - When the power is turned off, data stored in the EEPROM memory is retained.
 - The datalogger ID can be set. This is useful to identify multiple dataloggers.
 - By using data analysis software attached, acquired data can be evaluated easily and quickly, and also evaluated by using commercial spreadsheet software supporting the "CSV" extension such as Microsoft Excel.
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By Data Analysis Software



By Real-Time Transmission Software

- By using software attached, logged data can be easily displayed as graphs on a PC.
 - The data transmitted from up to 4 dataloggers (8 channels max.) can be analyzed being displayed in a graph.
 - Downloaded data with the "CSV" extension can be evaluated by using Microsoft Excel and other commercial spreadsheets.
 - The highest value, the lowest value and average value per channel can be automatically calculated.
 - The Scroll-bar function can zoom in on any region of the graphs that you want to.
 - Updated data analysis software can be downloaded at the Software download site.
- Recommended operation conditions have to be minimum system requirements or better.

Specifications

Main units		
Model	SK-L200THII α D (temperature and humidity measurement type)	SK-L200TII D (temperature measurement type)
Display range	-15 to 65.0°C (depending on a probe connected)	-45 to 205.0°C (depending on a probe connected)
	10 to 99.9% rh	-----
Resolution(Temp.)	0.1°C at -9.9 to 65.0°C 1°C at -10°C or less	0.1°C at -9.9 to 205.0°C 1°C at -10°C or less
Resolution(Hum.)	0.1% rh at 15.0 to 99.9% rh 1%rh at less than 15.0%	-----
Accuracy (Temp)	±(0.1°C + 1 digit)	±(0.1°C + 1 digit)
Accuracy (Hum.)	±(0.1% rh + 1 digit)	-----
Probes connected	SK-LTHII α series probes	SK-LTII series probes
Sampling (display)	about 1 sec.	about 1 sec.
Display functions	TIME (display time), INT (log interval) REC (during logging), RES (during preset standby), OUT (during real-time transmission), LCD bars (used memory) CALL (call for the current measurement data during logging) Current temperature, Current humidity, Current date and time, low battery symbol, Temp. upper limit (Hi), Temp. lower limit (Lo), Hum. upper limit (Hi), Hum. lower limit (Lo), Temp. alarm ON (Alarm), Hum. alarm ON (Alarm), logging option, setting value of upper and lower limits, error message, ID number	
Memory capacity	8100 lines of data, but depending on the logging option (four logging options: Once, Repeatability, Ends at, By page)	
Log interval	1 sec., 2 sec., 5 sec., 10 sec., 15 sec., 30 sec. 1 min., 2 min., 5 min., 10 min., 15 min., 30 min., 60 min., 90 min.	
Communication	USB	
Operation ambient	-10 to 60°C, no condensing	
Storage ambient	0 to 50°C	
Power requirement	"AAA" size Alkaline battery x 2 or AC adapter (option)	
Battery life	. Under continuous measurement mode : more than 500 hours . Under logging mode: possible to log 8100 data with every log interval (ex.: about 506 days with log interval of 90 minutes.)	
Dimensions	(W) 100 x (H) 73 x (D) 22 mm	
Weights	about 123 g (exclusive of batteries)	
Materials	ABS resin	
Accessories	CD-Rom (Data analysis and realtime software), USB cable (1.5 m) , USB port cap (factory set), hand strap, "AAA" battery x 2	

Standard Probes



Model	SK-LTII-1 (Plug-in type)	SK-LTII-2 w/ sensor cord
Sensor	Thermistor	Thermistor
Measuring range	-10 to 60.0°C	-40 to 105.0°C
Accuracy	±0.5°C at 20.0 to 30.0°C ±1°C at other than above	±0.5°C at 15.0 to 35.0°C ±1.5°C at lower than -10°C ±1°C at other than above
Dimensions	(W) 25x (H) 70 x (D) 20 mm	Sensing part: (tip) Ø5 x (L) 20 mm Cord Length: 1.5 m
Weight	about 13 g	about 43 g
Materials	ABS resin	ABS resin, PVC resin
Accessories	Test Result	Test Result

