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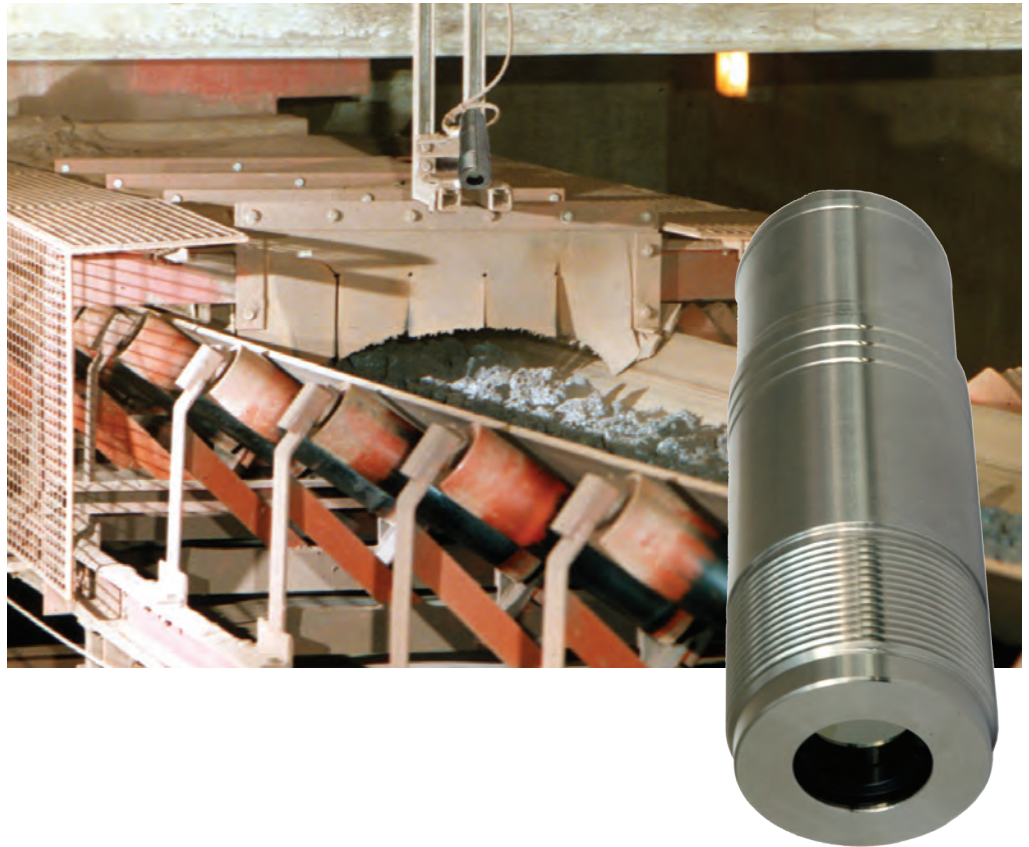

SPRINT 8
Digital Thermometer

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Sprint 8 thermometers are compact, rugged industrial non-contact thermometers with digital signal processing, USB configuration and simple, easy to implement 2-wire, 4-20mA loop connectivity.

Models with optional Green LED aiming diodes are available. This feature simplifies alignment when a measurement object is otherwise difficult to target. The Green LED spot size and location approximates the actual measurement spot size at the measurement distance.

To make installation easy Sprint 8 is housed in a solid stainless steel tubular body with a 40mm x 1.5 external thread. Optional cooling jackets and air purges allow Sprint 8 to operate in hostile environments.

Sprint 8 is supplied with two 40mm locknuts, EasySpot Setup Software, User Guide.
Please order the thermometer connection cable and USB configuration cables separately.

