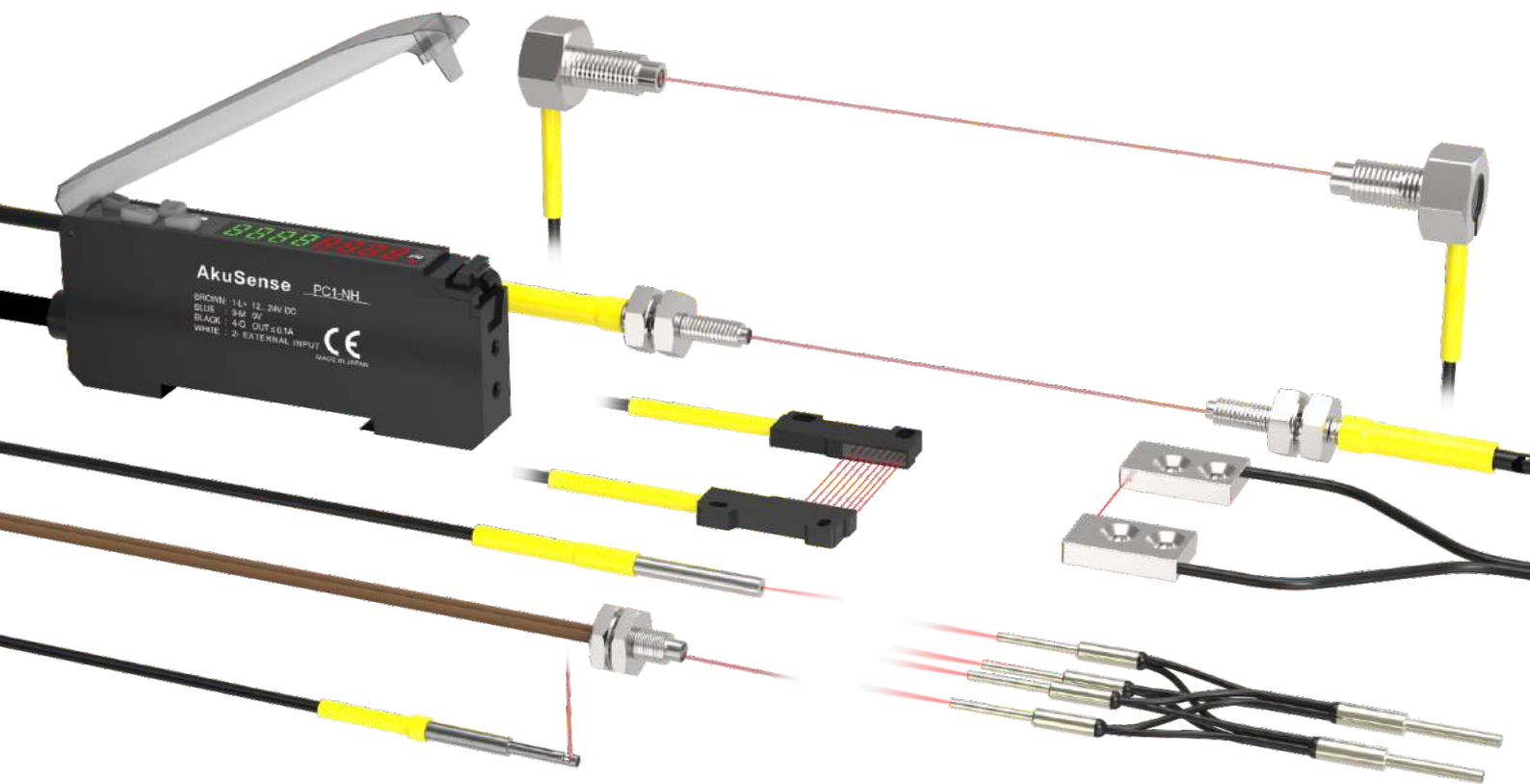


Fiber Optic Sensors



- Single amplifier with double output (NPN & PNP) self-compensation for light
- Various specifications of fiber optic components (covers all popular models in the market)
- Customized development according to the users' needs
- Sufficient stock, quick response, fast delivery time



PG 3 Standard economical type fiber amplifiers with double digits display

- Calculate luminance magnifications and power regulations automatically
- Briefly press SET button twice to set detected thresholds intelligently
- Strong anti-ambient light ability; stable performance
- Customized LED lights (red, orange, yellow and green) ensure stable brightness.

P.A-04



PG 2 Ultra-slim economical type fiber amplifiers with double digits

- Small size (only 10.5mm thick) can save mounting space
- Free setting of D.on/L.on
- Excellent anti-ambient light interference ability
- Customized LED lights (red, orange, yellow and green) ensure stable brightness.