Optional temperature probes



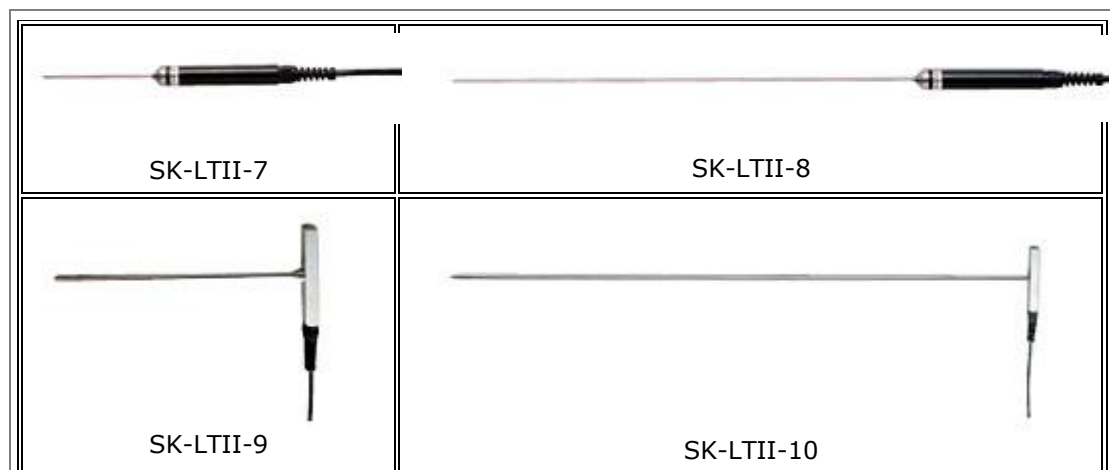
SK-LTII-3/SK-LTII-4



SK-LTII-5/SK-LTII-6

Model Name	SK-LTII-3	SK-LTII-4	SK-LTII-5	SK-LTII-6
Cat. No.	8164-00	8165-00	8166-00	8167-00
Sensor	Thermistor			
Measuring range	-40 to 105.0°C			
Accuracy	±0.6°C at 15.0 to 35.0°C ±1.5°C at lower than -10°C ±1°C at other than above			
Dimensions	Sensing stem	Sensing stem	Sensing	Sensing

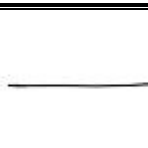
	(stainless steel)Ø3 x (L)150mm Grip:Ø18 x (L)100mm Cord Length: 3.75m Sensor unit (W) 25x (H) 62 x (D) 20mm	(stainless steel)Ø 3 x (L)150mm Grip: Ø18 x (L)100mm Cord Length: 5.0m Sensor unit: (W) 25 x (H) 62 x (D) 20mm	part:Ø 5 x (L)20mm Cord Length: 3.75m Sensor unit: (W) 25 x (H) 62 x (D) 20mm	part:Ø 5 x (L)20mm Cord Length: 5.0m Sensor unit: (W) 25 x (H) 62 x (D) 20mm
Weights	about 140g	about 161g	about 86g	about 108g
Materials	ABS resin,PVC resin Polyacetal resin Stainless steel	ABS resin,PVC resin Polyacetal resin Stainless steel	ABS resin, PVC resin Stainless steel	ABS resin, PVC resin Stainless steel
Waterproof properties	Conforming to JIS C 0920 protection class 5 (Equivalent to IP X5)		Conforming to JIS C 0920 protection class 7 (Equivalent to IP X7)	
Accessories	Test result			

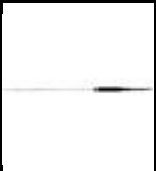
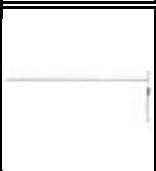


Model Name	SK-LTII-7 For high temperature	SK-LTII-8 For high temperature	SK-LTII-9 For soil temperature	SK-LTII-10 For compost temperature
Sensor	Thermistor			
Measuring range	-40 to 200.0°C		-15 to 65.0°C	-40 to 105.0°C
Accuracy	at -40 to -16°C ±2°C at -15 to -10°C ±2°C at -9.9 to 14.9°C ±1.0°C at 15.0 to 35.0°C ±0.5°C at 35.1 to 65.0°C ±(1.2%rdg+0.2)°C at 65.1 to 105.0°C ±(1.2%rdg+0.2)°C at 105.1 to 200.0°C ±(1.2%rdg+0.2)°C	at -40 to -16°C ±2°C at -15 to -10°C ±2°C at -9.9 to 14.9°C ±1.0°C at 15.0 to 35.0°C ±0.5°C at 35.1 to 65.0°C ±(1.2%rdg+0.2)°C at 65.1 to 105.0°C ±(1.2%rdg+0.2)°C at 105.1 to 200.0°C ±(1.2%rdg+0.2)°C	---- ±2°C ±2.0°C ±0.6°C ±2°C ---- ----	±2°C ±2°C ±2.0°C ±0.6°C ±2.0°C ±2.0°C ----
Shape of stem	Point end	Round end	Point end	Point end

