

easyray100 / 110 / 120

Single beam sensor

Technical data

FEATURES

- ▶ Easy installation without expensive kits
- ▶ Fast response time
- ▶ High resistance to ambient light
- ▶ Operating range up to 12 m
- ▶ PNP / NPN output (push-pull)



OPTICAL

Operating range		
- easyray100	0.1 ... 2 m	
- easyray110	0.1 ... 5 m	
- easyray120	0.1 ... 12 m	
Aperture angle		
	Emitter	Receiver
- easyray100	±3° at 2 m	±5° at 2 m
- easyray110	±5° at 2 m	±9° at 2 m
- easyray120	±7° at 6 m	±9° at 6 m
Max. ambient light		
100,000 Lux		
Wave length, IR		
940 nm		

MECHANICAL

Dimensions (h × w × l)	31 × 25 × 11 mm
Housing material	PC
Enclosure rating	IP65
Temperature range	-25°C ... +60°C

ELECTRICAL

Supply voltage U_{sp}	10 ... 30 VDC
Current consumption	
- Emitter	< 15 mA at 24 VDC
- Receiver	< 15 mA at 24 VDC
Output	PNP/NPN (push-pull)
Max. output load	100 mA, 100 nF
Typ. response time	< 3 ms
1 × Red Status LED Tx	ON – Power
2 × Red Status LED Rx	ON – Power ON – Light beam not interrupted

CONNECTION CABLE AND ELECTRICAL CONNECTION

Emitter

Connection	Fix cable or M8, 4-pin
Length connection cable	
- easyray100	2 m
- easyray110	5 m
- easyray120	12 m
Diameter	Ø 3.5 mm
Cable material	PVC, black
Wires	
AWG26	
• brown	U_{sp}
• blue	GND (0 V)

Receiver

Connection	Fix cable or M8, 4-pin
Length connection cable	
- easyray100	2 m
- easyray110	5 m
- easyray120	12 m
Diameter	Ø 3.5 mm
Cable material	PVC, gray
Wires	
AWG26	
• brown	U_{sp}
• blue	GND (0 V)
• black	Output

GENERAL

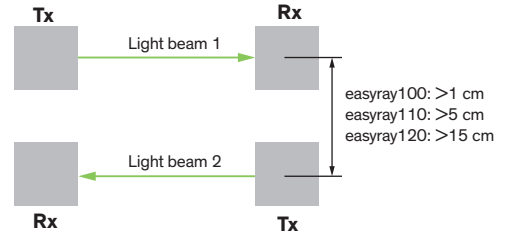
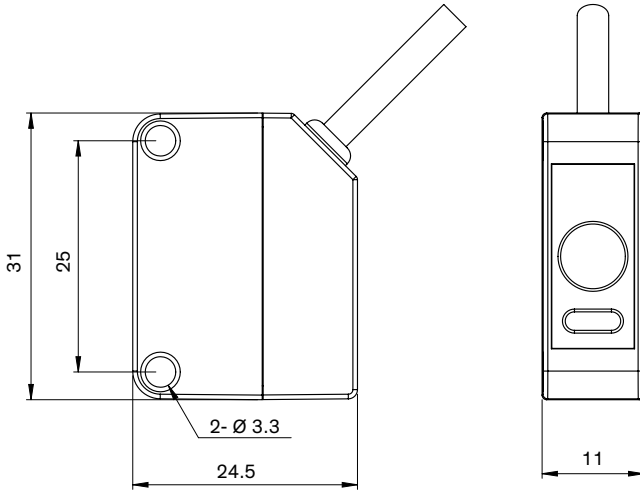
EMC emission	EN 61000-6-3:2007, EN 12015:2014
EMC immunity	EN 61000-6-2:2019, EN 12016:2013
Vibration	IEC 60068-2-6:2007
Shock	IEC 60068-2-27:2008
RoHS	2011/65/EU
Certificate	CE



CEDES AG is certified according to ISO 9001: 2015.

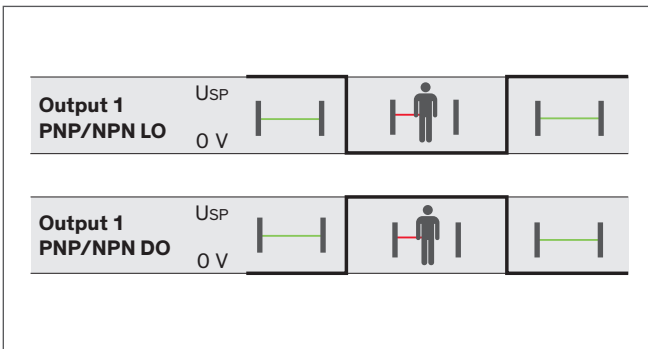
Dimensions

All dimensions in mm
Proportions not to scale

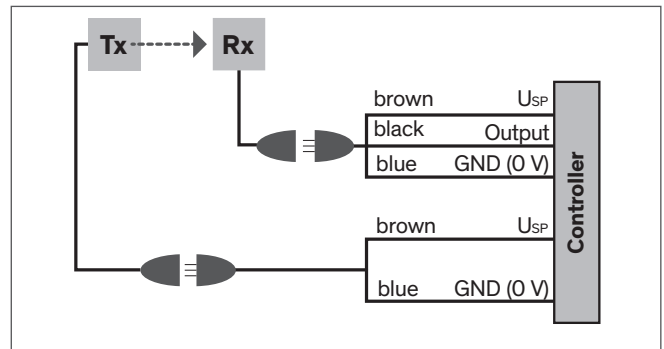


When using two through beam light barriers, pay attention to crossed mounting.

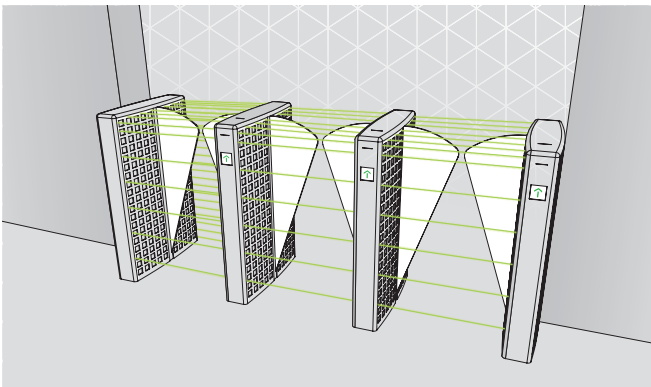
Output logic



Electrical connection



Applications



Personnel sluices



Sliding doors