

## IKPS - INFRARED PYROMETERS

IKPS are industrial pyrometers for contactless temperature measuring of metals bodies external surfaces. Hardening, annealing, rolling, forging, welding, sintering), molten glass, crucibles for glass, ceramics with reading even through glass windows / silicon. Digital signal processing. Configurable by PC: range, emissivity, response time, peak hold time / peak. Spectral ranges: 0.8 ... 1.1 ... 1.8  $\mu\text{m}$  and 1.45 microns. Measuring ranges up to 2500 ° C. Response times as low as 20 ms. Optics for targets low as 4 mm. Led pointing standard. Emissivity adjustable from 5 ... 100%. Linear output 4-20 mA. Be used in environments up to 70 ° C, standard.



The pointer spot LED requires a separate power supply 5 ... 30 VDC and <30 mA. You can use the LEDs during normal operation of the instrument: in this case it is advisable to use a low power so as not to heat the pyrometer.

The pointer LED indicates the center of the target, but does not define its boundary sizes.

### DESCRIPTIONS

	IKPS-S-18	IKPS-S-25	IKPS-GA-13	IKPS-GA-18
Range* °C:	650... 1800	800... 2500	300... 1300	350... 1800
Spectral band:	0,8... 1,1 $\mu\text{m}$		1,45... 1,8 $\mu\text{m}$	
Optics (see table):	I, II, III	IS, IIS, IIIS	I, II, III	I, II, III

Diameter of the target M (mm) to the distance a (mm)					
Optics type	a=0	600	1000	1500	2000
I	13	6	15	26	36
II	16	10	9	15	22
III	17	13	11	11	17
IS	13	4	12	23	34
IIS	16	7	5	12	19
IIIS	17	10	7	7	14

\* Software adjustable, minimum span 50°C)

### TECHNICAL SPECIFICATIONS

Output ** :	4-20 mA (** Fixed output to 3.9 mA for temperature >75°C)
Max load:	400 Ohm (18 V), 700 Ohm (24 V), 1000 Ohm (30 V)
Power supply:	24 Vdc $\pm$ 25%, stabilized, ripple < 50 mV
Self consumption:	<1.5 VA with LED active pointer
Pointing:	Led
Accuracy (23 °C):	$\pm$ 0.5% reading value, $\pm$ 1 K
Repeatability:	0.1% reading value, $\pm$ 1 K
Resolution:	0.5 K
Temperature coefficient:	0.2 K / K body temperature (at 23 ° C)
Emissivity:	Software adjustable 0.05 ... 1.00
Response time t90:	Software adjustable 10 / 50 / 250 ms 1 / 3 / 10 s
Time maintaining peak / peak:	Software adjustable OFF / 10 / 50 / 250 ms 1 / 5 / 25 s02
Body:	Stainless steel
Dimensions:	L = 120 mm, M 40 x 1,5
Weight with cable:	about 600 g
Cable length:	2.5 m
Ambient temperature:	0... 70°C, standard
Protection degree:	IP65 (DIN 40050)
Safety system:	I (VDE0411)
Accessories (options):	IP-Service Configuration software with interface cable Stainless steel air purge Stainless steel air /water cooling jacket



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