end				
Dimensions				
Sensing part	Ø3 x (L)150mm	Ø3 x (L)400mm	Ø5 x (L)250mm	Ø8 x (L)900mm
Grip	Ø18 x (L)100mm	Ø18 x (L)100mm	Ø14 x (L)100mm	Ø14 x (L)100mm
Cord Length	1.5m	1.5m	4.8m	4m
Sensor unit	(W)25 x (H)62 x (D)20mm	(W)25 x (H)62 x (D)20mm	(W)25 x (H)62 x (D)20mm	(W)25 x (H)62 x (D)20mm
Weights	about 102g	about 104g	about 252g	about 431g
Materials				
Sensing part	SUS304	SUS304	SUS304	SUS304
Grip	Polyacetal resin	Polyacetal resin	SUS303	SUS303
Cord Length	PVC resin	PVC resin	PVC resin	PVC resin
Sensor unit	ABS resin	ABS resin	ABS resin	ABS resin
Waterproof Properties	JIS C 0920 (equivalent to IP X5 rated) Sensor unit is not waterproof construction			
Accessories	Test result			

Related Products

	8161-50	AC/DC Adapter for SK-L200THIIaD, SK-L200TII D	Input: 100-240VAC (50/60Hz) Exclusive use for SK-L200THIIaD and SK-L200TIID Dataloggers
	8162-00	SK-LT II-1 Standard Probe	Plug-in type probe for SK-L200TII and SK-L200TIID temperature measurement type dataloggers Range: -10 to 60.0°C
	8163-00	SK-LTII-2 Standard Probe	Standard probe with sensor cord (1.5m) for SK-L200TII and SK-L200TIID temperature measurement type dataloggers Range: -40 to 105.0°C
	8164-00	SK-LTII-3 Waterproof Penetration Probe	Waterproof penetration probe (IP X5) with sensor cord (3.75m) for SK-L200TII and SK-L200TIID temperature measurement type dataloggers Range: -40 to 105.0°C
	8165-00	SK-LTII-4 Waterproof Penetration Probe	Waterproof penetration probe (IP X5) with sensor cord (5m) for SK-L200TII and SK-L200TIID temperature measurement type dataloggers Range: -40 to 105.0°C
	8166-00	SK-LTII-5 Waterproof Probe	Waterproof cylindrical tip type probe (IP X7) with sensor cord (3.75m) for SK-L200TII and SK-L200TIID temperature measurement type dataloggers Range: -40 to 105.0°C

	8167-00	SK-LTII-6 Waterproof Probe	Waterproof cylindrical tip type probe (IP X7) with sensor cord (5m) for SK-L200TII and SK-L200TIID temperature measurement type dataloggers Range: -40 to 105.0°C
	8167-01	SK-LTII-7 Waterproof Probe for High Temperature	Waterproof penetration probe (IP X5) with sensor cord (1.5m) for SK-L200TII and SK-L200TIID temperature measurement type dataloggers This probe can detect temperature up to 200°C Range: -40 to 200.0°C
	8167-02	SK-LTII-8 Waterproof Probe for High Temperature	Waterproof penetration probe (IP X5) with sensor cord (1.5m) for SK-L200TII and SK-L200TIID temperature measurement type dataloggers This probe can detect temperature up to 200°C Range: -40 to 200.0°C
	8167-03	SK-LTII-9 Soil Temperature Probe	Waterproof penetration probe (IP X5) with sensor cord (4.8m) for SK-L200TII and SK-L200TIID temperature measurement type dataloggers. This probe is suitable to measure soil temperature. Range: -15 to 65.0°C
	8167-04	SK-LTII-10 Compost Temperature Probe	Waterproof penetration probe (IP X5) with sensor cord (4m) for SK-L200TII and SK-L200TIID temperature measurement type dataloggers. This probe is suitable to measure compost temperature Range: -40 to 105.0°C