

Infrared-temperature hand-held measuring instruments

Series IR

When it comes to temperature measurement technique and provided that a combination of simplest control and high measurement accuracy is required, then infrared thermometers will always be the first choice. This choice becomes a must, if one of the following requirements are given:

- Deterioration-free measurement of moving components
- Measurement of dangerous matter e.g. electrically live parts, chemically aggressive materials etc.
- Measurement in inaccessible locations
- Feedback-free measurement of small low-mass components



Without infrared-thermometers are these measurements almost unthinkable.

In this case, nothing is easier as operation according to the motto: targeting – measuring – reading the measurement value. In any area of non contact temperature measurement, SIKA infrared thermometers are reliable partners due to the following features: fully developed laser sight technology, very good optical characteristics, and modern technology with adjustable emissivity, data memory, and numerous additional functions.

Software

To create a high-performance temperature recording and monitoring system, you only need the SIKA software package and a PC. Temperatures measured by MaxiTemp 570 are transferred to the PC via USB-Connection, where data are monitored and evaluated graphically or tabular in form of a company-specific test protocol.

Another highlight of the software package is the user-specific setting of the MaxiTemp-measurement data memory. You can program the alarm limit values, the emissivity, the material, and the number of measurement locations for every measurement point. Continuous measurement value recording and determination of temperature for preventive maintenance becomes an easy task with MaxiTemp, PC and software.

Measuring spots

Hand-held infrared measuring instruments measure the surface temperature of an opaque object.

The instrument's optics detect emitted, reflected, and transmitted energy, which is collected and focused onto a detector.

The electronics translate this information into a temperature measurement and display the temperature. The laser pointer is only used as an pointing device.

To measure a temperature, the hand-held measuring instrument is simply aimed at an object and the measurement activated. Here, the distance and associated spot size is to be observed.

The measuring spot size increases as the distance from the object to be measured increases. The ratio between distance and measuring spot size is represented as optical resolution. The higher the optical resolution, the smaller the measuring spot size is with the same distance.

