

PG1 Dual Digital Display Fiber Optic Amplifier

- With automatic light compensation technology, 4-channel anti-light interference
- Small hysteresis, dual output selectable, the fastest speed upto 13 μs



Model No.	PG1-N HOT	PG1-P
Control output	1 output port	
Light source	Red, 4-element LED	
Response time	SHP: 13 μs, FINE: 30 μs, SUPR: 100 μs, MEGA: 200 μs	
Output selection	LIGHT-ON/DARK-ON (Short press MODE and select with UP DOWN)	
Display indicator	Operation indicator: Red LED, dual digital monitor: Dual 7-digit display, threshold (4-digit green LED body indicator) and current value (4-digit red LED body indicator) lit together. Current value range: 0-9999	
Detection method	Light intensity (area detection is available for automatic sensitive tracking)	
Delay function	1ms~9999ms	
Control output	NPN open collector, maximum 100mA, residual voltage: 1V	PNP open collector, maximum 100mA, residual voltage: 1V
Power supply	12~24V DC ± 10%	
Ambient illuminance	Incandescent lamp ≤ 20,000 lux, Sunlight ≤ 30000 Lux	
Power consumption	Standard mode: Max 300mW	
Vibration resistance	10~55Hz, double amplitude: 1.5mm, X, Y, Z axis are 2 hours respectively	
Ambient temperature	-10°C~+55°C, No freezing	

Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

Vision

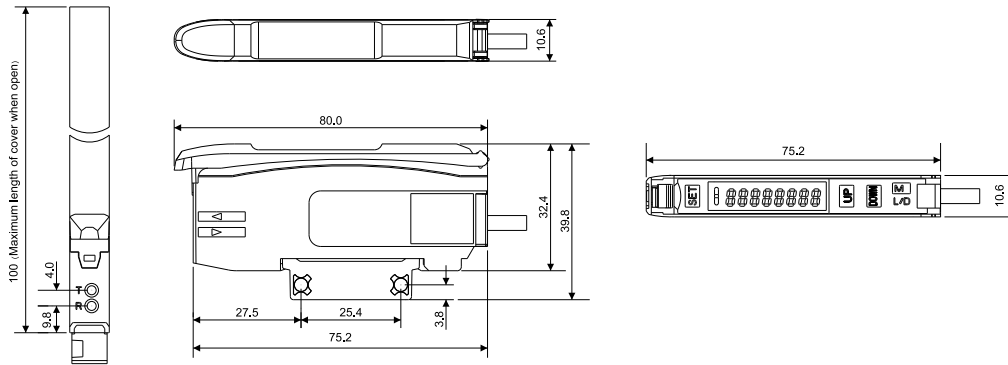
Vibration

Temperature

Annexes

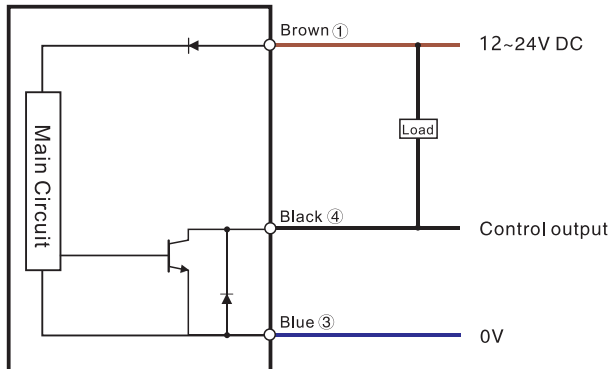
Dimensions

Unit: mm

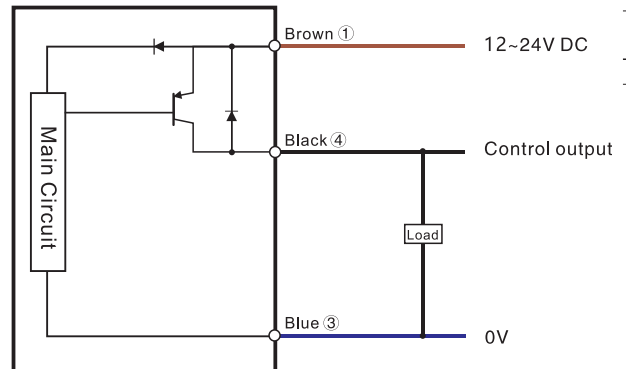


Circuit diagram

NPN



PNP



Guidance

Fiber amplifiers

Standard economical

High stability

High performance type

High speed response

Fiber components

Popular type

Array-type

Flat bracket type

Side-view type

High elastic type

High temperature resistant

Small spot type

Combination type

High end type

Fiber lens

Fiber lens

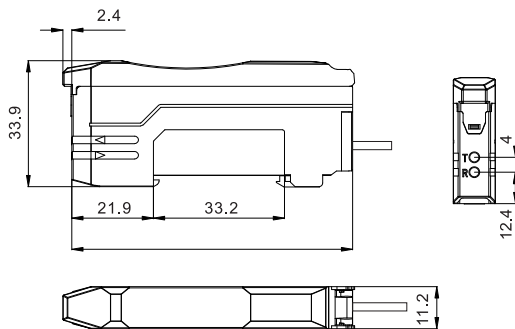
PG5 Highly Stable Dual Digital Display Fiber Amplifier

- APC compensation function, high stability
- With AI function, automatically configure the most suitable luminous intensity
- Coded menu: greatly reduce the cost of use and maintenance;

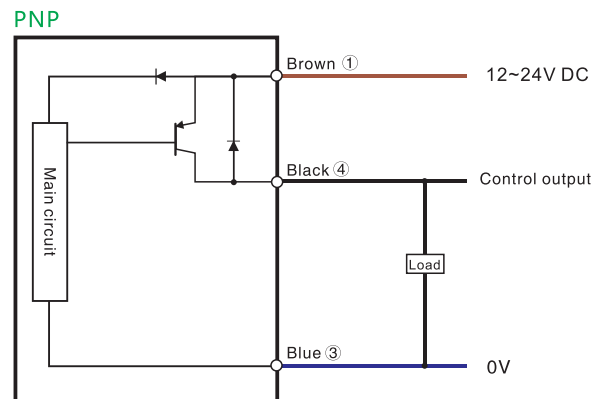
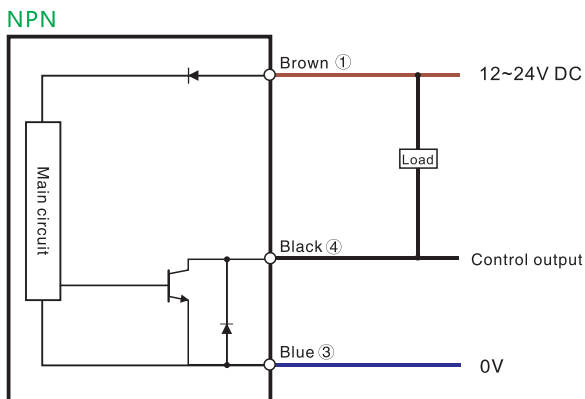


Model No.	PG5-N	PG5-P
light source	Red LED (wavelength 630nm)	
Reaction time	50μs (P100) 、 250μs (P101) 、 500μs (P102) 、 1ms (P103) 、	
Output method	Normally open and normally closed: L. on, D. on	
Protect the circuit	Power supply reverse connection protection, output surge protection, output reverse connection protection, output overcurrent protection, output ESD protection	
Timer function	Output off timing, output on timing, output single timing, output timing off	
Control output	Applied voltage: 30V DC or less (between detection output and 0V) Maximum output current: 100mA; residual voltage: below 2V	Applied voltage: below 30V DC (between detection output and +0V) Maximum output current: 100mA; residual voltage: below 2V
Delay function	Conventional: 900mW (at 24V, the maximum is 32mA; at 12V, the maximum is 47mA)	Conventional: 900mW (at 24V, the maximum is 36mA; at 12V, the maximum is 50mA)
Timing range	1-9999ms	
Utility function	Parameter initialization/key lock/threshold two points, automatic and manual setting, fast saturation attenuation	
Regional mode	Yes	
voltage	12-24VDC ± 10%	
Power consumption	20mA max	
Ambient luminosity	Incandescent lamp: maximum 20000lux, sunlight: maximum 30000lux	
Ambient temperature	-10°C~+55°C, no freezing	
Environment humidity	35~85% RH	
Vibration resistance	10 To 55Hz, full width 1.5mm, X, Y, Z axis directions for 2 hours each	
Impact resistance	500m/s ² , 3 times each in X, Y, and Z axis directions	
Shell material	Polycarbonate	

