

## **HMD-1000-T**

### **STATIC HOT METAL DETECTOR**

*NON-CONTACT, RELIABLE, PRECISE DETECTION  
FOR ALL PRODUCTS FROM 225°C (400°F)*

**HMD-1000-TD**



**HMD-1000-TL**



#### **FEATURES:**

- Laser Positioning
- Relay Output and Solid State Output
- Detects at a distance of 0.2 meters to 10 meters
- Test Function
- 100 – 240 VAC, or 24VDC
- Response Time: Relay Output: < 10ms;  
Solid State & Isolated Output: < 2ms

#### **APPLICATIONS:**

- Tracking
- Positioning
- Cut-to-Length
- Presence Detection

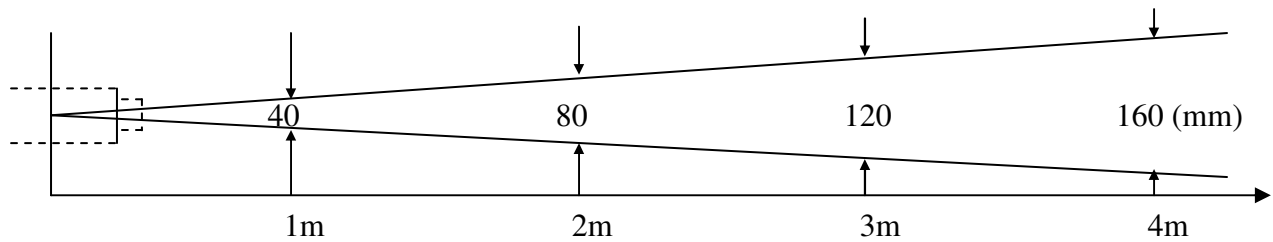


MADE IN THE USA

**DESCRIPTION:**

The HMD-1000-T is used in monitoring the presence of product over 225°C. It is enclosed in a mill-duty, water-cooled, air-purged housing which is designed for the harsh conditions of steel mills.

The detection distance can be adjusted according to the sight field and the type of product. The HMD-1000-T is equipped with an aiming laser for ease of installation.

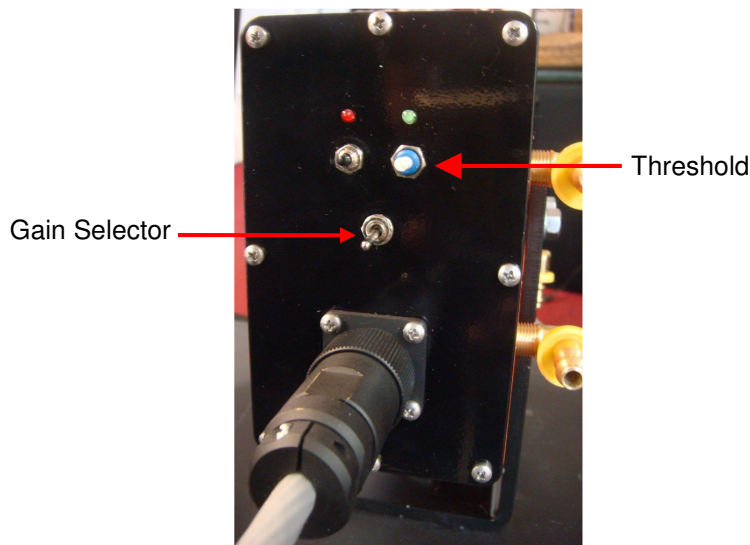


The Hot Metal Detector has two signal gains available, either “normal” or “high” gain.

The **Normal** setting, which is the default, should be used for most situations involving hot metal that is orange-red in color.

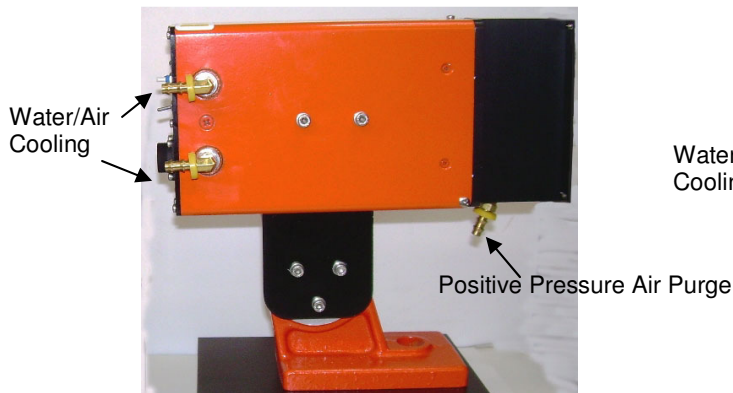
The **High** gain setting should be used for situations where the metal is colder, such as after a quench or when the metal has cooled down to a gray color.

The threshold potentiometer adjusts the energy point at which the sensor detects the hot metal. The threshold can be adjusted on the back of the sensor.

