

FLD02 Fluorescence Photodetector

Overview

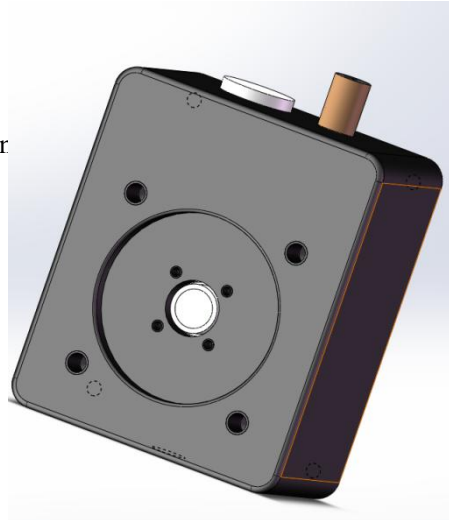
The FLD02 photodetector uses a high-transimpedance amplifier to detect weak light signals.

Features

- Large photosensitive area
- Compact housing for measurements in confir
- M4/M6 threaded mounting holes

Applications

- Fluorescence detection
- Chemical analysis
- Bioaerosol detection
- POCT
- Air quality testing



Specifications

1.

Model	FLD02A-350	FLD02A-150
Material	Si	
Wavelength Range	320-1100nm	
Sensitive Area	2.4x2.4mm	
Sensitivity	0.6A/W @ 960nm	
Bandwidth ^a	DC-350Hz	DC-150Hz
Rise Time ^a	1ms	2.5ms
Gain ^a	1.1x10 ⁹ V/W	0.90x10 ¹⁰ V/W
Saturation Power	4.5nW	550pw
Noise Voltage ^a	4mVpp	5mVpp
Maximum Output Voltage ^a	5V	5V
Equivalent Noise Power		
Operating Voltage	9-12V	
Operating Current	<200mA	
Output Impedance	50Ω	
Output Coupling	DC	
Output Connector	SMA female	
Operating Temperature	-10~65°C	
Storage Temperature	-40~85°C	

Model	FLD02C-150
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Material	InGaAs
Wavelength Range	900-1750nm
Sensitive Area	500um
Sensitivity	0.9A/W @ 1654nm
Bandwidth ^a	DC-150Hz
Rise Time ^a	2.5ms
Gain ^a	0.6×10^9 V/W
Saturation Power	8.3nW
Noise Voltage ^a	3mVpp
Maximum Output Voltage ^a	5V
Equivalent Noise Power	
Operating Voltage	9-12V
Operating Current	<200mA
Output Impedance	50Ω
Output Coupling	DC
Output Connector	SMA female
Operating Temperature	-10~65°C
Storage Temperature	-40~85°C

Note: a For high-impedance loads

Model Description

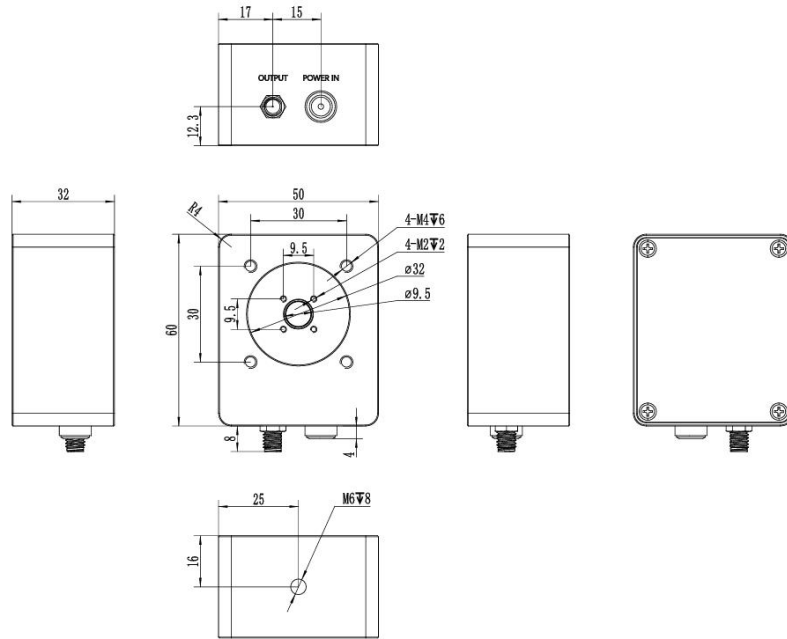
Detector Model Naming Convention: Detector Series-Bandwidth-SM1

Example:

