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Measurement instruments

Scales & Balances

Temperature Meters

PCE-T312

Highly accurate thermometer with two type-K channels

The PCE-T312 handheld digital thermometer had a large LCD and are accurate to within ±0.15 %. Thanks to the backlit display you can use it under adverse conditions. The instrument has 2 type-K channels and is frequently used to measure temperature before and after carrying out an action or process, i.e. when you turn a machine on or off. Pressing the backlight key will turn on and off the display backlight and the user will be able to see the readings shown for T1 and T2.

- For type-K and type j- thermocouples
- Data Hold function
- Min Hold and Max Hold functions
- Low battery indicator
- Shock-resistant ABS enclosure
- 3½ digit LCD
- Backlight key
- Type K thermocouple and battery included

Technical specifications

Measurement range	-200 to 1372 °C
Resolution	up to 100 °C: 0,1 °C above: ±1 °C
Accuracy	up to 1000 °C: ±0.15 %, ±1 °C above: ±0.5 % ±2 °C
Inputs	2
Display	large LCD
Power	3 x 1.5 V batteries (included)
Operating temperature	0 to +50 °C, below 80 % r.h.
Dimensions	150 x 50 x 35 mm
Weight	200 g

Contents

PCE-T312 thermometer, thermocouple sensors, batteries and user's manual

Model No.	Description
PCE-T312	Thermometer with 2 channels

Optional Accessories

CAL-T2	ISO Calibration, 2 channels

See page 3 for temperature sensors.

PCE-T390

Thermometers with memory, RS-232 interface and software

The PCE-T390 handheld thermometer is very accurate and has an internal memory that can store up to 16,000 readings. With the software, which is included and in English, and the RS-232 interface you can transfer data to a PC for further analysis. Time interval measurements can be set by the user. The PCE-T390 can display 4 simultaneous readings and store them automatically to memory.

- Thermometer with 4 channels
- Data Hold and Max Hold indicators
- Average value measurement
- Low battery indicator
- Auto shut-off
- Type-K and type-J thermocouple sensor and Pt100
- Windows compatible software
- Thermocouple sensors up to 220 °C included
- Battery pack included

Technical specifications

Measurement range	type K:	-200 to +1370 °C
	Pt100:	-200 to +1562 °C
Resolution	type K:	0.1 °C (-200 to +1000 °C) 1 °C (+1000 to +1370 °C)
	Pt100:	0.1 °C (-200 to +850 °C) 1 °C (+850 to +1562 °C)
Accuracy	type K:	±0.5 % of reading +1 °C
	Pt100:	±0.4 % of reading +1 °C
Thermocouple inputs		4
Sequence measurement		1 to 3599 seconds (adjustable)
Data memory		16,000 values, with four sensors, 4,000 values each one
Display		four times display LCD 52 x 38 mm
Power supply		6 x AAA batteries (1.5 V) or optional external net power adaptor
Operating temperature		0 to +50 °C, < 80 % r.h.
Dimensions		174 x 68 x 42 mm
Weight		310 g

Contents

PCE-T390 thermometer, type-K thermocouple sensor, software, RS-232 cable and user's manual

Model No.	Description
PCE-T390	Thermometer with 4 channels

Optional Accessories

NET-300	Net Power Adaptor
RS232-USB	USB to RS-232 cable adapter
BOX-LT1	Carrying case
CAL-T4	ISO Calibration, 4 channels

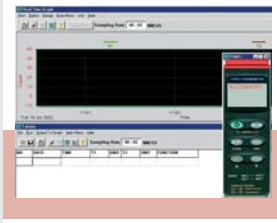
See page 3 for temperature sensors.

PCE-T395

Data logger thermometer with date / clock function, RS-232 interface and software

The PCE-T395 handheld thermometer is accurate and has an internal memory that can store up to 16,000 values with date and time. With the software and the RS-232 interface you can transfer data to a PC for further analysis. Time interval measurements can be set by the user. The PCE-T395 can display 4 simultaneous readings and store them automatically to memory.

