

SKYCLD1



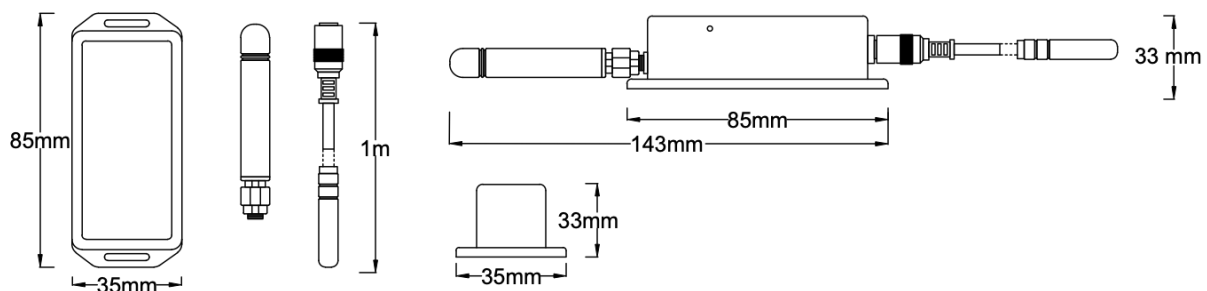
Temperature & Humidity Monitoring Device

Skysens SKYCLD1 is a LoRaWAN compatible, easy to use and cost-effective temperature and humidity monitoring device which can measure very high and very low temperatures with its additional temperature probe.

- ✓ 12 bits thermometer between -55°C and +125°C.
- ✓ Precise humidity and temperature measurement.
- ✓ Excellent long-term stability.
- ✓ LED interface.
- ✓ Easy attachment with accessories.
- ✓ Adjustable sensor reading interval from network.
- ✓ Ready with end-to-end software application.
- ✓ 2 mode restart pin button.
- ✓ Up to 10 years of battery life.
- ✓ Optional IP65 casing.



Application Areas : Restaurants, warehouses, supply chains, hospitals, industries, production lines , etc.



Dimensions	35 x 85 x 33 mm	Measurement Range	-10 to +80 °C 20% to 80% RH
Weight	120 gr (apprx)	Temperature Sensitivity	0.5 °C
Available Frequencies	All	Humidity Sensitivity	1% RH
Antenna	+2 dBi or +3 dBi external	Operating Conditions	-40°C to +80°C & 0% RH to 100% RH
Expected Battery Life	Minimum 5 Years with 30 min Interval	Battery	3.6V Lithium AA (Changeable)

SKYCLD1

PRODUCT IMAGES, BUTTONS AND PLUG-INS



SKYCLD1

PAYLOAD STRUCTURE – Downlink

Interval Change Downlink

Following message should be sent to the device in order to change message period of the device.

Interval Change Command	
Port	Message
0x0B	0x02T ₀ T ₀ T ₁ T ₁ T ₂ T ₂ T ₃ T ₃

T values at the above table are time values in seconds and hexadecimal form. Must be sent in MSB first form. For example, 0x0200000384 message should be sent to the device in order to set message interval to 900 seconds. (0x384H = 900) These values can take from 1 minute to 6 hours.

Reset Downlink

Following message should be sent to the device in order to reset the device.

Reset Command	
Port	Message
0xFA	0x01

SKYCLD1

Reset Operation

Push the reset button and hold, red LED must light for a while and start blinking. When you see the blinking release the button. The device gets reset by this operation and after every reset operation, the device goes into sleep mode automatically by blinking red and green LEDs once.

Wake Up

To exit sleep mode and take the device to the normal operation mode, push the reset button until you see the red LED light. When you see red light release the button and the device will go into normal operation mode by blinking LEDs in a sequence of green-red-green.

It is also possible to wake the device up by inserting the probe jack. After the probe is inserted the sequence above happens in the same order.

OTAA Mode

The device requests OTAA join to the server after the device wakes up and goes into the normal operation mode. OTAA requests are represented by the blinking green LED once per request. When the device successfully joins to OTAA mode green LED lights for a while.

Communication

The device indicates uplink communication by blinking green LED once and downlink communication by blinking red LED once.

ABP

For ABP please contact SKYSENS.

Error Behaviour

The first time device with a hardware problem is energized, it flashes the red led at the intervals of five hundred milliseconds, to indicate there is a hardware problem.