



SunPeak
Innovations

LoRaWAN autonomous
humidity and
temperature logger

SP Uni Datasheet



Plug into the future!

www.sunpeak.com



○ Description

SP Uni is a high-precision humidity and temperature logger that regularly measures these parameters on-site using built-in and remote sensors and transmits this data to the Helium Network, and from there to the SunPeak application. If the quality of radio coverage does not allow sending data at the current moment, SP Uni accumulates an archive of data linked to the time of measurement and sends them when a radio signal appears. If the threshold parameters are exceeded, you will receive an SMS notification or a push notification in the application. Together with other SunPeak sensors and actuators, you can easily create a monitoring and control system for your facility, ensuring its safe and efficient operation.

The device is compact and sealed, can be installed on mounting ties or screws and is suitable for use in mobile outdoor applications, does not require changing the power source for a long service life.

Note: The device requires LoRaWAN Helium Network radio coverage, on the basis of which the SunPeak system operates. Before installation, do not forget to scan the QR code on the label of the device, then the data will be automatically received by your SunPeak application. For use with private LoRaWAN networks, you need to configure your network server using the included network keys.

○ Safety Information

Keep the device away from fire or hot environments.

Do not attempt to disassemble, repair, or modify the device. If you need service, please contact us.

Do not use the device where wireless devices are not allowed.

CAUTION!

Avoid replacement of a battery with an incorrect type that can defeat a safeguard.

Avoid disposal of a battery into fire or a hot oven, or mechanically crushing or cutting a battery, as this can result in an explosion.

Do not leave a battery in an extremely high-temperature surrounding environment, as this can result in an explosion or the leakage of flammable liquid or gas.

Do not leave a battery subjected to extremely low air pressure, as this can result in an explosion or the leakage of flammable liquid or gas.



🔗 Quick start guide

1. Download the SunPeak app for Android or iOS or use the web version of the SunPeak service.sunpeaki.com
2. Log in using your phone number and add the device to your workspace by scanning the QR code on the device body or manually entering the serial number.
3. Install the device on the control object and connect an external temperature sensor if necessary.

Note: please note that the sensor should not be positioned so that rain splashes directly fall into the humidity measurement channel.



4. Turn on the device by pressing the button once and waiting a couple of seconds. SP Uni will confirm its activation with a white LED indicator. A red flashing signal means searching for a radio network, if successful, the device will blink blue. Subsequent successful communication sessions are confirmed by a blue flash. Turn off the device by pressing the button 4 times in a row. Force sending of current data by pressing once. Pressing eight times leads to resetting the device to factory settings.

Note: the device will not be able to connect to the Radio network automatically unless step 2 is completed.

5. Create your object in the SunPeak app or web version of the service, add this sensor to control humidity and temperature in the object settings.

Note: If the signal level at the installation site is sufficient, the system usually needs 15-30 minutes to receive and process data from the sensor, after which you will be able to see them in relation to the object.

The absence of data in the system, as well as regular flashes of red indicate insufficient LoRaWAN signal at the installation site. In this case, check the radio coverage in your location on our website and try to place the device, if possible, higher and in a more open space.

Specifications

Wireless Transmission	
Technology	LoRaWAN®
Frequency	EU868/US915/IN865/AS923/AU915/RU864
Tx Power	+17dBm/+19dBm
Sensitivity	-130 dBm
Mode	1.0.4 OTAA/ABP Class A
Measurement	
Range	-40°C to +70°C (internal temperature sensor), -55°C to +125°C (external temperature sensor), 0% to 99% (internal humidity sensor)
Accuracy	±0.3°C (internal temperature sensor), ±0.5°C (external temperature sensor), ±2% RH (internal humidity sensor)
Operation	
Power On/Off	Button switch
Configuration	Not req., getting data via the SunPeak app
Physical Characteristics	
Power supply	2400 mAh ER14505 Li-SOCl ₂
Battery life	>5 years (20 min measurement interval)
Operating temperature	-40°C to +70°C
Ingress Protection	IP65
Dimension	80 (100 with fastening loops) x 50 mm
Installation	wall or pole mounting with ties or two screws

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