

# Panasonic

ideas for life

Lamp Spot Type  
UV CURING SYSTEM

Aicure UP50

## Energy-Efficient and Stable UV Irradiation Performance



NEW

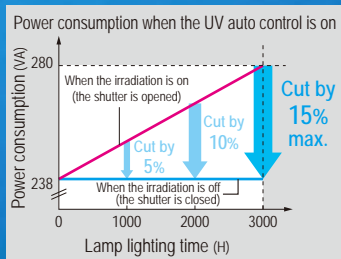
# Featuring an energy-efficient mode, which cuts the power consumption by a maximum of 15% while the irradiation is off, and a high-accuracy auto-tuning function



## High-efficiency UV irradiation

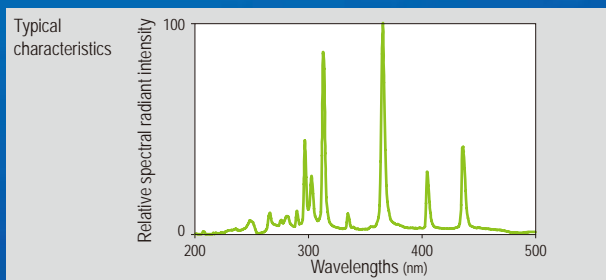
Eco mode reduces power consumption.

The Eco mode cuts the standby power consumption by a maximum of 15% while the irradiation is off (the shutter is closed), contributing to the running costs (electricity charge). Compatible with a wide range of power supply voltages from 100 to 240 V AC for worldwide use.



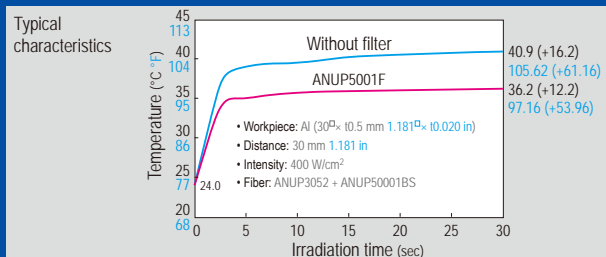
## Surface tackiness can be quickly eliminated.

The development and adoption of our unique special mirror that allows for the effective irradiation with short wavelengths enables the quick elimination of surface stickiness caused during curing. The irradiation time can also be reduced, decreasing the temperature rise of workpieces.



## ANUP5001F heat ray cut filter prevents temperature rises in the irradiation unit.

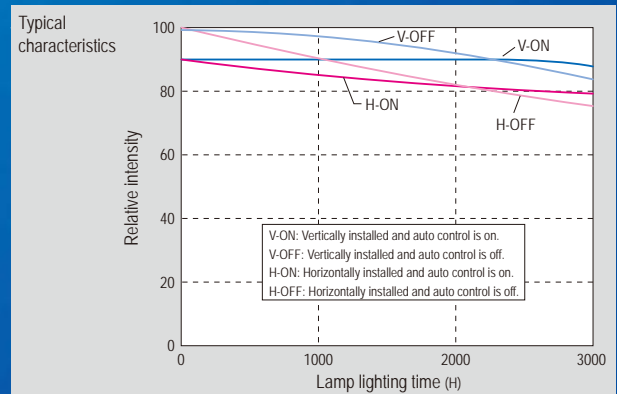
The use of the filter is recommended especially for heat-sensitive workpieces. You can reduce temperature rises in the irradiation unit by attaching a heat reflecting filter depending on the type of workpiece.



## Stable UV irradiation performance

UV auto control function automatically compensates for the UV intensity

This function increases the electrical power applied to the lamp according to the total irradiation time of the lamp to compensate for the UV intensity decrease, maintaining stable UV irradiation until the end of the lamp life.



## Significantly higher reliability for bonding and fixing Slim UV sensor (optional)

Panasonic's original

The UV sensor for measuring irradiation intensity enables auto-tuning in high-accuracy.



The UV intensity can be relative measured\* at the actual position by using the slim UV sensor. It can also automatically adjust the UV intensity to the preset level. Since the sensor only has 5 mm (0.2 in) thickness, which is similar to the workpiece, the intensity measurement is possible without removing the system from the production line, facilitating

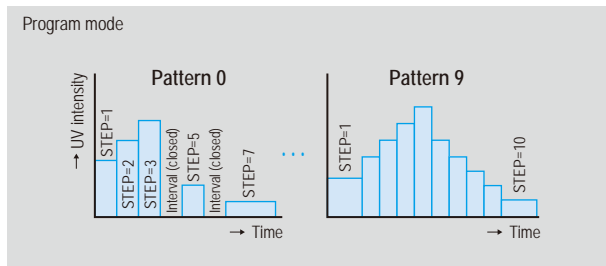
high-accuracy setting and in-line condition optimization. The UV intensity can be checked and adjusted at real time, enhancing the bonding and fixing reliability.