P.A-05



PG 1 Economical & practical type dual display fiber amplifiers

- Button design conforms to ergonomics
- Visible bright LED, easy settings
- Selectable NPN/PNP output

P.A-06



PC1-H high-speed response numeric displays fiber amplifiers

- Fastest response time in the industry (15ms)
- Digital display of red and green light in comparison, easy installation
- Unique technology for light compensation, stable detection

P.A-07

Fiber Optic

Slot Type

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Light Curtains

Ultrasonic

Connectivities

Tester

Guidance

Fiber amplifier

Standard economical

Ultra-slim economical

Practical type

High speed response

Fiber components

Popular type

Array-type

Flat bracket type

Side-view type

High flexible type

High temperature re-

sistant type

Small spot type

Combination type

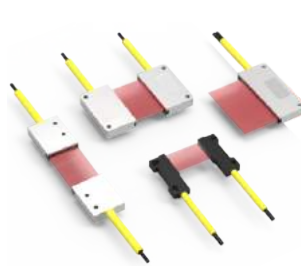
Fiber lens



Popular Type

- Imported fiber optic core, wonderful performance
- Long sensing distance, very cost-effective

P.A-08



Array-type

- Suitable for moving objects detection
- Detect objects that are not in clear positions

P.A-12



Flat bracket type

- Flexible installation, easy to be fixed
- Fits into limited space

P.A-14



Side-view type

- Can detect objects in narrow space
- Easily access to detectable objects, high precision

P.A-15



High flexible type

- Good performance with excellent flexibility
- After bending at angles of 90 degree, transmission ability only reduces 10%

P.A-16



High temperature resistant type

- Heat resistant stainless steel outer casing, strong chemical resistance
- Can stand maximum temperature of 350°

P.A-17



Small spot type

- Built-in lens, small beam spot
- Customizable high-flex optical fiber cables

P.A-18



Combination type

- Several fiber units combined together
- Customizable fiber length to tail your needs

P.A-19



Lens

- Offers a complete series of specifications; can replace most of the popular products in the market
- Both thru-beam and diffuse reflective model numbers for you to choose from

P.A-19

Guidance

Fiber amplifier

- Standard economical
- Ultra-slim economical
- Practical type
- High speed response

Fiber components

- Popular type
- Array-type
- Flat bracket type
- Side-view type
- High flexible type
- High temperature resistant type
- Small spot type
- Combination type

Fiber lens

PG3 Standard economical type fiber amplifiers with double digits display

- Calculate luminance magnifications and power regulations automatically
- Briefly press SET button twice to set detected thresholds intelligently
- Strong anti-ambient light ability; stable performance
- Customized LED lights (red, orange, yellow and green) ensure stable brightness.

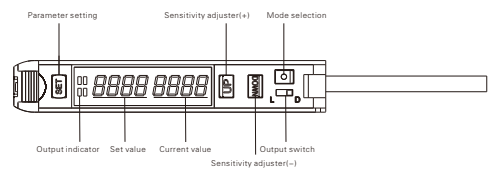
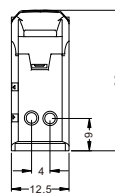
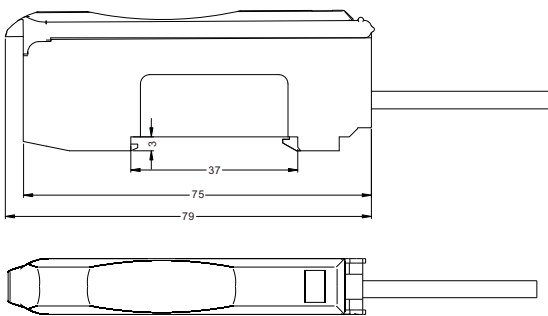


NEW!

Model Number	PG3-N	PG3-P
Light source	Red LED (630nm)	
Operating voltage	12~24V DC $\pm$ 10%	
Power consumption	$\leq$ 20mA	
Output type	NPN open- collector	PNP open- collector
Switch type	Selectable L.on/D.on	
Response time	50us(P-0)/200us(P-1)/400us(P-2)/800us(P-3)/6.4ms(P-4)/12.8ms(P-5)/25.6ms(P-6)	
Timer	Timer being interrupted if output on; timer on if output on; timer on once if output on; timer off if output on	
Timer range	1~9999ms	
Practical functions	Initialization settings/key lock/ two thresholds, full automation and manual setting	
Advanced functions	Luminous power and threshold can be synchronously adjust	
Ambient luminance	Incandescent lamp: $\leq$ 20000Lux max , Sunlight: $\leq$ 30000Lux max	
Ambient temperature	$-20^{\circ}\text{C} \sim +55^{\circ}\text{C}$	
Ambient humidity	35~85% RH	
Protective circuit	Reverse polarity protection, over-current protection, over voltage protection	
Vibration	10~55Hz, full amplitude 1.5mm,XYZ three directions,2hours each	
Shock resistance	500m/s ² for 3 times each in X, Y, Z directions	
Outer casing Material	PC	
Weight	Approx.110g (cable included)	

