

## Piros S Infrared Pyrometer

-40 °C ... 2500 °C



**Non-contact temperature measurement  
Steel glass paper plastics ceramics**

Piros pyrometers are non-contact measuring thermometers with analog outputs. They complement the Piros infrared sensor range with switching performance in the OSA/OKA/OKB range, which have been tried and tested for years (please request brochure!).

For temperature measurement we have the stationary design OKS in the Piros S range available in various types with measurement ranges between -40 and +2500 °C.

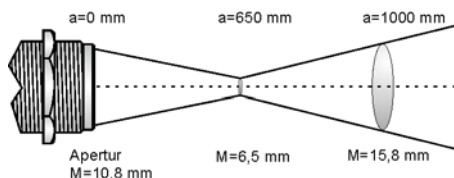
The sensors have been designed for control and monitoring tasks in many varied industries:

- steel works and rolling mills
- forging works
- presses
- soldering, sintering and hardening works
- glass industry
- food industry
- paper industry

We recommend the use of our questionnaire for application analysis so that the user does not necessarily need to cope with the theory of radiation measurement. (Please order by fax or at [www.proxitron.com](http://www.proxitron.com))

The following criteria are relevant for selection of the correct sensor:

- size and condition of the object
- minimum/maximum object temperature
- distance from sensor
- measurement range



Various optical systems ensure optimum adaptation of the measured area to the object size. Please see the type summary for a list of measured area size in relationship to object distance.

### Highlight overview

Stainless steel housing with M40 thread  
Plug connection with M9 thread

Temperature range:

- 40 bis 1000 °C, for all materials
- 100 bis 1300 °C, for glass
- 250 bis 2500 °C, for metal
- 300 bis 1300 °C for measurement through flames (e.g. in furnaces)

Electrical connection:

- 24 V DC as current loop with 4 - 20 mA measuring signal.
- Integrated USB interface (galvanically isolated) for parameterisation or measuring data transmission with PC software or hand-held parameterisation device.

Technical data:

- Response time from 10 ms
- Measuring areas from 1,5 mm diameter
- Measuring failure from 0,5%
- Emissivity adjustable

With integrated laser pilot light and maximum value memory depending on model.

Accessory:

- Mounting bracket
- Colling jacket
- Air purge unit
- Laser - Pilot light attachment
- Monitoring und parameterisation software and USB cable
- hand-held parameterisation device
- Connection cable in different lengths

### Software and hand-held programming device

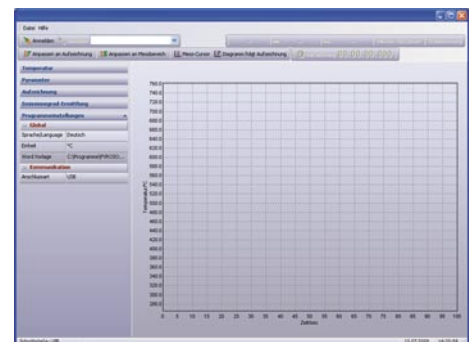
The integrated service interface enables display and adaptation of the following parameters:

- Temperature display °C / °F
- Measuring range settings
- Emissivity
- Maximum value memory
- Response time t95

Settings can be carried out using a laptop or PC with the aid of the optional software and the USB interface cable provided. The software runs under Windows. The temperature display can be shown as °C or °F. The user guidance system is multi-lingual and entirely intuitive. The software offers beside the possibility of the parameterisation also the recording and evaluation of the measuring data.

Stand-alone operation:

If the OKS series device is connected via USB to a PC no further power supply is required for operation of the device.



The hand-held parameterisation device allows temperature display on site at any time in addition to changes to all device parameters without PC or software.

Pyrometer of the series OKS are available for different applications in different versions. Various optics allow an adaptation to object size and distance.  
All devices are provided with plug connection.  
Separate connecting cables are available in different length.



