

# IMPAC KTG 218 AND KTS 218

Fast infrared temperature switches for non-contact recognition of hot objects located in the field of view between 400 and 1500°C



The Impac® KTS 218 and KTG 218 recognizes hot objects located with non-contact monitoring, to trigger a switch process. The switching level can be adjusted via potentiometer and the switch status is indicated by LED.

The switch is used for recognizing, counting, or positioning of hot objects e.g. in forges or steel works. The instrument is equipped with a white LED targeting light for exact alignment and, during operation, the LED is always on.

## PRODUCT HIGHLIGHTS

- Two versions for temperature ranges between 400 and 1500°C
- Switch time only 600  $\mu$ s
- 10 optics, selectable
- LED targeting light for aligning
- Stainless steel housing
- Small dimensions

## AT A GLANCE

### Temperature Ranges

KTG 218  
400 to 1400°C (752 to 2552°F)

KTS 218  
700 to 1500°C (1292 to 2732°F)

### Spectral Range

KTG 218  
0.85 to 1.8  $\mu$ m

KTS 218  
0.85 to 1.05  $\mu$ m

### Measurement Uncertainty

0.75% oR

### Optics

10 fixed optics

### Exposure time $t_{90}$

Switch time: 600  $\mu$ s

### Output

Switch output 20 V, max. 30 mA

TECHNICAL DATA

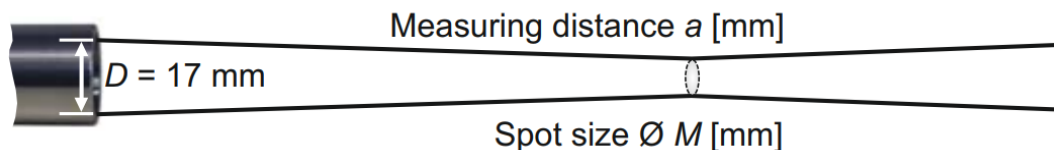
Measurement Specifications		
Temperature Range	KTG 218	400 to 1400°C (752 to 2552°F)
	KTS 218	700 to 1500°C (1292 to 2732°F)
Spectral Range	KTG 218	0.85 to 1.8 μm
	KTS 218	0.85 to 1.05 μm
Measurement Uncertainty ( $\epsilon = 1, T_{amb} = 23^{\circ}\text{C}$ )	0.75% of reading in °C	
Repeatability	0.3% of temperature value (emissivity $\epsilon = 1$ )	
Optics (Measuring Distance)	170 mm, 220 mm, 400 mm, 600 mm, 800 mm, 1000 mm, 1400 mm, 1600 mm, 1800 mm, 2000 mm	
Sighting	LED targeting light	

Electrical and Communication Specifications	
Power Supply	24 VDC ( $\pm 15\%$ ), 60 mA
Switch Time	600 μs
Output	Switch voltage 20 V when exceeding the threshold, max 30 mA

Environmental Specifications	
Protection Class	IP 65
Ambient Temperature	0 to 70°C (32 to 158°F)
Dimensions [mm]	25 x 125 (Ø x l)
Housing	Stainless steel
CE Label	According to EU directives about electromagnetic immunity

<sup>1</sup> The determination of the technical data of this pyrometer is carried out in accordance with VDI/VDE IEC TS 62942-2, the calibration / adjustment in accordance with VDI/VDE 3511, Part 4.4.

OPTICS



## REFERENCE NUMBERS

Measuring Distance [mm]	Spot Size M [mm]	KTG 218 (400 to 1400°C)	KTS 218 (700 to 1500°C)
170	2.5	3 844 590	3 844 490
220	4	3 844 500	3 844 400
400	5.5	3 844 510	3 844 410
600	7	3 844 520	3 844 420
800	10.5	3 844 530	3 844 430
1000	14	3 844 540	3 844 440
1400	18	3 844 550	3 844 450
1600	21	3 844 560	3 844 460
1800	24.5	3 844 570	3 844 470
2000	28	3 844 580	3 844 480

## ACCESSORIES

PN	Description
3 821 520	Connection cable, 2 m
3 821 530	Connection cable, 5 m
3 821 540	Connection cable, 10 m
3 821 550	Connection cable, 25 m
3 834 230	Adjustable mounting support, stainless steel
3 835 180	Air purge unit, stainless steel
3 837 440	Cooling jacket
3 835 240	Air purge unit with 90° mirror



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## ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than four decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

AE's power solutions enable customer innovation in complex semiconductor and industrial thin film plasma manufacturing processes, demanding high and low voltage applications, and temperature-critical thermal processes.

With deep applications know-how and responsive service and support across the globe, AE builds collaborative partnerships to meet rapid technological developments, propel growth for its customers and power the future of technology.

PRECISION | POWER | PERFORMANCE | TRUST

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