Dimensions



Circuit diagram



PB1 High Performance Dual Digital Fiber Amplifier

- Infrared communication function
- Regional mode
- 7-speed response time setting
- Novel and unique appearance



Model No.	PB1
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
Display screen	7 segment 8 digit display (red: 4 digit, green: 4 digit)
Response time	50 μ s/ 250 μ s/ 500 μ s/ 1ms/ 4ms
Time delay function	< 50ms
Operating temperature	-10°C~+60°C
Operating humidity	35%~85%RH
Ambient brightness	Sunlight ≤ 10000Lux
Protective circuit	Short circuit protection, Reverse polarity protection, Over voltage protection
Shock resistance	10G(1500m/s²), XYZ three directions
Anti-vibration	10~55Hz Double amplitude 1.5mm, XYZ three directions, 2 hours each
Certification	CE
Connection method	2m 4 wire cable
Weight	65g

Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

Vision

Vibration

Temperature

Annexes

Guidance

Fiber amplifiers

Standard economical

High stability

High performance type

High speed response

Fiber components

Popular type

Array-type

Flat bracket type

Side-view type

High elastic type

High temperature resistant

Small spot type

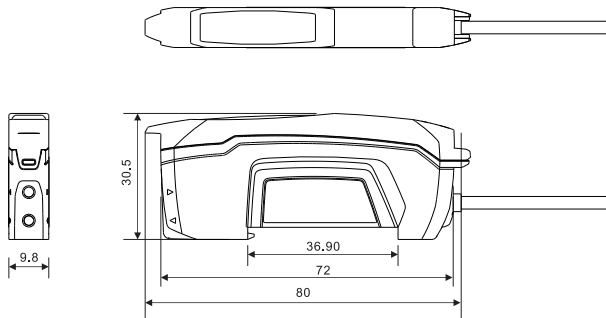
Combination type

High end type

Fiber lens

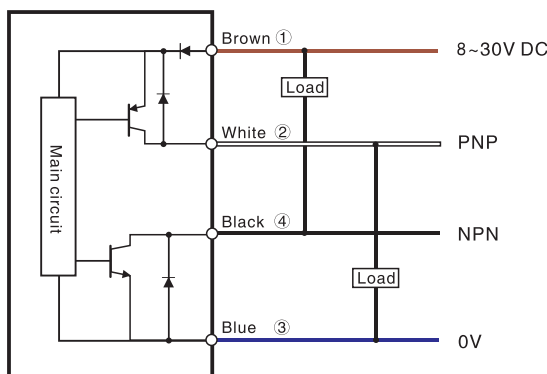
Fiber lens

Dimensions



Circuit diagram

NPN/PNP



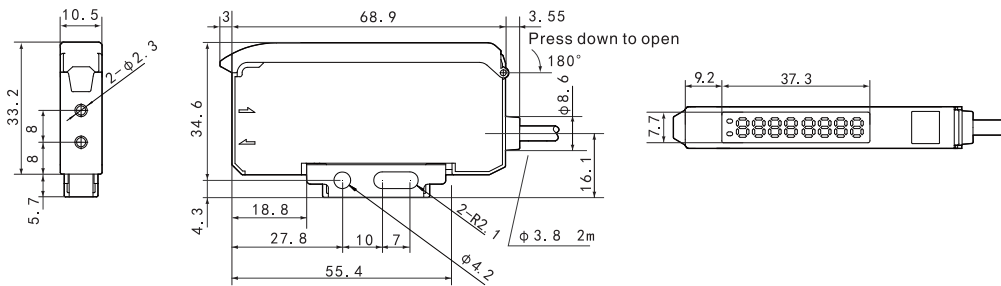
PC1 Ultra High Speed Response Dual Digital Display Fiber Amplifier