- Data logger with date and time function
- Data Hold and Max Hold indicators
- Average value measurement
- Auto power-off
- For type-K thermocouple sensor
- Windows compatible software
- 2 x Thermocouple sensors up to 220 °C included
- Battery and carrying case included



Technical specifications

Measurement range	-200 to 1370 °C
Resolution	0.1 °C (from -200 to 200 °C) 1 °C (from +200 to 1370 °C)
Accuracy	±0.2 % of reading measurement (-200 to 200 °C) +0.5 % (200 to 400 °C) +0.2 % (400 to 1370 °C)
Thermocouple inputs	4
Sequence measurement	3 seconds for 4 sensors
Data logger	16,000 values with date and time, with four sensors, 4,000 values each one
Display	four times display LCD (25 mm) with clock
Power supply	9 V pack or optional external power adapter
Operating temperature	0 to +50 °C, < 90 % r.h.
Dimensions	184 x 64 x 30 mm
Weight	250 g (battery included)

Contents

PCE-T395 thermometer, 2 x type-K thermocouple sensor, software, RS-232 cable, carrying case and user's manual

Model No.	Description
PCE-T395	Data logger thermometer, 4 channels

Optional Accessories

NET-300	Socket for mains power adapter
RS232-USB	USB to RS-232 cable adapter
CAL-T4	ISO Calibration, 4 channels

See page 3 for temperature sensors.

Thermocouples / Temperature sensors type K / Type Pt100

A variety of thermocouples are available, each suitable for different measuring applications. You can choose, from the list below, one or several temperature sensors which are compatible with our thermometers.

Common specifications for all sensors:

- Type-K (NiCr-Ni)
- Type-I according to DIN/ IEC 584 (±1.5 °C or 0.004 x Itl)
- ABS plastic handle (110 mm long, 90 °C max.)
- Stainless steel sensor tube
- 1000 mm long cable, sometimes spiral form
- Miniature connector

Model No.	Description	Image	T 90	min T max T
TF-110A	Sensor with high surface temperature probe heater with 90° angle, L = 130mm, A = 50mm, Ø 8mm		2 s	-200 °C 900 °C
TF-101	Sensor with high surface temperature and a spring at the end, L = 130mm, Ø 3mm		5 s	-200 °C 450 °C
TF-509	Self-adhesive temperature sensor made of fibreglass 50 x 25 x 2mm		2 s	-10 °C 250 °C
TF-513	Magnetic sensor heater 5 x 5 x 2mm, insulated wire PTFE		2 s	-50 °C 200 °C
TF-104A	Fold-away sensor with resistance to high temperature suitable for gases, liquids, furnaces, etc. L = 300mm, Ø 3mm		12 s	-200 °C 1100 °C
TF-106	Probe with pointer for liquids, gum, L = 130mm, Ø 3mm		6 s	-200 °C 600 °C
TF-119	Switch sensor for hard or frozen materials or with external cable L = 130mm, Ø 6mm		18 s	-180 °C 200 °C
TF-108	Operating temperature sensor suitable for gas and air, L = 130mm, Ø 6mm		2 s	-50 °C 600 °C
TF-120	Thermal sensor (made of fibreglass) suitable for air and liquids, L = 1000mm, Ø 2 x 1mm		1 s	-50 °C 480 °C
TF-121	Thermal sensor for high temperatures (with ceramic insulation), for air and liquids, L = 1000mm, Ø 2 x 0.8mm		1 s	-50 °C 1430 °C
TF-520	Thermocouple stem extension for type-K miniature connectors, L = 10m		/	-50 °C 85 °C
TF-550	Plug adaptor (male)		/	/
TF-551	Plug adaptor (female)		/	/

PCE-T317

High precision thermometer with 1 channel for sensors type PT100

You can connect resistance sensors to the PCE-T317 thermocouple thermometer. The PT100 sensor has a resistance of 100 Ohms at 0.0 °C. The thermometer offers you the possibility to calculate maximum value, minimum value and average value over a measurment period of 9.7 hours. Pressing the "MEM" button allows you to store up to 97 values in the internal memory, so that you can analyse the data at your convenience.

