Static Hot Metal Detector

Logika Technologies Static Hot Metal Detector is designed for steel industry applications. It includes a rugged IP66 enclosure protecting state-of-the-art electronics and will withstand the harsh ambient conditions present in heavy industrial environments. The HMD-ST is used primarily for detection of hot metal above 300°C (572°F), including most shapes and dimensions of wire rod, bar, strip, steel plate, billet and slab. If the environment is too harsh, a fiber optic option is available. <u>Laser pointer is available for easy alignment.</u>
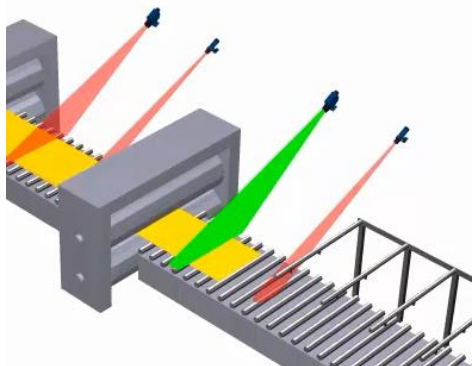
HMD –	ST –	XXX
Base		Power Input
Model		**024** – 024 VDC
		110 – 110 VAC
		220 – 220 VAC

Operating Temp	-25˚C to +70˚C (-13˚F to +158˚F). With cooling water: +120˚C (250˚F)
Detection Range	0.2-8 m
Response Time	Relay < 8 ms, PNP/NPN < 0.2 ms
LED Indicators	Green = power on, Red = target detect
Output	Relay NO/NC @ 3 A, Choice of PNP(S) or NPN (\S) type output @100 mA
Power Input	24 VDC, 110 VAC, 220 VAC @ 5 W
Cable	Insulation 20 MΩ, 500 VDC, ≥500˚C (930˚F)
Housing	Cast aluminium enclosure rated IP66, includes cooling water connection and air purge connection
Size	Enclosure: 217 mm L x 73 mm W x 167 mm H (with mounting bracket) (8.5" L x 3" W x 6.6" H), 1.8 kg (4.0 lbs)
Laser Aiming	Controlled by push button on the back of housing. Class 2 laser
Self-testing	Self-test activates when test pin connected to 0 VDC OR test button is press at the back

Features

- Designed for harsh environment with IP66 enclosure
- Integrated air purging and cooling water connection
- Test button at the back of sensor
- Sensitivity adjustment at back of sensor
- Laser pointer for alignment
- Easy to install
- Very fast response time

Applications

- Slab/Billet detection and positioning
- Reheat furnace entrance
- Reheat furnace exit
- Billet detection – continuous casting
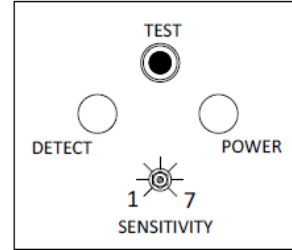- Wire Rod Mill / TMT Bar

Additional Options

- Junction Box - Includes electrical support components
- Shroud - Sheet metal protective cover
- Support Stand - Steel Construction - adjustable for mounting sensors

The HMD-ST's Control Panel is located on the back of the housing. The following functions are available on the Control Panel:

POWER = Green: HMD is powered.
DETECT = Red: Hot metal target detected

Detector **TEST** and laser aiming button
Potentiometer = Sensitivity range adjustment

Cable Terminal Wiring Description

Number	Color	Pin No.	Function
1	Brown	K	+24VDC/110VAC/220VAC
2	Red	M	0V/Neut/Neut
3	Orange	A	+24VDC Out
4	Yellow	B	0VDC Out
5	Green	G	Chassis Ground
6	Blue	J	PNP (S)
7	Purple	L	Self test
8	Gray	D	Relay NO
9	White	E	Relay Common
10	Pink	F	Relay NC
11	Black	C	NPN (/S)

Enclosure Diagram.