

## Process Instruments

# **SpotScan**<sup>™</sup>

# Line scanning accessory for spot pyrometers

Fluke Process Instruments is proud to introduce the SpotScan accessory. This accessory is used with Endurance®, Marathon MM, Marathon MR, Modline® 5 and Modline 7 Series sensors. When mounted to the front of the sensor, the accessory allows the user to gather temperature information over a larger area on the target due to the scanning mechanism inside the accessory.

# Get more process temperature information!

With SpotScan, you can continue to use the supreme sensor optics to achieve small spot sizes on your target, but with the scanning capability, you can have the spot sweep over the target to see a larger area, providing more data and information for your process. By using the sensor peak picker capabilities, you can see a hot spot over a larger area. Additionally it is important to continuously monitor the analog output for temperature variations that exceed defined limits.

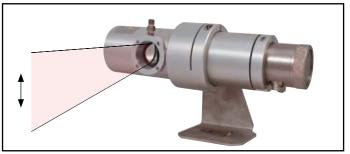
With the SpotScan accessory, you still use the analog temperature output that comes from sensor. By using the various signal conditioning sensor features, you can obtain temperature information over the area you are scanning in a variety of different ways. For instance, if you use the peak picker function, you can look for hot spots over a larger area. Similarly, if you use the averaging or response time function, you can obtain average temperatures over a larger area. In any case, the SpotScan accessory allows you to look at a larger area providing more data to understand your process better.



# **Sighting Options**

The SpotScan accessory provides an innovative way to allow you to sight the instrument or periodically check sighting. Onboard SpotScan accessory controls allow you to manipulate the end or center positions of the scan, as well as the frequency of the scan.

- 1. If you have a sensor equipped with a laser, you can simply turn the laser on to see exactly where the sensor is aimed.
- 2. If you have a sensor equipped with only through-the-lens sighting, you can stop the scanning at the end points to make aiming adjustments in this area.



Endurance sensor SpotScan accessory and optional air purge

## **Standard Features**

- Durable housing IP65 enclosure designed to survive in ambient temperatures up to 60°C (140°F)
- Air purge option available for use in dusty or dirty environments
- For use with Endurance, Raytek® Marathon MM, Marathon MR, Ircon® Modline 5 and Modline 7 Series sensors
- Sighting achieved with the on board sensor via laser, through-the-lens sighting or video function
- SpotScan controls accessible via removable end-cap
- Externally visible 3-state indicator: stationary, power on, scanning
- Interfaces to SpotScan mounting brackets for tilting and positioning
- Uses sensor DC power supply for easy installation

## **Highlights**

- Easily mounts to the housing of any Endurance, Marathon MM, Marathon MR, Modline 7\* or Modline 5 sensor
- Innovative scan mirror positioning capability allows you position mirror at end-points to easily sight and configure mounting of the sensor and accessory

# Easy Setup and Installation – Reduce your installation costs

- The SpotScan accessory utilizes the existing sensor DC power supply.
- Optional air purge allows for use in dirty and dusty environments

## **General Specifications**

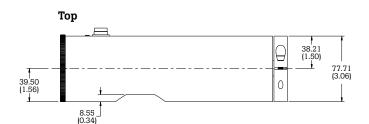
Scan Angle	2 - 15° adjustable by control knob			
Scan Frequency	0.5 - 5 hz. Adjustable by control knob			
Internal optical path distance	EN1R 31.9 mm [1.25 in] MR 31.9 mm [1.25 in] MM 91.0 mm [3.58 in] Modline 5 99.1 mm [3.90 in] Modline 7 91.0 mm [3.58 in]			
Status Indicator	3-state (stationary, power on, scanning)			
Power Supply	18 – 32 VDC, 12W			
Operating Temperature Range	0 °C - 60 °C (32 °F - 140 °F)			
Storage Temperature	-20 °C - 85 °C (-4 °F - 185 °F)			
Weight	1.98 kg (4.38 lb.)			
Enclosure Rating	IP65 (when sensor is fitted in accessory)			
Standards	CE			

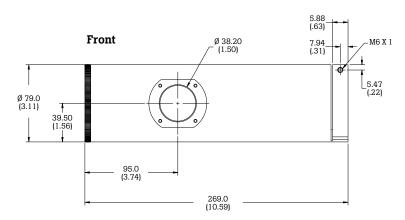
Window	Endurance	Marathon	Modline	Correction Factor
SSA (uses N-BK7 window material)	EN1R	MR1S	5R	0.98 ± 0.02*
	EN1R	MR1S, MM1M	5R, 52, 72	
		MM2M	5G, 7G	$0.90 \pm 0.05$
		MM3M	56,76	
SSB (uses ZnS window material)		MMMT	75	0.75 ± 0.10
		MMG5	77	$0.93 \pm 0.05$
		MMG7	78	$0.77 \pm 0.10$
		MMLT	74	0.73 ± 0.10

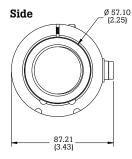
<sup>\*</sup> E-Slope correction, depends on measured temperature

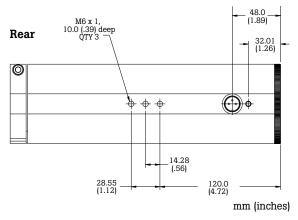
Note: SpotScan accessory will interface to only Modline 7 sensors configured as "7X-XXXX-X-X-2"

## **Dimensions**









<sup>\*</sup> Modline 7 requires "7X-XXXX-0-0-2" configuration



# **Applications**

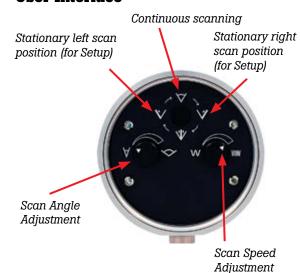
To avoid false readings associated with scale buildup on the metal surface, you can use the peak picker function to provide a more accurate temperature measurement of the steel.

While looking at thin wires that are not always in the field-of-view, the SpotScan accessory will allow you to look over a larger area and still see the wires.

Use the SpotScan accessory for web or conveyor hot spot or cold spot monitoring. Mount the sensor and accessory to allow for complete coverage of the area you want to monitor.

With the two SpotScan models available, you can scan high and low temperature applications.

## **User Interface**



# **Options**

#### Power cables

PSCB7HT | High-temp (180 °C/356 °F) 7.5 m

power supply cable includes connector to the accessory

## Accessories for SpotScan only

SSUAA | SpotScan universal adapter

accessory

SSRAM Right angle mount to attach to

SSUAA, SSA or SSB

SSAP SpotScan air purge accessory

# **Applications**

- Metals processing
- Molten metal/forging
- Hot rolling mills
- Rod/wire mills
- · Heat treating & annealing
- Induction heating
- · Induction pipe welding
- Butt welding
- Hot spot detection (conveyors, webs, belts)
- Refuse burning
- · Carbon graphite production

# The Fluke Process Instruments Guarantee

The SpotScan accessory is supported by a 2 year warranty. With a network of trained representatives and agents in over one hundred (100) countries and offices located in the U.S., Germany and China, we provide local service and support you can rely on time after time.

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### **Worldwide Service**

Fluke Process Instruments offers services, including repair and calibration. For more information, contact your local office or e-mail support@flukeprocessinstruments.com

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