\* UV intensity can be measured as a relative value.

## Stable UV irradiation performance

### Programmable irradiation function

This function prevents curing distortion and enables high-quality precision bonding.



The irradiation can be programmed to controls the irradiation power and time depending on the resin and curing application, supporting high-quality and high-precision bonding with minimum cure shrinkage. In addition to the simple irradiation mode which irradiation is continuously performed at a constant intensity, up to 10 steps 10 patterns can be set. This includes the step-up mode which the intensity is changed over time and the interval mode which irradiation is performed at specified intervals.

### Digital setting allows for consistency of set values from operator to operator.

The irradiation power can be finely set in the range of 0 to 100% in increments of 0.5%. The actual UV irradiation intensity is approximately proportional to the displayed value, making the setting work easier and more accurate.

### Interchangeability with ANUP5204

The wavelength distribution (typical characteristics) of UP50 is identical to ANUP5204, our existing model. The replacement lamp, the ANUPS204, is also the same as that for the ANUP5204.

## Specifications

Aicure Product No.	<b>ANUP50</b>
Power supply	90 to 264 V AC 50/60 Hz 280 V A
Lamp Product No.	ANUPS204
Lamp	200 W mercury xenon lamp, preset quickly-attachable type * Average life of 3,000 hours: Ratio to the initial UV intensity -- 80% or higher in a vertical position, 70% or higher in a horizontal position (when the auto control function is off) * Guaranteed life: 2,000 hours

## Easy to install

### Can be placed either vertically or horizontally .

The unit can be placed in either a vertical position that makes the footprint smaller or a horizontal position that allows stacking other units.



### Long life, quickly-attachable lamp

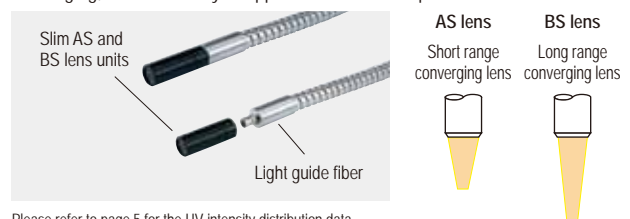
The average lamp life is 3,000 hours (guaranteed life: 2,000 hours\*). The lamp can be easily replaced with a single operation and does not require an optical axis adjustment.

\* Ratio to the initial UV intensity -- 80% or higher in vertical placement, 70% or higher in horizontal placement



### Two lens unit models for short and long range converging

The two lens unit models, one for short range and the other for long range converging, cover a variety of applications and work pieces.







Please refer to page 5 for the UV intensity distribution data.

UV irradiation	UV intensity adjustment by digital setting (0 to 100%, in increments of 0.5%) UV auto control Programmable irradiation (10 steps in each of 10 patterns)
Shutter	External signal control: Turning the lamp on/off, manual opening/closing of the shutter, starting programmed pattern irradiation, starting timer-controlled irradiation, and executing calibration Electronically-controlled shutter using manual or timer-controlled operation
Setting	Digital setting using membrane switches
External signal	Input: Opening/closing the shutter (timer/manual), lighting the lamp Output: Lighting the lamp, stabilizing the lamp light, opening the shutter, outputting error signals, and indicating the lamp life
Dimensions	165 × 201 × 325 mm 6.496 × 7.913 × 12.795 in (Excluding protruding sections)
Weight	8 kg approx.

Please refer to page 4 for the light guide fiber units and other optional parts.

## Options

### Light guide fiber units

Number of branches	1	2	3	4
Shape				
Bundle diameter: 3.5 mm 0.138 in (light outlet end)	ANUP5031	ANUP5032	ANUP5033	ANUP5034
Bundle diameter: 5 mm 0.197 in (light outlet end)	ANUP5051	ANUP5052	ANUP5053	ANUP5054
Bundle diameter: 8 mm 0.315 in (light outlet end)	ANUP5081	—	—	—

### Others

Product name	Specifications	Product No.
Lens*	Short range converging lens	ANUP5001AS
	Long range converging lens	ANUP5001BS
Heat ray cut filter	Reflection type	ANUP5001F
Goggles	UV protective goggles	ANUP5001SG
Lamp	For ANUP50	ANUPS204
Lamp lead wire	For ANUP50	ANUPS50H2
UV sensor	Slim type (Thickness: 5 mm 0.197 in)	ANUJ3800
UV sensor extension cable	Length: 10 m 32.808 ft	ANUJ38110
	Length: 2 m 6.562 ft	ANUJ38102

\* Please consult us separately for the lens for the  $\varnothing 8$  mm  $\varnothing 0.315$  in fiber unit.

