

CP-UV01 Ultraviolet Indicator

Battery-free visual ultraviolet (UV) presence and relative-comparison tool

Product Overview

The CP-UV01 is a battery-free portable indicator that turns green when exposed to UVA (long-wave ultraviolet) or UVB (medium-wave ultraviolet). It lets users check whether a UV source is operating and make relative comparisons of UV passing through glass, films, lenses, textiles, and other materials under the same conditions. The detachable light shield improves visibility in bright surroundings.

Key Features

- Green response appears when UV reaches the viewing window
- No battery, app, electronic sensor, or display required
- Same-condition comparison of glass, films, lenses, textiles, and other materials
- Detachable 35° light shield for clearer viewing in bright surroundings
- Compact keyring format with a durable weather-resistant housing

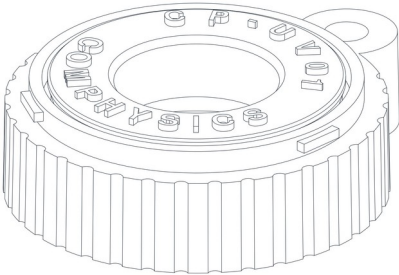
Suggested Applications

- Presence check for UV lamps and UV-curing sources
- Relative comparison of UV transmission through windows, vehicle glass, films, and lenses
- Same-condition comparison of textiles, shields, and protective materials
- Education, demonstrations, and quick field checks

How UV Becomes Visible Green Light

UV enters after the test object	Background reduced unwanted light suppressed	Green-light conversion UV triggers the response	Viewing signal refined green response made clearer	Eye or camera response check
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The device does not show UV itself; it displays green light produced in response to UV.



Technical Specifications

Product type	Battery-free visual ultraviolet indicator
Model	CP-UV01
Visual response	Visible green response when UV enters the device
Target UV range	280-400 nm UVA/UVB range. Response brightness varies by wavelength and does not indicate absolute intensity or UV Index
How to read	Check for a green response or compare brightness under the same conditions
Power	None required
Operating principle	Background-light reduction - UV-responsive green emission - viewing filter - protective window
Housing	Black ASA (acrylonitrile styrene acrylate) weather-resistant resin Manufacturing: material-extrusion 3D printing
Body size	Approx. 42.0(W) × 49.9(L) × 14.5(H) mm including keyring feature
Size with light shield	Approx. 47.3(W) × 49.9(L) × 48.1(H) mm with the light shield locked
UV inlet	Ø22.0 mm outer opening / Ø18.0 mm effective inner opening
Viewing opening	Ø18.0 mm effective inner opening / Ø19.2 mm entry
Light shield	3-point twist lock, approx. 35° rotation, 35° viewing angle, Ø12.0 mm tip opening
Keyring hole	Ø4.8 mm
Manufacturing variation	From design reference values: overall size ±0.50 mm, openings ±0.30 mm, angles ±1.0°
Patent application	Republic of Korea patent application 10-2026-0103351, filed 2026-06-08
Country of origin	Republic of Korea

Before Use

- This product indicates UV presence and relative differences; it does not provide numerical UV intensity, UV Index, or transmittance.
- Green brightness can vary with UV wavelength and strength, distance, angle, surrounding light, camera settings, and unit-to-unit variation.
- For relative comparisons, keep the same source, distance, angle, surrounding light, and viewing method.
- Do not use it as the sole basis for personal safety, protective-equipment performance, or regulatory compliance.
- Do not expose eyes or skin directly to UV sources; follow the source manufacturer's safety instructions.

Product Size and Surface Appearance

Published dimensions are design reference values. Because the housing is 3D printed, actual products may vary by approximately ±0.50 mm in overall size, ±0.30 mm at openings, and ±1.0° in angles. Layer lines and slight surface-texture differences are normal. Verify the actual product when precise installation clearance is required.