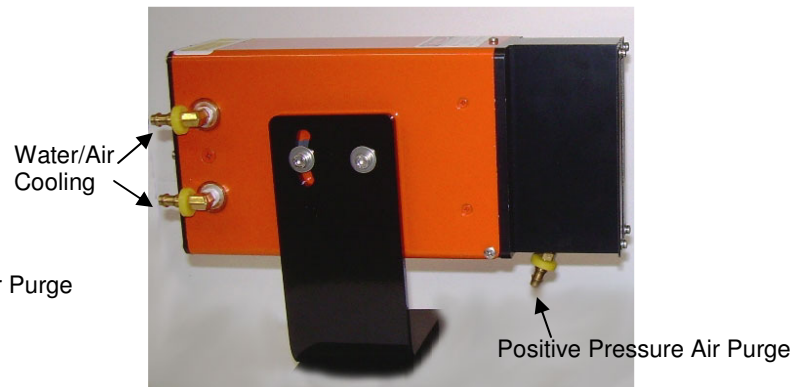


## SPECIFICATIONS:

<b>Response Time</b>		Relay output: <10ms Solid-State output: <2ms	
<b>Laser</b>		Red Laser diode, maximum wavelength 650nm Safety: Class II	
<b>Detection Distance</b>		0.2m to 10m	
<b>Field of View</b>		Standard: 2.30 degrees, 8cm @ 2m (3" @ 6.5") Narrow: 1.15 degrees, 4cm @ 2m (1.5" @ 6.5")	
<b>Target Temperature</b>		From 225°C	
<b>Operating Voltage</b>		100VAC - 240VAC or 24 VDC	
<b>Power Consumption</b>		<5W	
<b>Outputs</b>	<b>Relay Output</b>		AC 250V, 10A DC 30V, 10A
	<b>Solid State Output</b>	24V	<b>High Level</b> Selectable high or low, maximum 100mA load current, Default <b>Low Level</b> Selectable high or low, maximum 100mA load current
<b>Detection Indicator</b>		Green LED lighted when target detected	
<b>Test Function</b>		Controlled by switch on the back panel or test input (connect to ground)	
<b>Sight View</b>		Standard: 40mm at 1m Narrow: 20mm at 1m	
<b>Insulation Resistance</b>		DC 500V>20MΩ	
<b>Protection</b>		With polarity protection when DC power is used, output with overload and short circuit protection	
<b>Installation Adjustment</b>		Horizontal adjustment with no restriction, vertical adjustment from -20° to +20°	
<b>Operating Temperature</b>		-25° to 70°C without cooling >70°C with cooling water Maximum: 125°	
<b>Water Cooling</b>		Pressure: <0.3MPa	
<b>Housing</b>		Aluminium housing With air purging and water-cooling connector	
<b>Total Weight:</b>		HMD-1000-TL:3.175 kg / 7 lbs; HMD-1000-TD: 4.82 kg / 9 lbs	

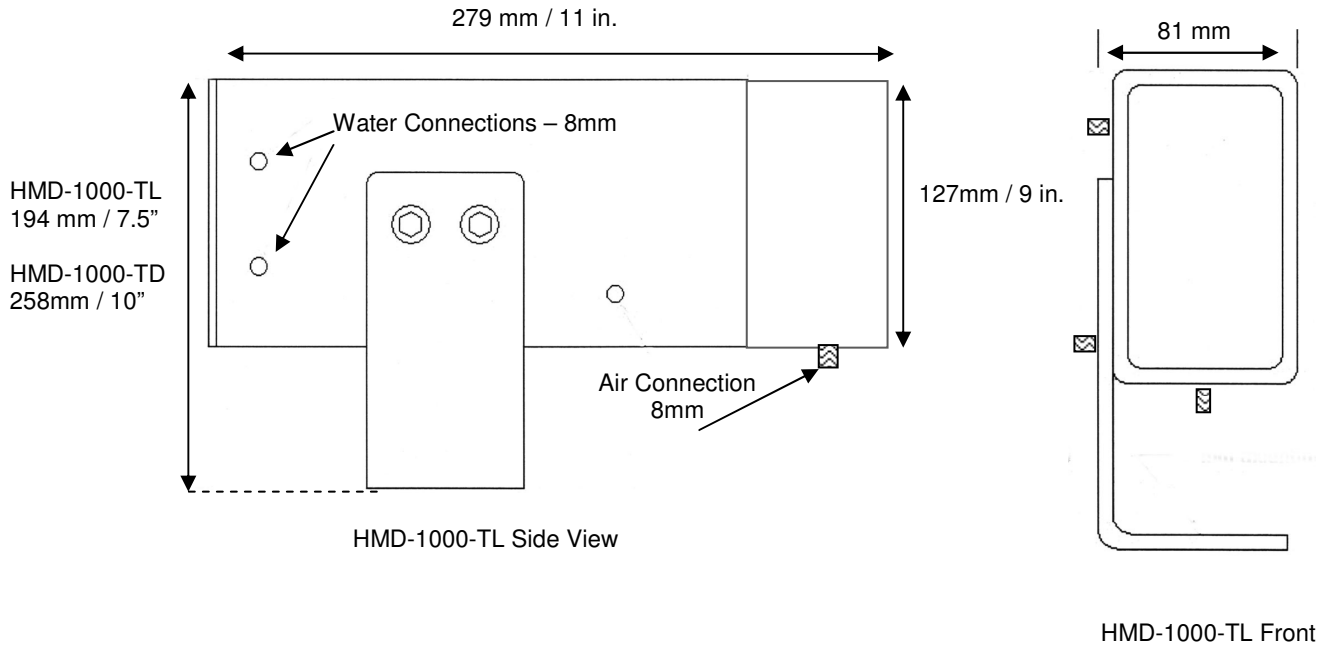


HMD-1000-TD



HMD-1000-TL

## DIMENSIONS:



## ORDERING INFORMATION:

Model	Foot Mount	Input Voltage	Cable Length *	Field of View
HMD-1000-	TL	AC 100-240 V AC	2 meters Standard HMD1-20015	Standard
	TD	DC 24 V DC	___ m Specify meter length	Narrow

\* Our standard cable length is 2 meters (HMD1-20015) A longer cable length can be used so that the junction box can be installed away from the environment – dust, steam, water, etc., and avoid multiple points of connections. Please specify cable length when ordering.