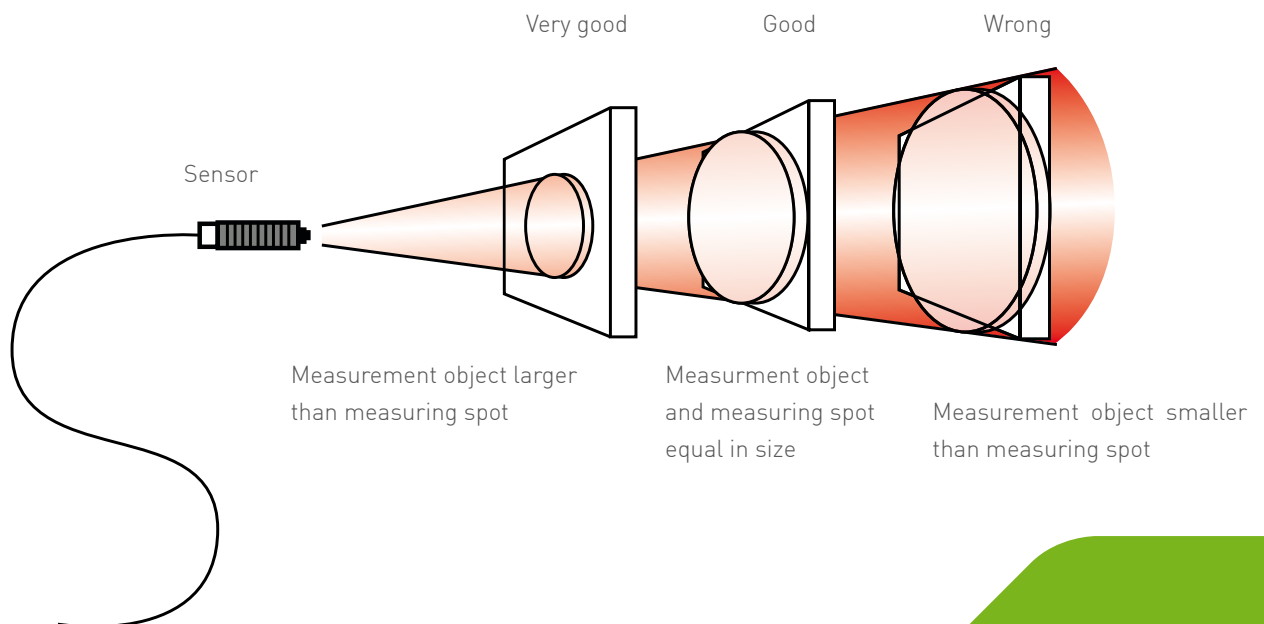


Table of total Emissivity

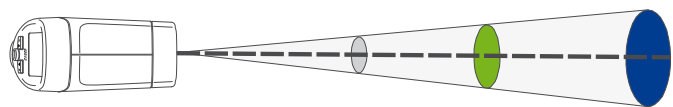
To ensure a correct setting of the emission factor in the infrared temperature measurement, please visit emissivity.sika.net and download a table of total Emissivity.

MiniTemp 400

Technical data

- Temperature range -20...330 °C
- Resolution 0.1
- Accuracy < 500 °C: $\pm(2\% \text{ of rdg.} + 2\text{ °C})$
- Optical resolution 8 / 1
- Emissivity fix 0.95

Type MiniTemp 400



Functions	
Spectral range	8...14 μm
Laser pointer	1
Alarm	
TC connection	
Data Store	
PC connection	
Power supply	9 V
LCD lightning	✓
°C / °F switchable	✓
Bargraph display	
Scan / Hold / Auto OFF	✓
Permanent measuring (Lock)	
Low Bat. indication	✓
MIN / MAX store	✓
AVA / DIF function	
Accessories (incl.)	Battery
Order code	
MiniTemp 400	EME8ETIR400000

Measuring points

Distance	Size measuring points
200 mm	25 mm
400 mm	50 mm
800 mm	100 mm

SemiTemp 509

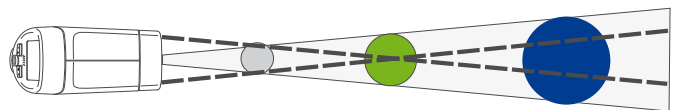
Technical data

- Temperature range -20...510 °C
- Resolution 0.1
- Accuracy < 500 °C: $\pm(2\% \text{ of rdg.} + 2\text{ °C})$
> 500 °C: $\pm(3\% \text{ of rdg.} + 1\text{ °C})$
- Optical resolution 12 / 1
- Emissivity 0.10...1.00

Type SemiTemp 509



Functions	
Spectral range	8...14 μm
Laser pointer	2
Alarm	Acustical high / low
TC connection	
Data Store	
PC connection	
Power supply	9 V
LCD lightning	✓
°C / °F switchable	✓
Bargraph display	
Scan / Hold / Auto OFF	✓
Permanent measuring (Lock)	✓
Low Bat. indication	✓
MIN / MAX store	Max
AVA / DIF function	
Accessories (incl.)	Battery
Order code	
SemiTemp 509	EME8ETIR509000



Measuring points

Distance	Size measuring points
150 mm	12,5 mm
300 mm	25 mm
610 mm	50 mm

SemiTemp 515

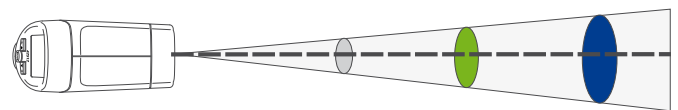
Technical data

- Temperature range -35...800 °C
- Resolution 0.1
- Accuracy <500 °C: $\pm(2\% \text{ of rdg.} + 2\text{ °C})$
>500 °C: $\pm(3\% \text{ of rdg.} + 1\text{ °C})$
- Optical Resolution 12 / 1
- Emissivity adjustable 0.10...1.00

Type SemiTemp 515



Functions	
Spectral range	8...14 μm
Laser pointer	1
Alarm	Acustical high / low
TC connection	Type K
Data Store	
PC connection	
Power supply	9 V
LCD lightning	✓
°C / °F switchable	✓
Bargraph display	
Scan / Hold / Auto OFF	✓
Permanent measuring (lock)	✓
Low Bat. indication	✓
MIN / MAX store	✓
AVA / DIF function	✓
Accessories (incl.)	Battery, TC-K
Order code	
SemiTemp 515	EME8ETIR515000