- 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



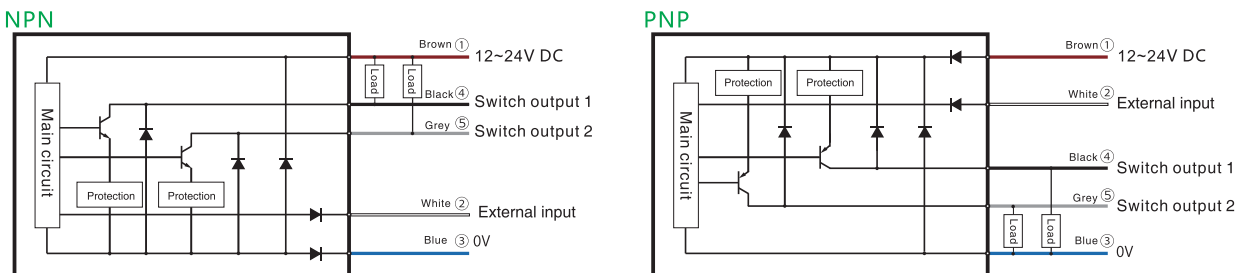
Model No.	PC1-NH	PC1-NH2	PC1-PH	PC1-PH2
Light source	Red LED 660nm			
Operating voltage	12~24V DC			
No-load supply current	Standard mode: 36mA max.(Single output), 39mA max.(Double output) Energy-saving mode: 25mA max.(Single output), 28mA max.(Double output)			
Output type	Single output NPN	Double output NPN	Single output PNP	Double output PNP
Switch type	Selectable L.on, D.on			
Indicator	Single output indicator (Red), dual output indicator (Orange)			
Display screen	7 segment 8 digit display (red: 4 digit, orange: 4 digit)			
Response time	15 μs(22us(1-HS)), 70 μs(2-FS), 250 μs(3-ST), 500 μs(4-LG), 1ms(5-PL), 2ms(6-UL), 8ms(7-EL)			
ON/OFF Time delay function	ON delay, OFF delay, Single pulse output, ON + OFF delay, ON delay+Single pulse output 0.1~9.999ms			
Sensing distance	Thru-beam: 4000mm, Diffuse reflection: 1200mm			
Sensitivity adjustment	Teach-in / Manual			
External output function	Remote teach-in, Input stops once it shines, Syn trigger input, reset-input (for two outputs only)			
Operating temperature	-25°C~+55°C			
Operating humidity	35%~85%RH			
Ambient brightness	Sunlight≤10000lux, Incandescent lamp≤3000lux			
Anti-vibration	10~55Hz Double amplitude 1.5mm, XYZ three directions, 2 hours each			
Shock resistance	50G(500m/S²), XYZ three directions			
Degree of protection	IP50			
Material	Shell: PPE, Display: PC			
Connection method	2m 5 core cable			
Weight	50g			

Dimensions



Unit: mm

Circuit diagram



Fiber Optic
Slot Sensors
Photoelectric
Laser
Proximity
Displacement
Magnetic
Contact
Area
Ultrasonic
Vision
Vibration
Temperature
Annexes
Guidance
Fiber amplifiers
Standard economical
High stability
High performance type
High speed response

Fiber components
Popular type
Array-type
Flat bracket type
Side-view type
High elastic type
High temperature resistant
Small spot type
Combination type
High end type
Fiber lens
Fiber lens