- Accurate to within ±0.05 %
- Large 3½ digit LCD
- Alarm indicator
- Max, min and average value
- Data Hold function
- Memory for 97 readings (manual storage and recall)
- Backlight
- Selectable units
- Auto shut-off to save battery life
- PT100 Thermocouple for air and liquid included up to +600 °C, dimensions: Ø 3.2mm x 155mm

Technical specifications

Measurement range	-190 to 790 °C (depending on the sensor)
Resolution	0.1 °C
Accuracy	±0.05 % of reading, +0.5 °C (more deviation of the sensor)
Thermocouple inputs	1
Timed measurement interval	every 1.5 second
Internal storage	97 readings (manual)
Auto shut-off	turns off after 30 min to save battery life
Display	display LCD with 3 1/2 pos
Power	6 x AAA batteries (1.5 V) for 55 hours of operation
Operating conditions	0 to 50 °C, < 80 % r.h.
Dimensions	150 x 72 x 35mm
Weight	235 g (including battery)

Contents

Thermometer, PT100 sensor (maximum 600 °C) with cable and pin, 6 batteries and user's manual

Model No.	Description
PCE-T317	Thermometer with 1 channel

Optional Accessories

CAL-T1	ISO Calibration
PT-385	replacement sensor for the PCE-T317

PCE-8xx

Infrared thermometers with visible laser for measuring surface temperature without contact

Infrared thermometers are used to measure, without contact, surface temperature up to 1600 ºC. The relation of distance to measurement point is an indication of the optic that you use; when the value is higher, the diameter of the measurement point is smaller for the same distance. For example, with the PCE-888, the diameter of the measurement point is 25 cm at a distance of 4m, while, with the PCE-889, the diameter is 8 cm at the same distance. Every surface radiates heat in the form of infrared radiation. To adjust the infrared radiation, of different surfaces, some models allow the for you to regulate the level of emissions.

- Built-in laser pointer to improve aim
- Adjustable emission level
- Auto-power off after 7 seconds
- Distance to spot size: 16:1, laser point Ø 19 mm a 30 cm, 75 mm at 1,2 m and 150 mm at 2,4 m
- Battery and carrying case included

- Small 6 mm point of measurement at a distance of 30 cm
- Optics 50:1
- Measurement range up to +1000 °C
- Data Hold for short-term storage of measurements
- Min./max./average function
- Adjustable alarm value

- Small 6 mm point of measurement at a distance of 30 cm
- Optics 50 :1
- Measurement range up to +1600 °C
- Set high and low alarms
- Data Hold for short-term storage of measurements.
- Min./max./average function

Technical specifictions

Model	PCE-888	PCE-889	PCE-890
Measurement range	-50 to +550 °C	-50 to +1000 °C	-50 to +1600 °C
Resolution	0.1 °C at 200 °C, or 1 °C	0.1 °C	0.1 °C
Reproducibility	0.5 °C	0.5 °C	0.5 °C
Accuracy	-50 to -20 °C: ±5 °C -20 to +550 °C: ±1,5 % ±2 °C	50 to -20 °C: ±5 °C -20 to +200 °C: ±1.5 % ±2 °C +200 to +538 °C: ±2.0 % ±2 °C > +538 °C: ±2.5 % ±5 °C	-50 to -20 °C: ±5 °C -20 to +200 °C: ±1.5 % ±2 °C +200 to +538 °C: ±2.0 % ±2 °C +538 to +1300 °C: ±3.5 % ±5 °C > +1300 °C: ±3.8 % ±5 °C
Spectral range	8 to 14 µm	8 to 14 µm	8 to 14 µm
Response time	< 500 ms	<1 s	<1 s
Distance to size ratio	16 : 1	50 : 1	50 : 1
Emissivity	0.1 to 1.0 adjustable	0.1 to 1.0 adjustable	0.1 to 1.0 adjustable
Laser	Built-in laser pointer	Built-in laser pointer	Built-in laser pointer
Min/max/average function	- - -	yes	yes
Long-term measurements	- - -	yes	yes
Adjustable alarm value	- - -	yes	yes
Backlight display	yes	yes	yes
Operating temperature	0 to +50 °C	0 to +50 °C	0 to +50 °C
Power	battery 9 V pack	1 battery 9 V pack	1 battery 9 V pack
Dimensions	230 x 56 x 100 mm	230 x 56 x 100 mm	230 x 56 x 100 mm
Weight	290 g	290 g	290 g
delivery included	battery, carrying case and user's manual	battery, carrying case and user's manual	mini tripod, carrying case, battery and user's manual