Measuring points

Distance	Size measuring points
260 mm	20 mm
520 mm	40 mm
1040 mm	80 mm

SemiTemp 512

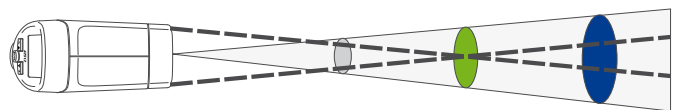
Technical data

- Temperature range -35...1000 °C
- Resolution 0.1
- Accuracy < 500 °C: $\pm(2\% \text{ of rdg.} + 2\text{ °C})$
> 500 °C: $\pm(3\% \text{ of rdg.} + 1\text{ °C})$
- Optical Resolution 30 / 1
- Emissivity adjustable 0.10...1.00

Type SemiTemp 512



Functions	
Spectral range	8...14 μm
Laser pointer	2
Alarm	Acustical high / low
TC connection	
Data Store	
PC connection	
Power supply	9 V
LCD lightning	✓
°C / °F switchable	✓
Bargraph display	
Scan / Hold / Auto OFF	✓
Permanent measuring (lock)	✓
Low Bat. indication	✓
MIN / MAX store	Max
AVA / DIF function	
Accessories (incl.)	Battery
Order code	
SemiTemp 512	EME8ETIR512000



Measuring points

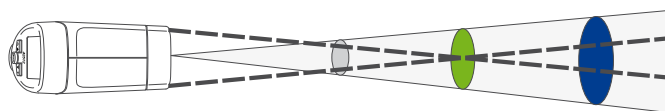
Distance	Size measuring points
150 mm	12,5 mm
300 mm	25 mm
610 mm	50 mm

MaxiTemp 570

Technical data

- Temperature range -35...1000 °C
- Resolution 0.1
- Accuracy < 500 °C: ±(2 % of rdg. + 2 °C)
> 500 °C: ±(3 % of rdg. + 1 °C)
- Optical Resolution 50 / 1
- Emissivity adjustable 0.10...1.00

Type MaxiTemp 570



Functions	
Spectral range	8...14 μm
Laser pointer	2
Alarm	Acustical (high / low)
TC connection	Type K
Data Store	100
PC connection	USB
Power supply	9V
LCD lightning	✓
°C / °F switchable	✓
Bargraph display	✓
Scan / Hold / Auto OFF	✓
Permanent measuring (lock)	✓
Low Bat. indication	✓
MIN / MAX store	✓
AVA / DIF function	✓
Accessories (incl.)	Battery, TC-K, transport case, software, USB cabel, stand-base
Order code	
MaxiTemp 570	EME8ETIR570000

Measuring points	
Distance	Size measuring points
260 mm	20 mm
520 mm	40 mm
1040 mm	80 mm

Our products at a glance

Series IR

	MiniTemp 400	SemiTemp 509	SemiTemp 515	SemiTemp 512	MaxiTemp 570
Temperature range	-20...330 °C	-20...510 °C	-35...800 °C	-35...1000 °C	-35...1000 °C
Resolution	0.1	0.1			0.1
Accuracy < 500 °C > 500 °C	±[2 % of rdg. + 2 °C]	±[2 % of rdg. + 2 °C] ±[3 % of rdg. + 1 °C]			±[2 % of rdg. + 2 °C] ±[3 % of rdg. + 1 °C]
Optical Resolution	8 / 1	12 / 1	12 / 1	30 / 1	50 / 1
Emissivity	Fix 0.95	Adjustable 0.10...1.00			
Spectral range	8...14 µm				
Laser pointer	1	2	1	2	2
Alarm		Acustical (high / low)			Acustical (high / low)
TC connection			Type K		Type K
Store					100
PC connection					USB
Power supply	9 V				
LCD lightning	✓	✓	✓	✓	✓
°C / °F switchable	✓	✓	✓	✓	✓
Bargraph display					✓
Scan / Hold / Auto OFF	✓	✓	✓	✓	✓
Permanent measuring (lock)		✓	✓	✓	✓
Low Bat. indication	✓	✓	✓	✓	✓
MIN / MAX store	✓	Max	✓	Max	✓
AVA / DIF function			✓		✓
Accessories (incl.)	Battery	Battery	Battery, TC-K	Battery	Battery, TC-K, transport case, software, USB cabel, stand base