

## Bonding resin or glass of poor UV transmission with 405 nm wavelength

Launch of new 405 nm type for broader UV curing applications

High-output head  
ANUJ6189

Standard type  
ANUJ6187



### Features of the 405 nm wavelength type

- Feature 1 High light transmission for resins such as polycarbonates and PEN that absorb UV
- Feature 2 High light transmission for UV cut coatings such as on smartphone lenses and imaging device protective glasses
- Feature 3 Low influence on workpieces easily damaged by UV light
- Feature 4 Further improved deep curing of resins curable with UV and visible light

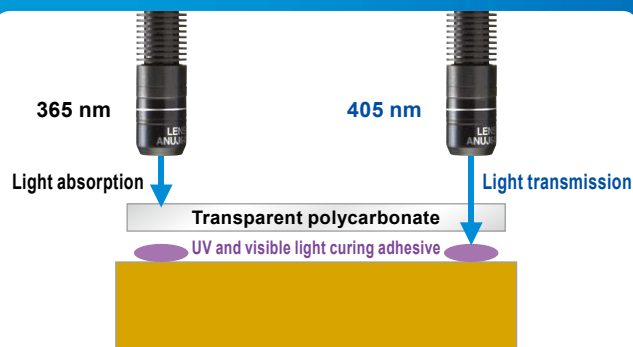
### Resin light transmittance

■ Light transmittance with our LED-UV wavelength (transparent plate thickness: 2 mm 0.079 in, measured example)

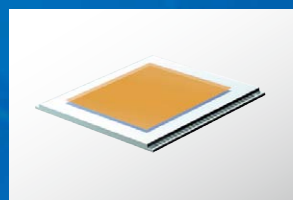
Wavelength	365 nm	385 nm	405 nm
Material			
Polycarbonate	0.004 %	23.6 %	83.2 %

Since light transmittance of a 405 nm wavelength is high for polycarbonate resin, curing of UV and visible light curing adhesive is possible even for this type of transparent resin.

### Depiction of bonding through resin



### Bonding polycarbonate protective covers

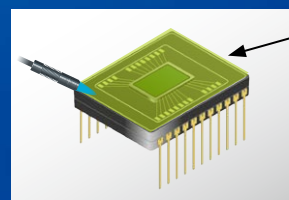


Liquid crystal panel

### Bonding UV cut coated glasses



UV cut coated glass  
Lens module



UV cut coated glass  
Imaging device

## SPECIFICATIONS

### Head

405 nm wavelength high-output head	Head model No.		ANUJ6189					
	Compatible lens	Spot diameter	ø3 mm	ø4 mm	ø6 mm	ø8 mm	ø10 mm	Protective glass <sup>*3</sup>
		Lens model No.	ANUJ6423	ANUJ6424	ANUJ6426	ANUJ6428	ANUJ6420	
	UV intensity (mW/cm <sup>2</sup> ) <sup>*1</sup>	20,900	17,800	9,190	5,450	1,790	810	
	Irradiation distance	8 mm	10 mm	15 mm	20 mm	30 mm	10 mm	
			0.315 in	0.394 in	0.591 in	0.787 in	1.181 in	0.394 in
405 nm wavelength standard type	Head model No.		ANUJ6187					
	Compatible lens	Spot diameter	ø3 mm	ø4 mm	ø6 mm	ø8 mm	ø10 mm	Protective glass <sup>*3</sup>
		Lens model No.	ANUJ6423	ANUJ6424	ANUJ6426	ANUJ6428	ANUJ6420	
	UV intensity (mW/cm <sup>2</sup> ) <sup>*1</sup>	15,500	12,600	5,730	3,150	890	440	
	Irradiation distance	10 mm	12 mm	20 mm	25 mm	30 mm	10 mm	
		0.394 in	0.472 in	0.787 in	0.984 in	1.181 in	0.394 in	
Common item	Light source	Class 3B LED product (JIS C6802: 2005) Risk group 2 (IEC/EN 62471)						
	Estimated light source life <sup>*2</sup>	20,000 hours (when the LED temperature inside the head is 60 °C 140 °F)						
	Cable length	0.2 m 0.656 ft						
	Operating temperature and humidity	+5 to +35 °C +41 to +95 °F, 30 to 85 % RH (No condensation at 25 °C 77 °F)						
	Storage temperature and humidity	-10 to +60 °C +14 to +140 °F, 30 to 85 % RH (No condensation at 25 °C 77 °F)						