Model No.	Description
PCE-888	Thermometer IR PCE-888, -50 ... +550 °C
PCE-889	Thermometer IR PCE-889, -50 ... +1000 °C
PCE-890	Thermometer IR PCE-890, -50 ... +1600 °C

Optional Accessories

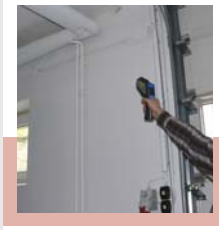
CAL-IR	ISO Calibration for IR thermometer PCE-888 or PCE-889
CAL-IR-2	ISO Calibration for IR thermometer PCE-890

PCE-IR 425

Infrared thermometer with laser pointer and an input for type-K thermoelements

The PCE-IR 425 infrared thermometer comes with a dual laser pointer and an input for type-K temperature sensors. The device has an optical resolution of 50:1 that allows for an accurate temperature measurement of small surface areas without contact. It also allows for upper and lower alarm limits to be setfor the highest level of control during a measurement.

- IR thermometer with a type-k input for thermopar NiCr-Ni sensor
- Large display: simultaneously shows average value as well as minimum and maximum limits
- Double laser for accurate targeting of measurement area
- 50:1 optical resolution
- Wide temperature range
  - Infrared: de -60ºC to 1000ºC
  - Type-K: -64ºC to 1370ºC
- HOLD, maximum, minimum, differential and average functions
- Adjustable emissivity
- Backlit display
- High and low alarm limits



Technical specifications

Measurement range	IR: -60 to +1000 °C type K: -64 to +1370 °C
Resolucion	0.1 °C above +200 °C; 1.0 °C blow +200 °C
Accuracy	IR: ±2 % of reading or ±2 °C tipo K: ±1% of reading or ±1 °C
Response time	<200 ms
Distance to size ratio	50 : 1
Emissivity	0.10 to 1.00 (adjustable)
Laser	2 visible points
Spectral range	6 to 14 µm
Functions	HOLD, MAX, MIN, DIF, AVG, LOCK HI-LO-ALARM, C/F
Operating conditions	0 to +50 °C / 10 to 90 % r.h.
Power	2 AAA batteries
Dimensions	215 x 145 x 45 mm
Weight	1150 g

Contents

Infrared thermometer, 2 batteries, carrying case and user's manual

Model No.	Description
PCE-IR 425	Infrared thermometer

Optional Accessories

CAL-IR	ISO Calibration (only for infrared sensor, without retractable probe)

See page 3 for temperature sensors.

PCE-JR 911

Infrared thermometer with printer, memory and RS-232 port

The PCE-JR 911 can measure the temperature of objects without contact and store the readings in its internal memory allowing the data to be transfered to a computer via the RS-232 port. It can also print readings once have been taken, thanks to its built-in printer. The thermometer comes calibrated from the factory.