Optical Variants

Optics (focus point **bold**)		4" Focus									
Spot Size in mm	Distance in mm	0	50	**100**	150	200	250	300	400	500	800
Sprint 8 (L)-4	32-1800°F	15	8.5	**2**	10.5	19.0	27.5	36.0	53.0	70	121
		12" Focus									
Spot Size in mm	Distance in mm	0	100	200	**300**	400	500	600	800	1000	1200
Sprint 8 (L)-12	32-1800°F	15	12.0	9.0	**6.0**	13.0	20.0	27.0	41.0	55.0	90
		30" Focus									
Spot Size in mm	Distance in mm	0	200	400	600	**800**	1000	1200	1500	2000	4000
Sprint 8 (L)-30	32-1800°F	15	15.3	15.5	15.8	**16.0**	23.8	31.5	43.1	62.5	140
		48" Focus									
Spot Size in mm	Distance in mm	0	200	400	600	800	1000	**1200**	1500	2000	4000
Sprint 8 (L)-48	32-1800°F	15	15.8	17.3	18.8	19.5	21.8	**24.0**	33.8	50.0	115

Accessories

Single axis mounting bracket Model Sprint 8-SM

Dual axis mounting bracket Model Sprint 8-DM

Cooling jacket incl. air purge unit & bracket Model Sprint 8-JP

Air purge when cooling not required Model Sprint 8-P

USB Configuration

A USB configuration interface on the rear of the Sprint 8 allows configuration of Temperature measurement span, Emissivity, °F or °C reading and Response speed. In research and laboratory environments the Sprint 8 can be operated exclusively over it's USB connection to the supplied EasySpot for Windows interface software.

Sprint 8 rear showing Signal and Programming connections

Cables and Accessories

Part	Description	Part Number
U8-15F	15 foot prewired connector/ cable for Sprint U8	LD-3310A11312
U8-48F	48 foot prewired connector/ cable for Sprint U8	LD-3310A11314
U8 L-15F	15 foot prewired connector/ cable for Sprint U8 L	LD-3310A11512
U8 L-48F	48 foot prewired connector/ cable for Sprint U8 L	LD-3310A11514
U8U-5F	USB Programming cable 5Ft for Sprint	LD-3310A14010
U8-JP	Cooled jacket for Sprint (inc. purge & bracket)	LD-3310A23010
U8-P	Air purge with mounting plate for Sprint	LD-3310A22010
U8-SM	Single-axis adjustable mount for Sprint	LD-3310A21010
U8-DM	Dual-axis adjustable mount for Sprint	LD-3310A21011

Themometer Models

Thermometer Models	Focus	Aiming	Part Number
Sprint 8-4	4 inches	Manual	LD-4408241301
Sprint 8 -12	12 inches	Manual	LD-4408242301
Sprint 8 - 30	30 inches	Manual	LD-4408243301
Sprint 8 - 48	48 inches	Manual	LD-4408244301
Sprint 8 L-4	4 inches	Green LED	LD-4408251301
Sprint 8 L-12	12 inches	Green LED	LD-4408252301
Sprint 8 L-30	30 inches	Green LED	LD-4408253301
Sprint 8 L-48	48 inches	Green LED	LD-4408254301

Specifications

Sprint 8 Digital Thermometer

	Sprint 8	Sprint 8-L (with Green LED)
Measuring range	0-1800°F	32-1800°F
Spectral range	8 to 14 µm	8 to 14 µm
Optics (see table inside)	4, 12, 30 and 48 inch focus factory set versions	
Internal Signal processing	Digital	
Emissivity	0.2 to 1.0, adjustable via USB interface	
Measurement Span	Adjustable anywhere within range, minimum span 100 °F	
Response speed (95% energy)	50 ms (min.), adjustable 100 ms to 100 s via USB interface	
Uncertainty	1% of meas. value specified in Kelvin	
Repeatability	0.5 % of meas. value specified in Kelvin	
NETD	0.05 °F	
Output	two-wire 4 to 20 mA temperature linear, into 600 Ohm load at 24V	
Interface	USB interface (galvanically isolated)	
Aiming	Manual	Green LED
Parameters	Adjustable via USB interface and supplied EasySpot software: emissivity; response time; Units °F / °C, measurement span	
Power supply	24 V DC +/- 25%, ripple 500 mV max LED: 7 … 30 V DC, <200 mW	
Power consumption	max. 0.6 W (without aiming LED)	
Operating temperature	0 to +160°F	
Storage temperature	-4 to +160°F	
Housing	Stainless Steel, IP 65 sealed	
Weight	Approx. 1lb	
Dimensions	Thermometer body length 5 inches, threaded 40mm x 1.5	