

# SunMate, Your Personal UV Monitor

## From OSUN Technologies



Just hold the button switch and point to the Sun, you'll know the UV rays strength.

It is a well-known fact that the sun's ultraviolet (UV) rays cause skin aging, sunburn, and skin cancer. Unfortunately, your eyes can not easily determine the intensity of UV radiation especially on cloudy and snowy days. Weighing less than an ounce and smaller than a pack of gum, the SunMate can be worn to the beach, the mountains, or anywhere outdoors. It will alert you when the UV intensity exceeds dangerous limits so you can apply the proper steps to protect your skin and eyes.

### About Ultraviolet Solar Radiation and the Ultraviolet Index (UVI)

Solar UV rays make up part of the photonic spectrum of light. The ultraviolet region ranges from 10nm to 400nm (nanometer) and can be further divided into UV-A, UV-B, and UV-C. UV-A rays range from 320nm to 400nm, UV-B rays range from 280nm to 320nm, and UV-C radiation has wavelengths less than 280nm. UV-A is linked to sunburn, accelerated skin aging, and damage to DNA. UV-B also causes sunburn and is related to snow blindness, skin cancer, and immune system suppression. UV-C is extremely dangerous to plants and animals. However, it is absorbed by the ozone layer and does not reach the ground unless the ozone layer is destroyed.

The National Weather Service and the Environmental Protection Agency developed the UV Index (UVI) to help you plan outdoor activities. This index is found on almost every daily weather forecast. The UVI numbers developed by these organizations indicate the relative UV intensity levels of the sun. As shown in the following table, the index is displayed on a scale of 0 to 10+, where 0 indicates a minimal UV level while 10+ indicates a very high and dangerous UV level.

UV Index				
0 – 2	3 – 4	4 – 7	7 – 9	10+
Minimal	Low	Moderate	High	Very High

The UVI varies widely and depends on such factors as the season, the time of day, weather conditions, surfaces, altitude and latitude, and regions of the world.

### About OSUN's SunMate

OSUN's SunMate alerts you of a possible overexposure to UV rays from sunlight. Powered by a single 3 volt button battery, the SunMate is easy to operate and does not require a technical background. Simply aim the unit at the sun and press and hold the ON/OFF button. LEDs indicate the UVI levels according to the table below. Gaps between the ranges in the UVI table above are closed to make the detection continuous. To Read the UVI,

- Aim the top of the unit toward the sun.
- Press and hold the ON/OFF button.
- Observe which LED is on and determine the UVI from the chart below.

0 – 2	2 – 4	4 – 7	7+
No light	Green, safe	Yellow, caution	Red, warning

- Release the ON/OFF button when finished. This will prolong battery life.

### About Reducing the Risks of Overexposure to UV

According to the EPA, other government agencies, and private organizations, there are ways to reduce the risk of short and long term UV damage to your skin and eyes.

- Apply sunscreen
- Wear proper clothing
- Wear a hat
- Wear sunglasses
- Avoid the midday sun
- Remain inside when the UVI is high

### To Replace the Battery

The SunMate is powered by a single 3 volt button battery (CR2025). Replace the battery after continuous use for more than 4 hours.

- Find the pull-out battery drawer located on the right side of the unit.
- Follow the instructions on the diagram below.

Use your left thumb to push the drawer latch to the right

Use your right thumb to pull the notch up to slide the battery drawer out

Insert a single 3 V battery in the drawer compartment near the latch