	Measuring range	Spectral range	Measuring spot / distance	Type	Art.-No.	
Application	Glass	100 - 1300 °C	5,14 µm	2,5 / 100 mm	OKS 5 TG13.14 S9	6920Q
				6 / 300 mm	OKS 6 TG13.14 S9	6920R
				16 / 800 mm	OKS 7 TG13.14 S9	6920S
				24 / 1200 mm	OKS 8 TG13.14 S9	6920T
	Measurement through flames	300 - 1300 °C	3,9 µm	2,5 / 100 mm	OKS 5 TF13.14 S9	6920U
				6 / 300 mm	OKS 6 TF13.14 S9	6920V
				16 / 800 mm	OKS 7 TF13.14 S9	6920W
				24 / 1200 mm	OKS 8 TF13.14 S9	6920X
	Metal	250 - 1300 °C	1,5 µm ... 1,8 µm	3 / 290 mm	OKS 2 GA13.14 S9	6920D
				6,5 / 600 mm	OKS 3 GA13.14 S9	6920A
				40 / 4000 mm	OKS 4 GA13.14 S9	6920E
		350 - 1800 °C		1,5 / 290 mm	OKS 2 GA18.14 S9	6920F
3,5 / 600 mm				OKS 3 GA18.14 S9	6920G	
20 / 4000 mm				OKS 4 GA18.14 S9	6920H	
600 - 1800 °C		0,8 µm ... 1,1 µm	3 / 290 mm	OKS 2 S18.14 S9	6920I	
			6,5 / 600 mm	OKS 3 S18.14 S9	6920J	
			40 / 4000 mm	OKS 4 S18.14 S9	6920C	
800 - 2500 °C			1,5 / 290 mm	OKS 2 S25.14 S9	6920K	
			3,5 / 600 mm	OKS 3 S25.14 S9	6920L	
			20 / 4000 mm	OKS 4 S25.14 S9	6920M	
Non metal (Restrictedly also for metal useable)	-40 - 1000 °C	8 µm ... 14 µm	2 / 100 mm	OKS 5 T10.14 S9	6920N	
			6 / 300 mm	OKS 6 T10.14 S9	6920O	
			16 / 800 mm	OKS 7 T10.14 S9	6920B	
			24 / 1200 mm	OKS 8 T10.14 S9	6920P	

# Piros S Infrared Pyrometer

## Piros OKS accessories

A wide selection of accessories rounds off our product range, and allows adaptation to many different application conditions.



Accessory	Type	Art.-No.
Mounting bracket	DAK 305	6913E
Air purge attachment	DAK 303	6913C
Cooling jacket with air purge	DAK 302	6913B
Laser pilot light unit	DAK 308	6913G
Parameterisation device	DAK 318	6913J
USB interface cable and software	DAK 317	6913I
Connection cable 2 m	ST S9/5-2	9847B
Connection cable 5 m	ST S9/5-5	9847A
Other lengths on request		

Other pyrometer designs are available for special applications.

Please, tell us your requirements.

We will be pleased to advise you.

Continuing brochures:

P21E Infrared Sensors (Hot Metal Detectors)

PIO004E Non-contact Temperature Measurement

Questionnaire

## Applications

- Temperature measurement of glass surfaces
- Material monitoring in presses
- Material detection for the paper or plastics industries
- Temperature monitoring for food industry
- Monitoring of object temperatures in furnaces or behind gas flames.
- Heating and air-conditioning
- Electrical equipment, electronics
- Automobile diagnostics
- Road construction
- Chemical industry
- Furnace construction
- Research and development

## Product range

### Inductive Proximity Switches

WG 210	<b>Sensing distance &lt; 20 mm</b>
WG 220	<b>Sensing distance 20-60 mm</b>
WG 230	<b>Sensing distance 60-120 mm</b>
WG 240	<b>Sensor strips</b>
WG 241	<b>Surface sensors</b>
WG 250	<b>Ring sensors</b>
WG 260	<b>Inductive analog sensors and evaluation electronics</b>

### Further Sensors

WG 100	<b>Capacitive sensors</b>
WG 510	<b>Piros light barriers</b>
WG 610	<b>Piros infrared sensors</b>
WG 620	<b>Piros for fibre optic cables</b>
WG 630	<b>Piros infrared pyrometers</b>
WG 800	<b>Flow sensors, air</b>
WG 830	<b>Flow sensors, liquid</b>

# Proxitron

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