

OPTICAL BARRIER OB-ITPF

Logika Technologies infrared laser optical barrier, Model OB-ITPF, is designed for automation of steel, aluminum, and other mill production lines. With its high-output LED laser, the OB-ITPF is well suited to detect billets and slabs inside reheat furnaces. It exhibits strong anti-jamming capabilities in high radiation environments and performs well around fog, dust and water.

The OB-ITPF is specially designed for harsh conditions in heavy industrial environments. The IP66 rugged enclosure protects the electronics and allows the sensor to withstand these conditions. The fiber allows the electronics to be positioned away from the heat source.



OB-ITPF	-	XXX	-	X
Base		Power Input		Output
Model		024 = 24 VDC		N = NPN
		110 = 110 VAC		P = PNP
		220 = 220 VAC		

Operating Temp	Emitter & Receiver: -25°C to +70°C (-13°F to 158°F). Optical Heads: Up to 300°C (572°F)
Power Input	24 VDC, 110 VAC, 220 VAC @ 5 W
Output	Relay NO/NC @ 5 A, Choice of PNP or NPN "S" type output @ 100 mA
Response Time	Relay < 25 ms, PNP/NPN < 15 ms
Detect Range	Up to 50 m (164 ft.)
LED Indicators	Power, signal strength, emitter and receiver signal strength indicators
Cable	2 metre Fiber Optic Cable (cable length can be customised)
Size	Lens Enclosure: 444 mm L x 127 mm D x 127 mm H (17.5" L x 5" D x 5" H) Emitter and Receiver Electronics: 230 mm L x 90 mm W x 76 mm H (9" L x 3.5" W x 3" H"). Total weight: 14.3 kg (31.5 lbs)
Housing	Cast aluminum enclosure rated IP66
Indicators	Emitter/Receiver Green = Power on; Receiver: Red = target detect
Laser	905 nm Near-IR, average power <5 mW. Class IIIR

Key Features

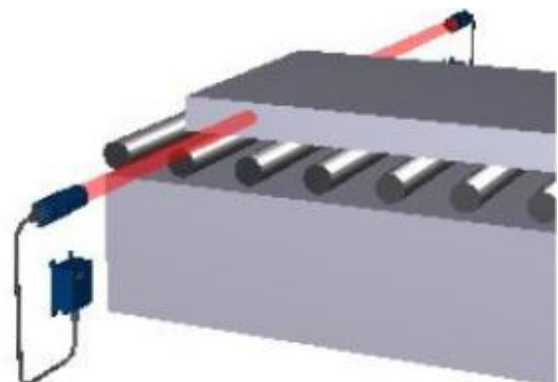
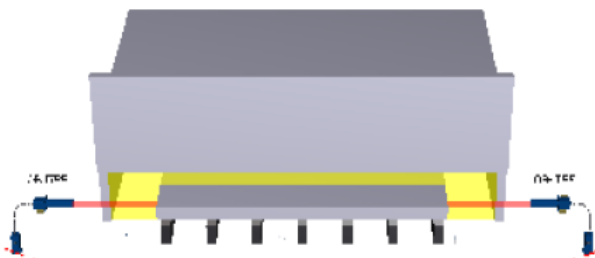
- Intense highly directive near infrared laser
- Light strength, signal strength and detection indicators
- Fiber optic feature allows for remote sensor installation
- Insensitivity to ambient light
- High power laser penetrates harsh environments, is insensitive to ambient light and radiation from furnaces, and is ideal for long distances
- Remote optical heads are connected to their electronics components through fiber optic cable protecting the electronics from harsh environments