- Functions:
  - Measurements saved directly to memory
  - Measurements / history / data tables
  - Measurements over a set period of time
- Printer and able to take readings and save them to memory
- RS-232 port
- Internal memory for 1200 readings in 4 series of measurements
- Possible to assign 99 positions per series
- Single beam laser sight for accurate targeting
- Adjustable emissivity
- Date & time function

Technical specifictions

Measurement range	-40 to +500 °C
Resolution	0.1 °C < +100 °C; 1 °C > +100 °C
Accuracy	±2 % of reading or ±2 °C (highest value valid)
Response time	<200 ms
Reproducibility	0.5 °C
Distance to size ratio	8 : 1
Emissivity	0.3 to 1.0 (adjustable)
Laser	Built-in laser pointer
Spectral range	8 to 14 µm
Memory	1200 readings (4 x 99 series)
Printer	38 mm thermal printer
Operating conditions	0 to +50 °C / 10 to 90 % r.h. (without condensation)
Power	4 x AA batteries (1.5 V)
Dimensions	208 x 70 x 53 mm
Weight	260 g

Ideal to control receiving material

Contents

Infrared thermometer, 4 batteries, paper roll, software with RS-232 data cable, carrying case and user's manual

Model No.	Description
PCE-JR 911	Infrared thermometer

Optional Accessories

HI 710034	Replacement rolls of paper, 10 pack
NET-300	Net Power Adaptor
STAT	Aluminium tripod
RS232-USB	RS-232 to USB adaptor
CAL-IR	ISO Calibration for thermometer

PCE-IR 1800

High temperature infrared thermometer up to 1800 °C

This infrared thermometer has been specially developed to carry out measurements on metal and steel, although it offers solutions for many high temperature applications up to 1800 °C. Adjustable emissivity provides versatility when measuring a variety of surfaces. The distance to spot size ratio is 120:1 making it possible to target small distant objects.

- Measurement range of 400 °C to 1800 °C
- With sighting scope
- Takes Celsius and Fahrenheit temperature readings
- Distance and spot size ratio 120:1
- Adjustable emissivity (0.10 to 1.00)
- Spectral range 2.1 to 2.4 µm
- Adjustable alarm (high / low)
- Data Hold function

Technical specifictions

Measurement range	+400 to +1800 °C
Resolution	1 °C
Accuracy	±1 %
Response time	200 ms
Repeatability	±0.5 %
Ratio	120:1
Emissivity	adjustable between 0.10 to 1.00
Laser	single dot laser system
Spectral range	2.1 to 2.4 µm
Alarm adjustable (Hi / Lo)	yes
Functions	MIN / MAX / AVG / HOLD
Operating conditions	-10 to +50 °C / 10 to 90 % r.h. (without condensation)
Power	2 x 9V battery packs
Weight	600 g

Contents

PCE-IR 1800 Infrared thermometer, carrying case and user's manual

Model No.	Description
PCE-IR 1800	High temperature IR thermometer

Optional Accessories

CAL-IR-2	ISO Calibration for thermometer

PCE-IR 100 (HACCP)

Food safety infrared and contact thermometer

The PCE-IR 100 thermometer allows control of the surface temperature in a quick and precise way without risk of contamination. It also offers the possibility to determine the internal temperature of food with its retractable probe or with the infrared system.
The different coloured LED's, which are found below the display, allow for clear indication of temperature ranges that are "safe" or "unsafe".

- Infrared and probe temperature measurement
- Food safety measurement according to the HACCP
- Response time
- Temporary hold function for minimum and maximum values
- Timer
- Possibility of ISO Calibration
- Water resistant enclosure

Technical specifictions

Infrared	
Measurement range	-40 to +280 °C
Resolution	0.1 °C
Accuracy	-40 °C to 0 °C: ±1 °C + 0.1 °C/°C 0 °C to +65 °C: ±1 °C +65 °C to +280 °C: ±1.5 % of reading
Response time	< 500 ms
Emissivity	0.97
Ratio	3 : 1
Retractable Probe	
Measurement range	-40 to +200 °C
Resolution	0.1 °C
Accuracy	-40 °C to -5 °C: ±1 °C -5 °C to +65 °C: ±0.5 °C +65 °C to +200 °C: ±1 °C or ±1.5 % of reading
Dimensions	167 x 62 x 36 mm
Power	1 battery 9 V pack
Ingress protection	IP65 (water resistant)

