

## Features and Specifications

### Measurement parameters

Temp / Humidity / Voltage / 4-20mA

### Data Collection

Wireless Communication with PC  
/ Remote PC (Cloud database)

The SUNLOG-1W Series includes data loggers designed to measure and record temperature, humidity, process parameters in volts and mA. As the device is connectable to Wifi the data storing is done either on PC or cloud database. Two basic variants are available that is with or without LCD display.

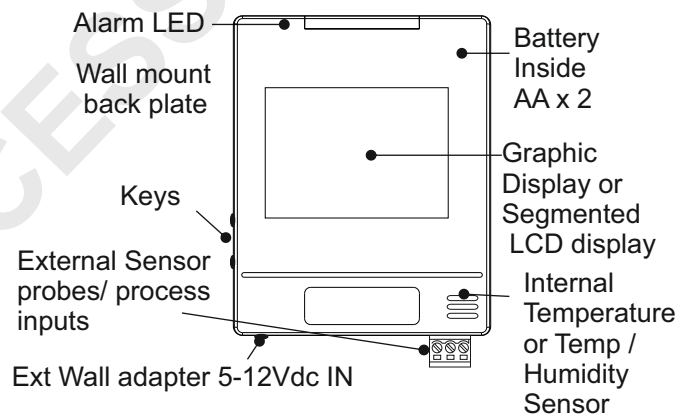
Model	Measurement Items	Measurement Range	Notes
SUNLOG-1W-TI	Temperature 1ch (internal sensor)	-20°C to 70°C	Gradual Response Time.
SUNLOG-1W-THI	Temperature / Humidity 1ch Each	0°C to 55°C / 10 to 95%RH	Measure Temperature and Humidity
SUNLOG-1W-T1	Temperature 1ch (External Probe)	-50°C to 155°C	External Sensor for Quicker Response Time / Waterproof / Wide selection of wire length
SUNLOG-1W-TC	Temperature 1ch (Thermocouple)	-199°C to 1760°C	For use with Thermocouple Sensor Types: K, J, R, T, S
SUNLOG-1W-RT	Temperature 1ch (Pt100, Pt1000)	-199°C to 600°C	Supports 2-wire and 3-wire Sensors High Precision Measurement in Wide Temperature Range
SUNLOG-1W-V	Voltage 1ch	DC 0 to 5Vdc Min Resolution: 1mV	Scale Conversion; other voltage levels Pre-order
SUNLOG-1W-C	4-20mA 1ch	0 to 20 mA	Operational up to 40 mA / Scale Conversion



Model with Segmented LCD Display (Low power)



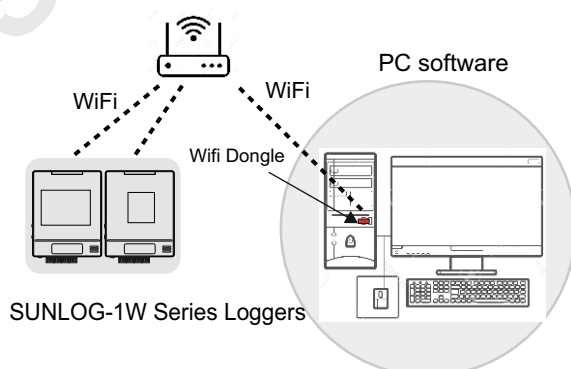
Model with Graphic (BIG) LCD Display



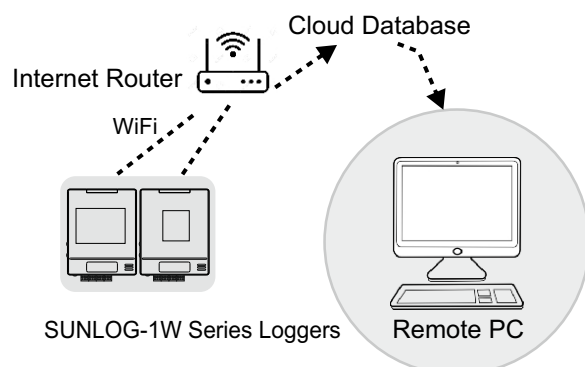
### Collect Data via Wireless Communication with the Local PC in Network or Remote Cloud server

The datalogger have Wifi connectivity that can be fixed with mobile App. Once set the device will communicates with PC or Cloud. Once fixed this property as " Network connected " the logger communicates with router to upload this data to Local server or cloud server. The Unit transfer the current value and recorded data to PC database over local network or Cloud database through remote IP with internet connectivity.