### Available for worldwide use

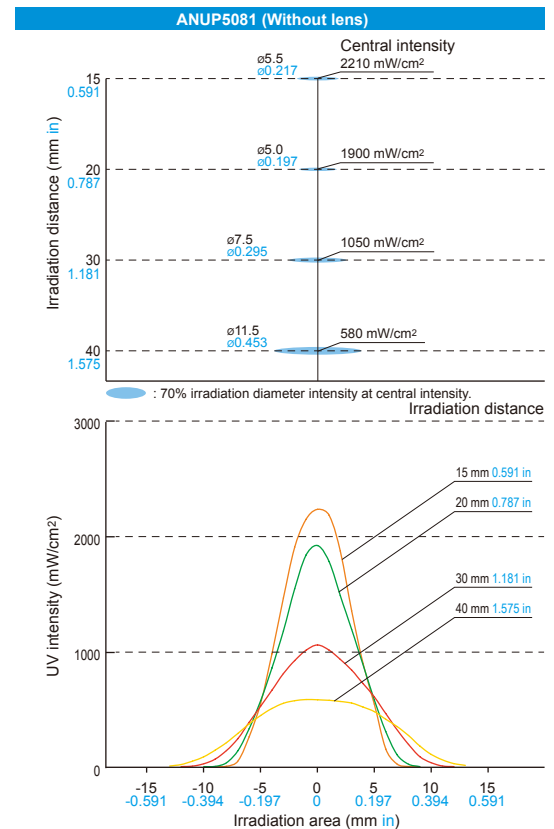
We have local sales companies to support the expansion of customers' global operations. Please visit our website to see our worldwide sales network.

<http://panasonic-denko.co.jp/ac/e/salesnetwork/index.jsp>



## Intensity Profiles (Typical examples)

### Bundle diameter: 8 mm 0.315 in, Straight

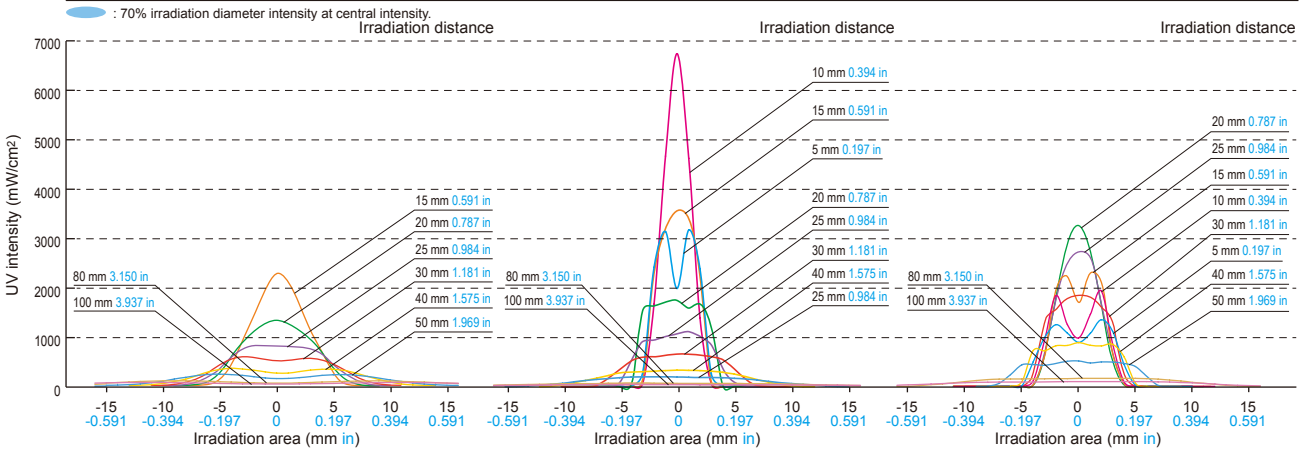
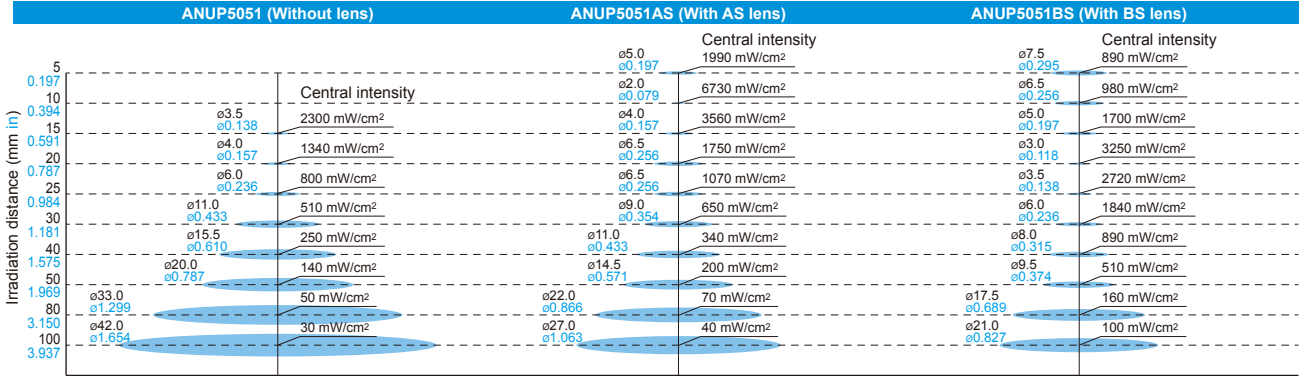