\*1 The values were measured using a UV illuminometer with ø1 mm ø0.039 in sensor hole when the high-output heads were fixed to the attachment, the ambient temperature was maintained at 25 °C 77 °F by the UJ30 / UJ35, and they were turned on with 100 % output (initial value: based on Panasonic's reference measurement method). Since the LED elements show illumination intensity fluctuations, the actual UV intensity may be more than 20 % higher.

\*2 The value is not a guaranteed value.

\*3 It is recommended that protective glass ANUJ6430 be used to protect the head-side lens from contamination when the head is used without a lens.

### Controller


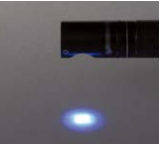

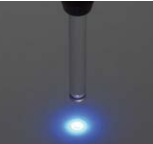
Type	UJ30 (Standard model)	UJ35 (High performance model)
Part No.	ANUJ3000	ANUJ3500
Connectable heads	1 to 4 heads	
UV sensor	Not compatible	Compatible
UV irradiation	One pattern irradiation in simple mode The heads are either collectively or individually controlled.	One pattern in simple mode and programmed pattern irradiation (up to 7 patterns with up to 10 steps) The heads are either collectively or individually controlled.
Type switching	None (1 type)	Switchable (8 types)
Intensity/irradiation control	Digital intensity and irradiation control manual or timer control (0.1 to 99.9 sec., 100 to 999 sec.) *Auto-calibration function using the UV sensor (UJ35 only) Specifications of UV sensor: [Temperature characteristic: ±5 % F.S. (5 to 35 °C 41 to 95 °F)/Repeat accuracy: ±1 % (25 °C 77 °F)]	
Setting/Operation	Setting by the operation switches and power-on/off by a key switch	Setting by the operation switches and power-on/off by a key switch RS232C (UJ35 setup tool)
Display	7-segment display	
Cooling method	Natural cooling (without a fan)	
External control	Method	Parallel I/O
	External input	Individual irradiation input, irradiation stop input, interlock, full-irradiation input, and type switching (UJ35 only)
	External output	READY signal, error signal, warning output, BUSY output (each head separately), and +5 V output (for indicators)
Operating voltage	Supplied AC adapter: 100 to 240 V AC (±10 %) 50/60 Hz 60 VA (at 100 V AC)	
Ambient temperature/humidity range	0 to +35 °C 32 to 95 °F, 30 to 85 % RH (No condensation at 25 °C 77 °F)	
Storage temperature/humidity range	-10 to +60 °C 14 to 140 °F, 30 to 85 % RH (No condensation at 25 °C 77 °F)	
Accessories	AC adapter, Key and User's manual	
Weight	1,180 g approx. (Controller: 940 g approx., AC adapter: 240 g approx.)	1,200 g approx. (Controller: 960 g approx., AC adapter: 240 g approx.)

\*Since the sensitivity of the UV sensor (ANUJ3800) has been adjusted using 365 nm, a larger value than the actual UV intensity will be displayed when using at 385 nm or 405 nm. Please consult us for further information.

## CONNECTION CABLES (required to connect to the UJ30 / UJ35 controller)

Product name	Cable length	Cable diameter	Cable model No.
Connection cable	1.7 m 5.577 ft	ø5.5 mm ø0.217 in	ANUJ6220
	3 m 9.843 ft	ø5.5 mm ø0.217 in	ANUJ6230
	5 m 16.404 ft	ø7.6 mm ø0.299 in	ANUJ6250
	7 m 22.966 ft	ø7.6 mm ø0.299 in	ANUJ6270
	10 m 32.808 ft	ø7.6 mm ø0.299 in	ANUJ6200