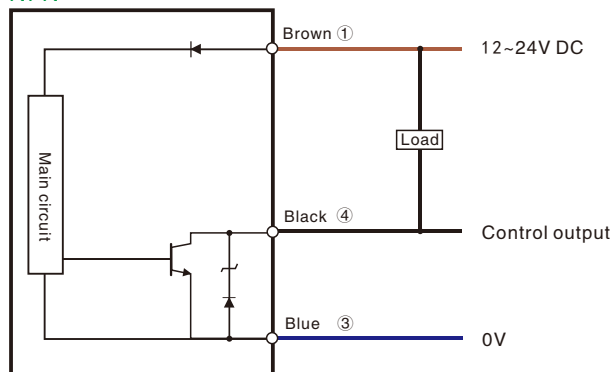
Dimensions

Unit: mm

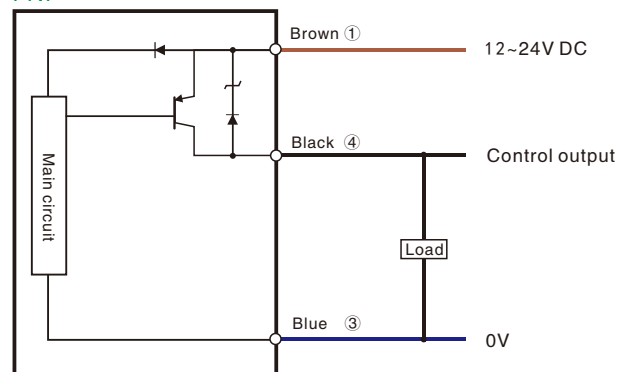


Circuit diagram

NPN



PNP



Fiber Optic

Slot Type

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Light Curtains

Ultrasonic

Connectivities

Tester

Guidance

Fiber amplifier

Standard economical

Ultra-slim economical

Practical type

High speed response

Fiber components

Popular type

Array-type

Flat bracket type

Side-view type

High flexible type

High temperature re-

sistant type

Small spot type

Combination type

Fiber lens

Ultra-slim economical type Fiber amplifier

PG2 Ultra-slim economical type fiber amplifiers with double digits

- Small size (only 10.5mm thick) can save mounting space
- Free setting of D.on/L.on
- Excellent anti-ambient light interference ability
- Customized LED lights (red, orange, yellow and green) ensure stable brightness.

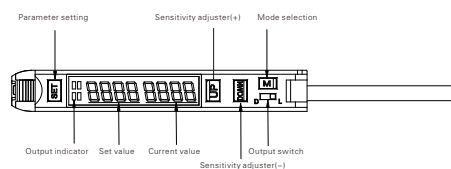
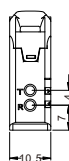
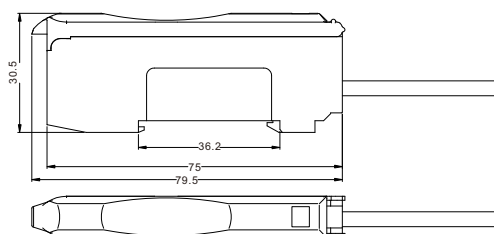


NEW!