[Rough guide of the relationship between the number of fiber unit branches and the UV intensity ratio]  
(Irradiation distance: 15 mm 0.591 in,  $\varnothing 1$  mm  $\varnothing 0.039$  in sensor)

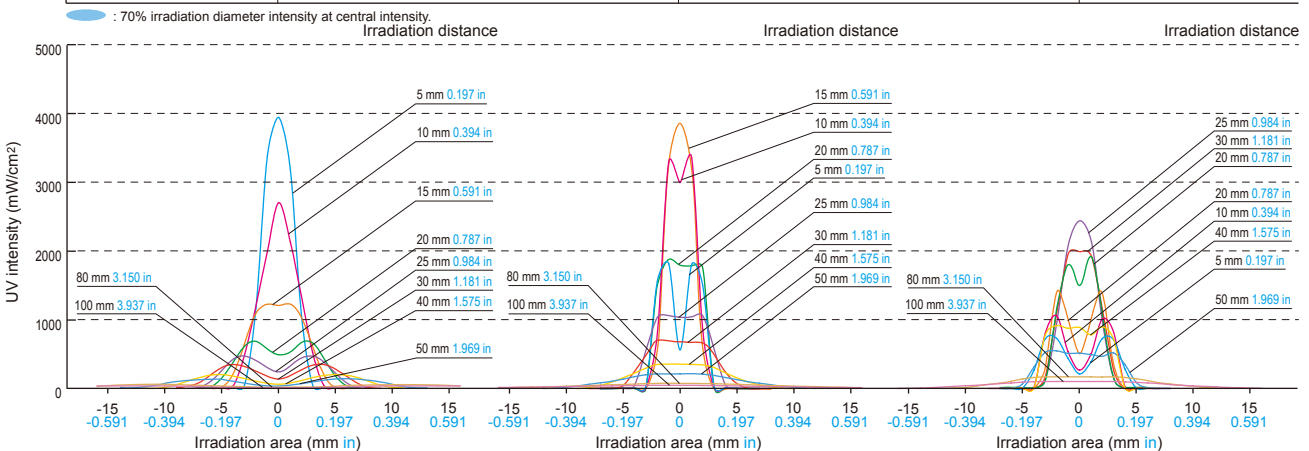
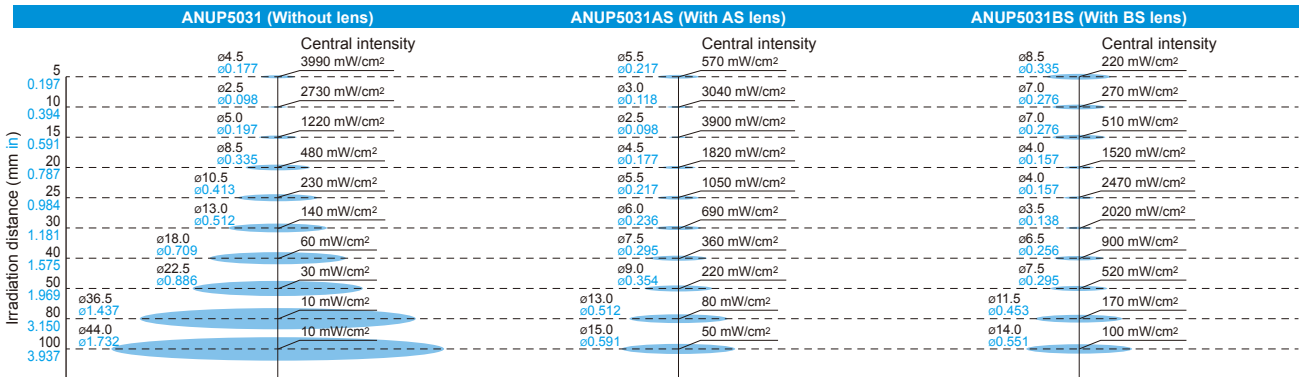
Fiber unit	UV intensity ratio	
	Without lens	With lens
$\varnothing 5 \times 1$ branch	100%	100%
$\varnothing 5 \times 2$ branches	75%	65%
$\varnothing 5 \times 3$ branches	55%	53%
$\varnothing 5 \times 4$ branches	50%	45%
$\varnothing 3.5 \times 1$ branch	100%	100%
$\varnothing 3.5 \times 2$ branches	80%	75%
$\varnothing 3.5 \times 3$ branches	62%	60%
$\varnothing 3.5 \times 4$ branches	57%	50%