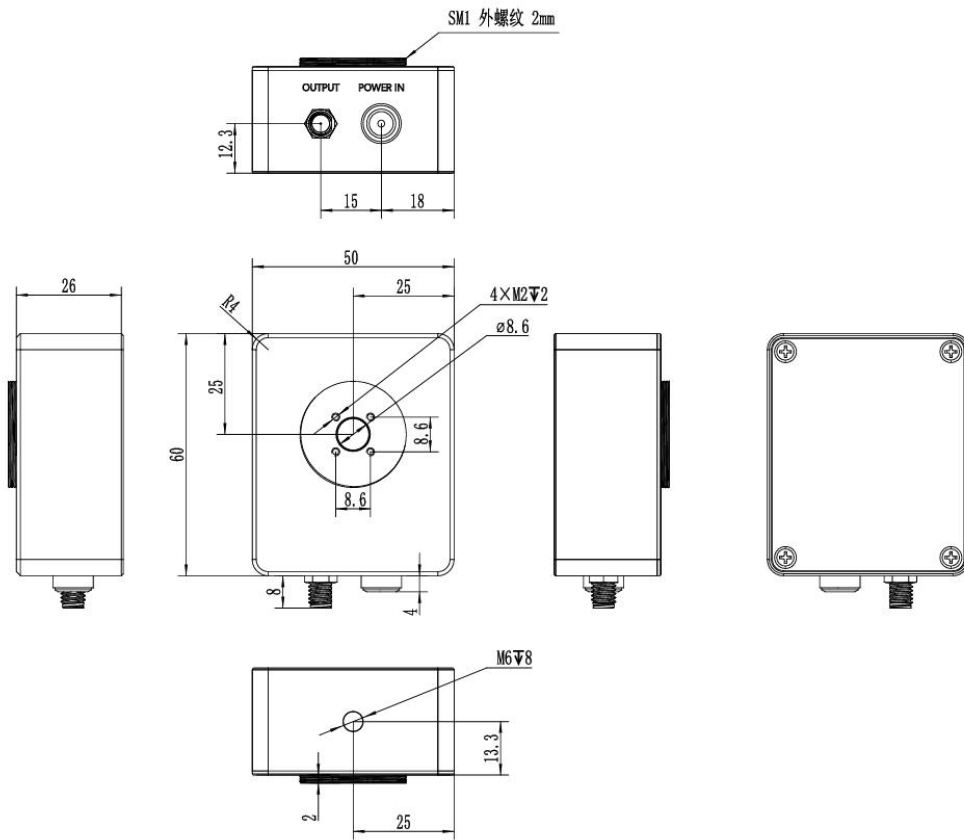
FLD02A-350 indicates a 30mm cage-type structure.

FLD02A-350-SM1 indicates an SM1 external threaded structure.

Machine Dimensions

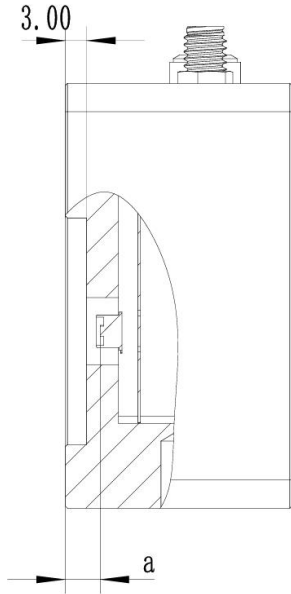


30mm cage structure (default)

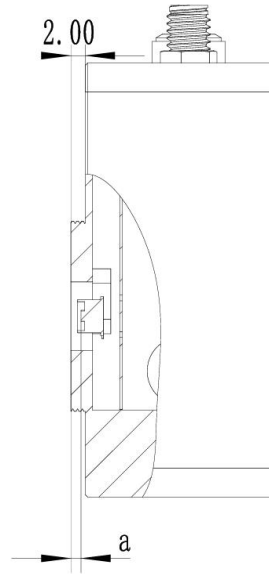


SM1 External Thread Configuration (Optional)

Schematic Diagram of Light-Sensitive Distance Measurement



30mm cage structure

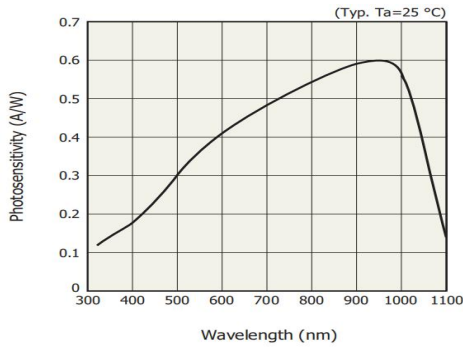


SM1 External Thread

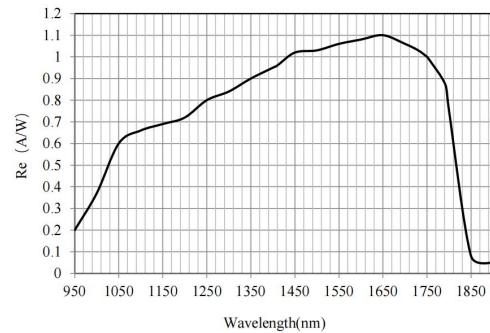
Configuration

Distance	A sereis	A sereisSM1
a=	5.7mm	1.7mm

Response Curve



FLD02AResponse Curve



FLD02CResponse Curve

2. Packing List

No	Item Name	Quantit y	Unit	Notes
1	Photoelectric Detector	1	Piece	
2	Terminal Cable (8-pin)	1	Stick	200 mm long
3	MMXC to BNC RF Cable	1	Stick	
4	Linear Power Supply (Optional)	1	Piece	PN12-M8