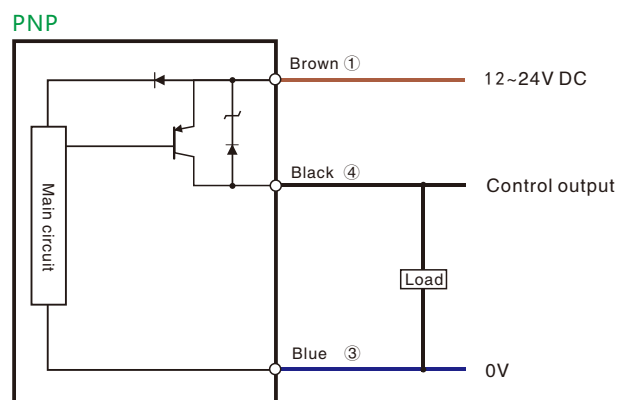
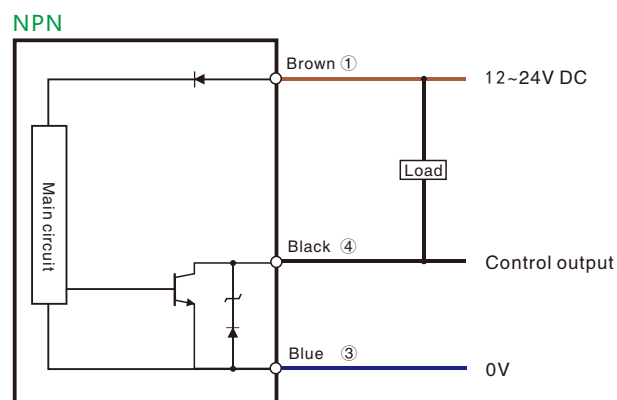
Model Number	PG2-N	PG2-P
Light source	Red LED (630nm)	
Operating voltage	12~24V DC $\pm 10\%$	
Power consumption	$\leq 20\text{mA}$	
Output type	NPN open-collector	PNP open-collector
Switch type	Selectable L.on/D.on	
Response time	200us(P-1)/400us(P-2)	
Timer	Timer being interrupted if output on; timer on if output on; timer on once if output on; timer off if output on	
Timer range	1~9999ms	
Practical functions	Initialization settings/key lock/ two thresholds, full automation and manual setting	
Advanced functions	Adjusting luminescence power presents F1, F2, F3 and F4 from interfering with each other	
Ambient luminance	Incandescent lamp: $\leq 20000\text{Lux}$ max , Sunlight: $\leq 30000\text{Lux}$ max	
Ambient temperature	$-20^{\circ}\text{C} \sim +55^{\circ}\text{C}$	
Ambient humidity	35~85% RH	
Protective circuit	Reverse polarity protection, over-current protection, over voltage protection	
Vibration	10~55Hz, full amplitude 1.5mm,XYZ three directions,2hours each	
Shock resistance	500m/s ² for 3 times each in X, Y, Z directions	
Outer casing Material	PC	
Weight	Approx.100g (cable included)	

Dimensions

Unit: mm



Circuit diagram



PG 1 Economical & practical type dual display fiber amplifiers

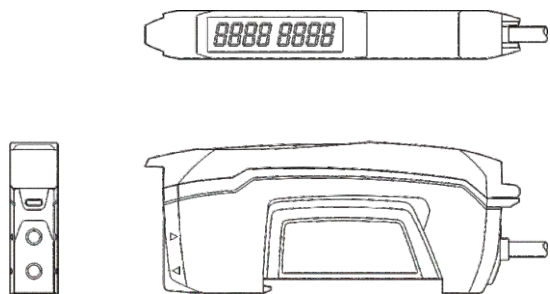
- Button design conforms to ergonomics
- Visible bright LED, easy settings
- Seletable NPN/PNP output



Developing

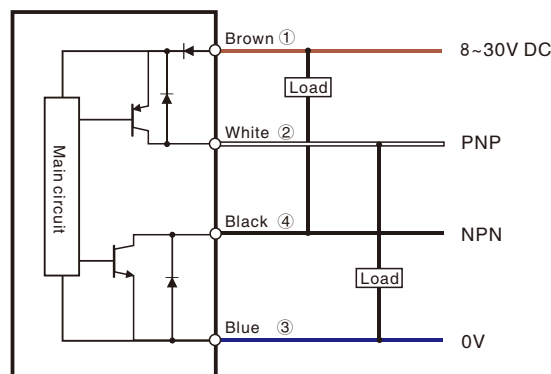
Model Number	PG1
Light source	Modulated red light 680nm
Operating voltage	8~30V DC
Saturation voltage	25mA < 1.2V, 100mA < 2V
Load current	< 50mA
Output current	< 200mA
Leakage current	< 100uA
Output type	NPN/PNP open-collector
Switch type	Selectable L.on/D.on
Digital display	7 segment 8 digit display (red: 4 digit, green: 4 digit)
Response time	50us/ 250us/ 500us/ 1ms/ 4ms
Time delay function	< 50ms
Operating temperature	-10℃~+60℃
Operating humidity	35%~85%RH
Ambient illuminance	Sunlight≤10000Lux
Protective circuit	Short circuit protection, Reverse polarity protection, Over voltage protection
Shock resistance	10G(1500m/s²), XYZ three directions
Vibration	10~55Hz Double amplitude 1.5mm, XYZ three directions, 2 hours each
Certificate	CE
Connection	2m 4 core cable
Weight	65g

Dimensions



Circuit diagram

NPN/PNP



Fiber Optic

Slot Type

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Light Curtains

Ultrasonic

Connectivities

Tester

Guidance

Fiber amplifier

Standard economical

Ultra-slim economical

Practical type

High speed response

Fiber components

Popular type

Array-type

Flat bracket type

Side-view type

High flexible type

High temperature re-

sistant type

Small spot type

Combination type

Fiber lens

A-07 **AkuSense**