#### Data transfer to PC over Local Wifi Network



#### Data transfer to Remote PC (server) over Wifi Network



SUNLOG-1W	-TI	-TE	-THI		-TC	-RT	-V	-C
Measurement Channels	Temperature 1ch	Temperature 1ch	Temperature 1ch	Humidity 1ch	Temperature 1ch	Temperature 1ch	Voltage 1ch	4-20mA 1ch
Sensor	Digital Sensor ( Internal )	Thermistor ( External probe )	Digital Sensor ( Internal )	Digital Capacitance	Thermocouple: Type K,J,T,S,B	Pt100 2/ 3-Wire	-	-
Measurement Units	°C, °F	°C, °F	°C, °F	%RH	°C, °F	°C, °F	V,mV	mA
Measurement Range	-30 to 70°C	-50 to 150°C	-30 to 70 °C	10 to 95 %RH	K: -195°C to +1350°C J: -100°C to +750°C T: -200°C to +400°C S: 0°C to 1760°C B: 250°C to 1820°C	-200 to +600°C	0 to 200mV 0 to 1/2/5/10V 1 to 5V Scalable to -9999 to +9999	0 to 20mA 4 to 20mA (Factory Set) Scalable to -9999 to +9999
Accuracy	±0.3°C	±0.3°C	±0.3 °C	±2 %RH at 25 °C, 50%RH (*1)	Thermocouple Measurement Types: K,J,N,R, S,T,E and B ± (0.5°C+0.5% of mV)	PT-100 at 25 °C ± 0.1°C ( 0 to 60°C) ± 0.2°C(-100 to 200°C) ± 0.5°C(beyond range above)		
Measurement Resolution	0.01°C	-99 to +99°C 0.01°C Beyond range above 0.1°C	0.01°C	0.01 %RH	K, J, T: 0.1 °C S: 1 °C	-99 to +99°C 0.01 °C Beyond above range 0.1 °C	200mV: 0.1mV For 0-1/2/5/10V 0.01V	0.01mA
Response Time	Approx. 10 sec	Approx: 10sec	Approx. 20sec		Approx. 10sec	Approx. 10sec	Approx. 10sec	Approx. 10sec
Logging Capacity	16000 readings Optional 40,600 readings		8000 per Channel (Optional 30800 per Ch)		16000 readings (Optional 40,600 readings)			
Recording Interval	Select from 15 choices: 1, 5, 10, 30 sec. or 1, 5, 15, 30 min, 1Hr, 2Hr, 6Hr, 12Hr, 24Hr							
Recording Mode (*2)	Endless (Overwrite oldest data when capacity is full) or One Time (Stop recording when capacity is full)							
LED Indicators	Flashing RED LED indicates the alarming condition. Flashing Green LED indicates Logging is ON.							
Display	Two options : Segmented LED ( preferable for Long battery life ) ; Graphic LCD							
Communication Interfaces	<Between Logger Unit(s) - wifi router > Wifi Frequency Range: 2.4GHz <Between Logger Unit(s) - smartphone > for setting SSID and Password Only, Bluetooth 5.0 (Bluetooth Low Energy) (*3) Transmission Range: Approx. 30 meters if direct and unobstructed							
Data Download	The recorded data is directly uploaded to a SUN-NET or SUN-Web software							
Log Start/Stop setting	Start Delay: Settable by software; Start Mode: By button / software; Stop Mode: By button/ Memory full /software							
Power	2 X AA size Battery Replacable for Logging and EXTERNAL 5VDC @1A for WIFI.							
Battery Life (*2)	2 X AA - Approx. 6 months. Its back up battery for logging purpose and comes in effect when external power is not present. Wifi communication stops if external power is OFF							
Dimensions	H 102mm x W 82 mm x D 22 mm							
Weight	Approx. 36 g							
Operating Environment	-20 to 80°C during wireless communication							
Waterproof Capacity	IP64: Splash proof (rated for use in daily life) (*4)							

\*1: When continually used in environments with temperatures above 60°C, accuracy of humidity measurements will decrease over time. Also, humidity cannot be measured at temperatures below -20°C.

\*2: The battery life is based on the following usage conditions: Recording at 5 minutes (or longer) intervals, Current Readings Transmission every 5 minutes, and Recorded Data Transmission once a day. Battery life also varies depending on ambient temperature, radio environment, frequency of communication etc.

\*3: Bluetooth interface with smartphone allow to set network connecting credentials.

\*4: This is the waterproof capacity of the data logger with the sensor connected. Note that the temperature-humidity sensor is not water resistant.