

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.

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.

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

size and condition of the object

minimum/maximum object temperature

lemperature

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 to 1000 °C, for all materials 100 to 1300 °C, for glass 250 to 2500 °C, for metal 300 to 1300 °C for measurment 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.

Acessory:

Mounting bracket Colling jacket Air purge unit Laser - Pilot light attachment Monitoring und parameterisa tion software and USB cable hand-held parameterisation device

Connection cable in different lengths

Piros Infrared Pyrometer General information

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.

Piros Infrared Pyrometer Type summary



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.

All devices are provided with plug connection. Separate connecting cables are available in different length.



		Measuring range	Spectral range	Measuring spot / distance	Туре	ArtNo.
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
	easurement ough 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
	thre			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 / 650 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 / 650 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	69201
				6,5 / 650 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 / 650 mm	OKS 3 S25.14 S9	6920L
				20 / 4000 mm	OKS 4 S25.14 S9	6920M
	Universal	-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
				36 / 2000 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	Туре	ArtNo.	
Mounting bracket adjustable	DAK 305	6913E	
Mounting bracket	DAK 304	6913D	
Air purge attachment	DAK 303	6913C	
Cooling jacket with air purge	DAK 302	6913B	
Laser pilot light unit	DAK 308	6913G	
Protection tube 100 mm lengths	DAK 319	6913L	
Protection tube 300 mm lengths	DAK 320	6913M	
Vacuum flange	DAK 322	6913O	
Cable protection cape	DAK 329	6913X	
Protection tube adapter	DAK 330	6913Y	
Parameterisation device	DAK 318	6913J	
USB interface cable and software	DAK 317	69131	
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.

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