Typical Applications

- Furnace entry and exit
- Detecting billets and slabs
- Detecting coils

Additional Options

- Junction Box - Includes electrical support components
- Laser alignment tool



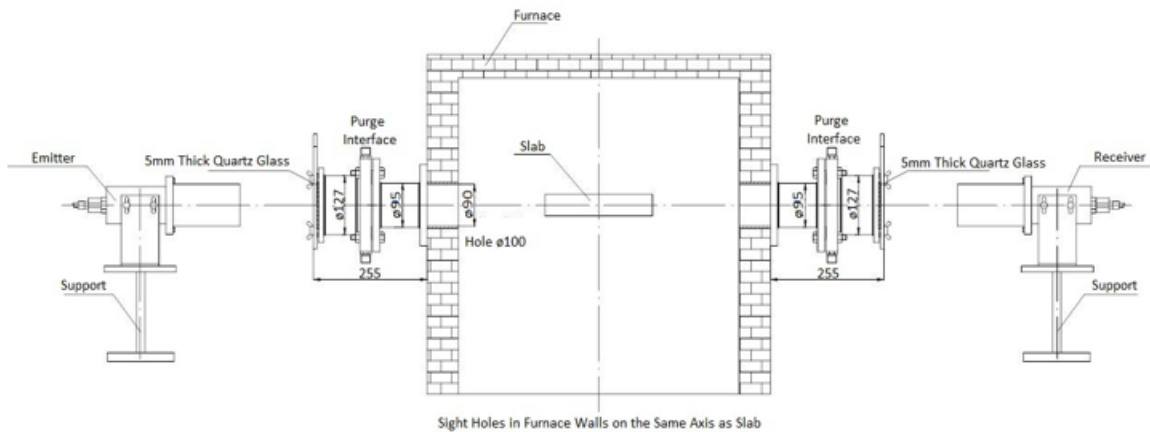
Cable Terminal Wiring Description.

Number	Color	Pin No.	Function
1	Brown	K	+24VDC/ 110/220VAC
2	Red	M	0V/Neut/Neut
3	Orange	A	Earth

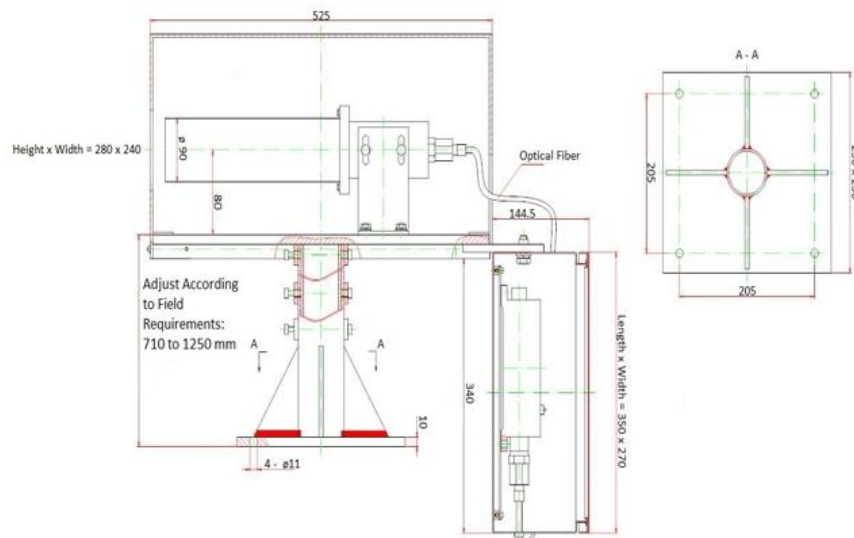
Emitter Wiring Diagram

Number	Color	Pin No.	Function
1	Brown	K	+24VDC/ 110/220VAC
2	Red	M	0V/Neut/Neut
3	Orange	A	+24VDC Out
4	Yellow	B	0VDC Out
5	Green	G	Earth
6	Blue	J	PNP Hi=Detect
7	Purple	L	NPN Low=Detect
8	Gray	D	Relay NO.
9	White	E	Relay COM.
10	Pink	F	Relay NC.

Receiver Wiring Diagram



OB-ITPF Detection System



Mounting Diagram