Contents

PCE-IR 100 thermometer, battery and user's manual

Model No.	Description
PCE-IR 100	Infrared thermometer

Optional Accessories

CAL-IR	ISO Calibration (only for infrared sensor, Without retractable probe)

PCE-IR10

Thermometer with LCD to measure the temperature of solids by infrared (for fixed installations)

The PCE-IR10 infrared thermometer is made up of a sensor head and a seperate electronic component that can be disconnected to accomodate optional sensors with longer cable lengths. Its sensor is so small that it can be installed anywhere yet offers the same benefits as other bigger system. The electronic component offers signal processing functions that usually others products can't offer, for example, with the LCD controller you can adjust emissivity, choose maximum value, minimum value or calculate average value. You can also programme the thermometer using optional PC software. This product can measure the temperature of moving objects without difficulties. Its small dimensions and low cost makes it ideal for multiple installation in a production process.

- Measurement range up to 600 °C
- Sensor head can be installed anywhere
- Analogue output
- USB / RS-232 / RS-485 output relay (optional)
- Adjustable emissivity
- LCD
- Series connection: maximum of 32 sensors
- Power supply: 8 to 36 VDC

Technical specifications

Outputs	analogue: 4 to 20 mA, 0 to 20 mA, 0 to 5 V, 0 to 10 V (in scale), type-K or type-J thermocouple optional: relay, USB, RS-232, RS-485
Inputs	emissivity value, ambient temperature compensation, programmable software
Cable length	1 m (standard, you can order other cable lengths)
Current	max. 100 mA
Power	8 to 36 VDC
Ingress protection	IP65 (NEMA-4)
Operating temperature (head)	-20 to 180 °C
Storage temperature	-40 to 85 °C
Relative humidity	10 to 95 % without condensation
Weight (sensor head) (electronic component)	40 g 420 g
Measurement range	-40 to 600 °C
Spectral range	8.0 to 14 µm
Optical resolution	15 : 1
Accuracy	±1 % or ±1 °C
Repeatability	±0.5 % or ±0.5 °C
Temperature coefficient	±0.05 °C / °C or ±0.05 % / °C
Temperature resolution	0.1 °C
Response time	150 ms (95 %)
Emissivity	0.100 - 1.100 digital adjustment, reading 0.001
Transmission	0.100 - 1.000 digital adjustment, reading 0.001
Signal processing	maximum value, minimum value and average value

Contents

Thermometer (electronic unit), analogue interface, 1 m cable with sensor head (ratio 15:1) and user's manual

Model No.	Description
PCE-IR10	Thermometer PCE-IR10

Optional Accessories

ACCTFB	Mounting bracket
ACCTMG	Mounting fork adjustable on 2 axis
ACCTAP	Cooling camera for infrared
ACCTUSBK	USB kit with USB interface, cable, software
ACCTRS232K	RS232 kit with interface, cable, software
ACCTRS485K	RS485 kit to connect up to 32 sensors in series
ACCTRS485B	RS485 interface card
ACCTRI	Output relay, two other open relays, 60VDC / 42VAC, 0.4A
CAL-PCE-IR10	ISO calibration certificate

PCE-IC1

Blackbody IR calibrator up to +350 °C for Infrared thermometers

The PCE-IC1 is a portable blackbody calibration source covering the range from +50 to 350 °C with 0.1°C resolution. Whether you are using a infrared thermometer, you need a high performance calibration standard to verify accuracy. The portable IR calibrator provides a stable blackbody target for calibration non-contact IR thermometers up to 350 °C. The IR calibrator is as easy to use as point and shoot. Simply set the desired temperature from the convenient front panel control buttons, wait a few minutes for equilibrium, then point the IR thermometer at the target. The radiated energy from the blackbody is measured by your IR thermometer. Now simply compare it is reading to the display on the IR calibrator and record the difference.

