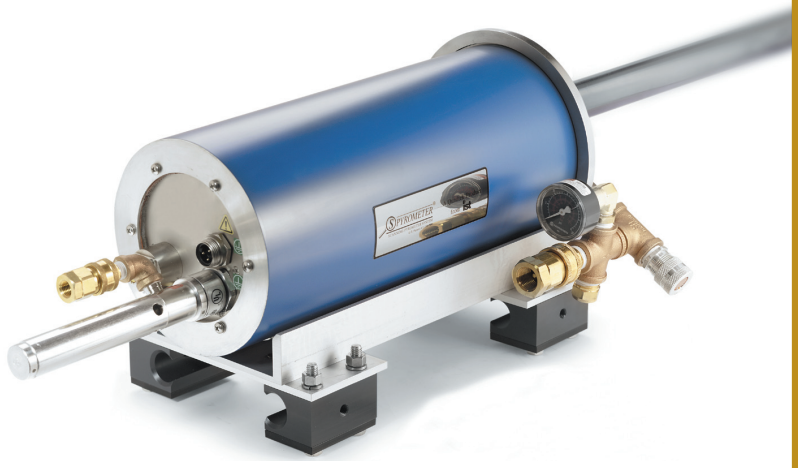
MIRION TECHNOLOGIES



IST-QUADTEK® M554 SPYROMETER³

Patented High Temperature Pyrometer Camera

The IST-Quadtek® Spyrometer³, with its patented combination of a color video camera and a scanning pyrometer, gives the operator the ability to see process conditions while measuring the temperature of virtually any area in the field of view. The M554 imaging pyrometer takes the video image and the temperature information, multiplexes it and sends it, via coaxial cable, to the image processor in the control room and displays it on a VGA monitor. Onscreen temperature measurement data is also accessible through 4-20mA outputs which can easily be interfaced to your control system.

PROCESS / BENEFIT

Rotary Kilns

Monitor cement and lime kiln product and temperatures. See potential kiln upsets early. Interface temperatures to your DCS.

Glass

View for flame impingement and product flow. Accurately measure refractory temperatures.

Fossil Utility Boilers

Observe flame shape and temperature of each burner. Assign a temperature cursor to each flame to aid in controlling NOx levels.

Steel Reheat Furnaces

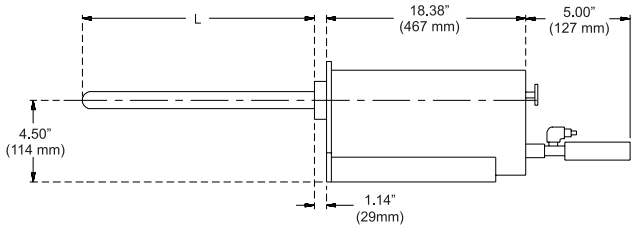
See areas of non-uniform heating and adjust product speed or combustion accordingly. Position temperature cursors to accommodate size and shape of the load.

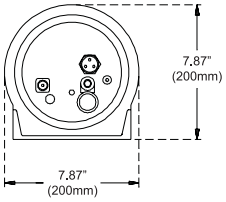
imaging systems

A Mirion Technologies Division

Featuring: ist-quadtek

SPECIFICATIONS AND PERFORMANCE





PYROMETER SENSOR

Temperature Ranges	/TR2: 1558°–3301°F (848°–1816°C) /TR1: 1225°–2291°F (663°–1255°C)
Temperature Accuracy	±1.0% Full Scale
Measurement Technique	Dual wavelength ratio pyrometry
Spectral Regions	Narrow bands centered at 0.8 and 1.6 microns
Spot Size	Approximately 1/24 of horizontal image width
Spatial Scan Resolution	47 horizontal x 35 vertical width of the image
Scan Rate	Scan speed varies with size and number of TMZ's or via operator adjustment

LENS

Construction	Air or water-cooled 304 stainless steel outer shroud; sapphire window for max. environmental protection
Type	Straight view lens: /L30M
Length (L)	703mm (27.7")
Type	45° offset lens: /OAL30W
Length (L)	694mm (27.3") For details on our full range of Spyrometer lenses, please contact your sales representative.
Field of View	Wide: 75° H x 58° V Medium: 50° H x 38° V Narrow: 35° H x 26° V
Diameter	/L: 1.5" (38mm); /OAL: 2.0" (51mm)
Cooling Requirements	Instrument quality air*, 25-40 SCFM (12–19 dm3/sec) @ 5-15 psig (34-103 kPa), required for straight lens
Thermocouple	/TJ: Type J thermocouple option; /TK: Type K thermocouple option

*To ISO 8573-1, Class 1•7•2

CAMERA

Power	115-230 VAC, 50/60 Hz
Camera Detector	Solid state color image sensor
System Resolution	300 lines minimum throughout the image
Video	1.0V p-p, 75ohm, CCTV signal /VTN: NTSC or /VTP: PAL video timing selected at time of order
Control	Iris adjustment on rear of camera; remote iris adjustment from the processor
Application Filter	Filters are provided to match your process and maximize performance. Contact your Sales Representative

ENCLOSURE

Construction	/CEI: Corrosion-resistant, insulated, air-cooled, NEMA 4; /CEW: Corrosion-resistant, water-cooled, NEMA 4
Cooling Type	Vortex cabinet cooler, 25 SCFM @ 100 psi (13 dm3/sec @ 690 kPa); instrument-quality air required or water cooled option available
Ambient Environment	Max. 140°F (60°C) with negligible radiant heat load. Water cooled option available to handle high radiant heat environment

MECHANICAL

Video Output Jack	Female PL-259 "UHF" type
Power Input Jack	Removable waterproof miniplug (JOY type TP, female 3-conductor; mating power cord provided)
Enclosure Cooling Input	1/4" brass quick-disconnect nipple; mating coupler (Snaptite BVHC4-4F) provided
Lens Cooling Input	1/2" brass quick-disconnect nipple; mating coupler (Snaptite BVHC8-8F) provided
Weight	30 pounds (14kg) for standard air-cooled configuration (lens and camera)

MIRION TECHNOLOGIES

315 Daniel Zenker Drive
200 IST Center
Horseheads, NY 14845
USA
T +1.607.562.4369
+1.800.432.1478
F +1.607.562.4392

Station Road
Alton, Hampshire
GU34 2PZ, UK
T 01420.541600
F 01420.541700

Kaiser-Konrad-Str 93a
D 53225 Bonn
Deutschland
T 0228.625088
F 0228.626300