## Bundle diameter: 5 mm 0.197 in, Straight



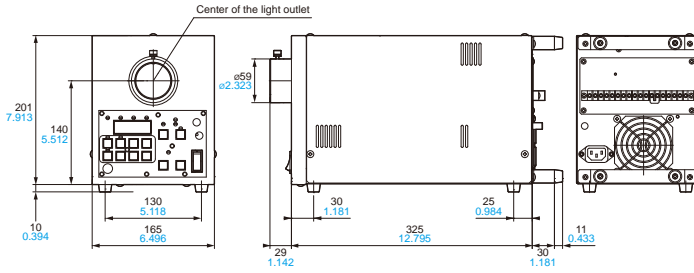
## Bundle diameter: 3.5 mm 0.138 in, Straight



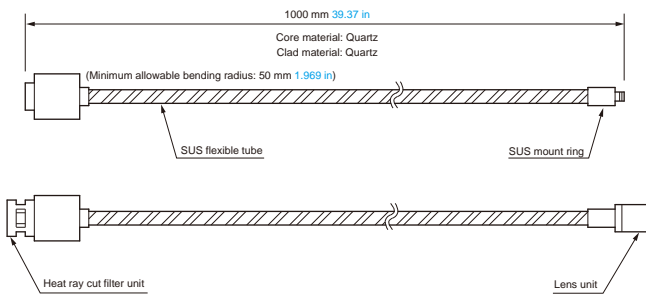
# Dimensions (Unit: mm in) Excluding the protruding sections

## ANUP50

### ANUP50 controller



### Light guide fiber units



### Light outlet end shape

	Fiber bundle diameter: 5 mm 0.197 in	Fiber bundle diameter: 3.5 mm 0.138 in	Fiber bundle diameter: 8 mm 0.315 in
Without lens			
For AS and BS lens with lens			

## Product No. List

### Lamp Spot Type

Controller	Product name	UV lamp	UV irradiation	Allowable number of fiber branches	Power supply	Product No.	
	ANUP50 controller	200 W Mercury xenon lamp	UV auto control, Electronically-controlled shutter	1 to 4 branches	90 to 264 V AC 50/60 Hz 280 V A	ANUP50	
Light guide fiber units	Bundle diameter	Number of branches	Product No.				
			ø3.5 mm ø0.138 in	1 branch	ANUP5031		
				2 branches	ANUP5032		
				3 branches	ANUP5033		
	4 branches	ANUP5034					
	ø5 mm ø0.197 in	1 branch	ANUP5051				
		2 branches	ANUP5052				
		3 branches	ANUP5053				
		4 branches	ANUP5054				
	ø8 mm ø0.315 in	1 branch	ANUP5081				
Accessories	Product name		Specifications	Product No.			
	Lens *		Short range converging lens	ANUP5001AS			
			Long range converging lens	ANUP5001BS			
	Heat ray cut filter		Reflection type	ANUP5001F			
	Goggles		UV protective goggles	ANUP5001SG			
	Lamp		For ANUP50	ANUPS204			
Lamp lead wire		For ANUP50	ANUPS50H2				

\* Please consult us separately for the lens for the ø8 mm ø0.315 in fiber unit.

Please contact .....

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