- Easy to use
- Emitter diameter 58 mm
- Range from +50 °C to +350 °C
- High accuracy
- Compact design

Technical specifications

Temperature range	+50 to +350 °C
Accuracy	±0.5 C up to 100 °C ±1.0 °C up to 200 °C ±1.5 °C up to 350 °C
Emissivity Blackbody	0.95
Emitter diameter	Ø 58 mm
Heating time	30 min up to 350 °C
Cooling time	30 min from 350 °C below 100 °C
Power	230 V / 50 Hz
Dimensions	180 x 114 x 233 mm
Weight	3000 g

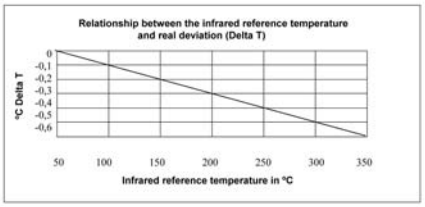
Contents

PCE-IC1 temperature-calibrator, manufacturer certificate and user's manual

Model No.	Description
PCE-IC1	Blackbody-IR-Calibrator

Optional Accessories

CAL-PCE-IC1	ISO calibration certificate

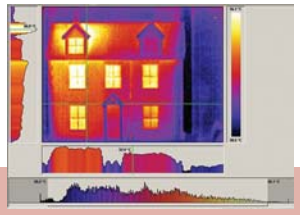


PCE-TC 3

Thermal imaging camera with high optical resloution (160 x 120 pixels) / good relation between price and quality

The core element of the thermal imaging camera is an Uncooled Focal Plane Array with a resolution of 160 x 120 pixels. This thermal imaging camera has been ergonomically designed making it easy to use with one hand. Thanks to it weighing only 750 g, it's ideal for the analysis of machines and installations, for construction among many other applications. The PCE-TC 3 thermal imaging camera offers a maximum accuracy of ±2 ºC or ±2 % in a temperature range of -10 ºC up to 250 ºC. On the clolour display, both cursors can be moved, while on the job, to different points and the corresponding temperature read directly and determine the difference in temperature between both points. With these high range functions, the user can immediately identify irregularities and take pertinent measurements instantaneously. The integrated laser point also allows the user to precisely locate the measurement area while capturing an image or taking a measurement. Images can be stored to an SD memory card and transferred to a computer later. Across the USB port, data can be transferred in real time; in this case the user can select up to 10 measurement points. Included with the thermal imaging camera are an SD memory card reader and software to allow further detailed analysis of data and thermal images, as well as accompanying descriptions.

- Resolution 160 x 120 pixels
- Temperature range: -10 to 250 °C
- Accuracy: maximum ±2 °C or ±2 % of compensation of optimum temperature
- Automatic detection of hottest and coldest point in an image
- Ergonomic: use with only one hand, weighs 750 g, ideal for portable use
- Free licence: frequency below 9 Hz
- Laser pointer: Allows for exactly locating measurement point
- SD memory card to store 1000 images
- Software for data transmission and analysis is included

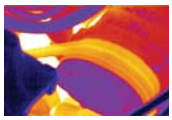
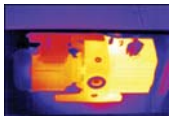


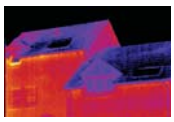
large 3.5" colour display

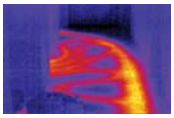
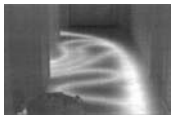
Software, SD memory card, rechargeable battery, charger, USB cable, card reader, strap and holster included