## LENSES

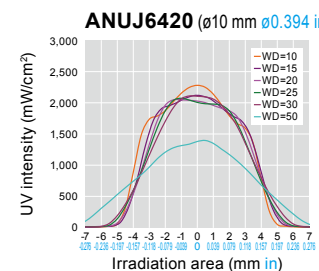
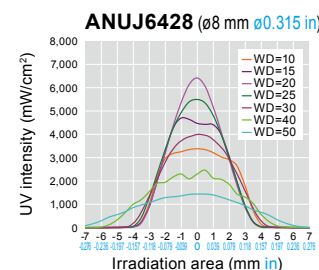
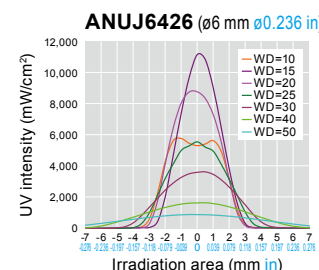
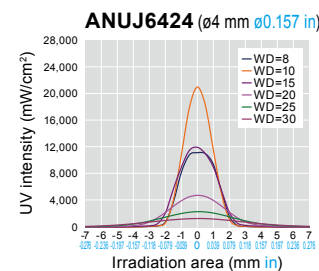
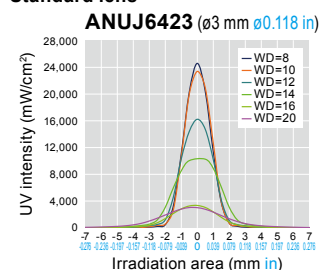
Standard lens	Side view lens	Cylindrical lens	Rod lens
			
Circular irradiation ANUJ642	Circular irradiation Angle at 90° ANUJ642SV	Elliptical irradiation ANUJ64S	Small diameter lens circular irradiation ANUJ647L

\*Rod lens combined with ANUJ6186, ANUJ6188 and ANUJ6189 high-output heads are treated as custom made products. Please consult us for further information.

## INTENSITY PROFILES (typical examples)

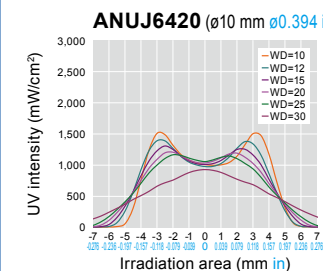
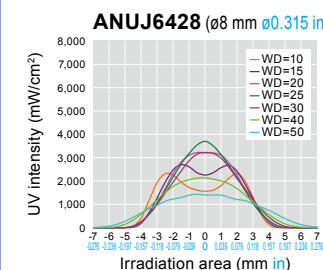
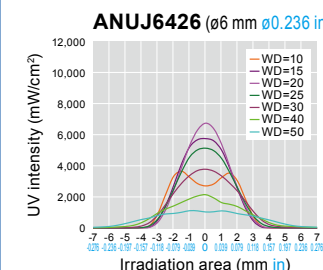
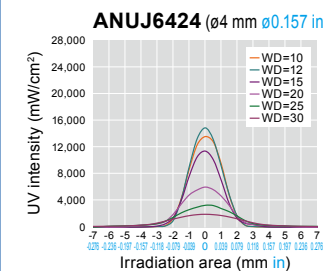
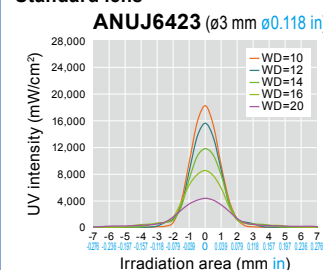
### 405 nm UV wavelength high-output head (ANUJ6189)

#### Standard lens

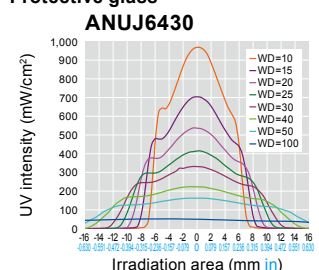


### 405 nm UV wavelength standard type (ANUJ6187)

#### Standard lens



#### Protective glass



#### Protective glass