Technical specifications

Temperature range	-10 to +250 °C
Resolution	0.15 °C
Accuracy	±2 % of reading or ±2 °C
Points of measurement	160 x 120 (19.200 points)
Sensor	Uncooled Focal Plane Array (UFPA)
Lens (FOV)	20 ° x 15 °
Measurement distance	300 mm to infinity
Spectral range	8 to 14 µm
Emissivity	0.20 to 1.00 (adjustable)
Memory	approx. 1000 images with an SD card
Interface	USB
Display	3.5" colour
Temerature units	°C, °F or K
Shades	4 variations
Cursor	2 manually moveable cursors
Laser pointer	class II
Power	litium rechargeable
Operating time (with battery)	approx. 4 hours
Enclosure	plastic
Operating temperature	-15 to +45 °C
Ingress protection	IP 54
Dimensions	230 x 120 x 110 mm
Weight	750 g



Contents

PCE-TC 3 thermal imaging camera, rechargeable battery, charger, USB cable, software, SD memory card, card reader, strap, holster, carrying case and user's manual

Model No.	Description
PCE-TC 3	Thermal imaging camera

Optional Accessories

PCE-TC LG	Battery charger (bench type)
PCE-TC ALG	Charger for automobiles
PCE-TC LS	Light protector for optics
PCE-TC BP	Replacement battery
STAT	Tripod
CAL-PCE-TC	Calibration certificate (with first order)
CAL-PCE-TC R	Calibration certificate (recalibration)

Battery charger (bench type)

Charger for automobiles

Tripod

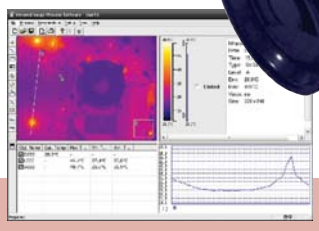
PCE-TC 8

Thermal imaging camera with high optical resolution (320 x 240 pixels)

PCE-TC 8 portable thermal camera can be used to carry out preventive maintenance, diagnose and validate of equipment failure etc. The circuit of this products has been designed as total digital chip, it has characteristics such as fast response, low power loss, clear image and so on. PCE-TC 8 has both outstanding function and easy operation, it widely applies in industrial detection, electric power and electron, petrochemicals, building inspection, scientific research and many ohter fields. The core element of the thermal imaging camera is an Uncooled Focal Plane Array with a resolution of 320 x 240 pixels. This thermal imaging camera has been ergonomically designed making it easy to use with one hand. Thanks to it weighing only 1200 g, it's ideal for the analysis of machines and installations, for construction among many other applications. The PCE-TC 8 thermal imaging camera offers a maximum accuracy of ±2 % or ±1 °C in a temperature range of -20 ºC up to +250 ºC. On the clolour display, 4 cursors can be moved, while on the job, to different points and the corresponding temperature read directly and determine the difference in temperature between 4 points. With these high range functions, the user can immediately identify irregularities and take pertinent measurements instantaneously. The integrated red laser point (1 mw /653 nm) also allows the user to precisely locate the measurement area while capturing an image or taking a measurement.

- High resolution 320 x 240 pixels
- Wide temperature range: -20 to +250 °C
- High accuracy: ±2 % of reading or ±1 °C
- Operation: Drop-down menu
- Adjustion: Auto adjust brightness/contrast, Auto/manual mix colours
- Dot temperature: Decussation dot temperature display, and sustain 10 dots contemporary most
- Max/min temp capture: Max/mini temperature capture available
- Laser point: 1 mw / 635 nm (red)
- Simulation colour option: User can setup simulation option , sieve the background to emphasize high temperature target
- Magnify of image: Real time magnifying of images
- Built in visual digital camera
- Automatic detection of hottest and coldest point in an image
- Video output
- Laser pointer: Allows for exactly locating measurement point

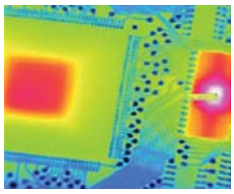
large 3.5" colour display

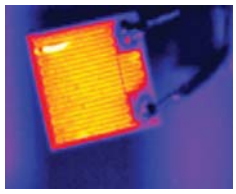


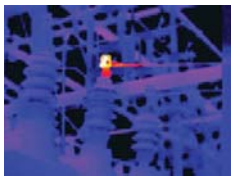
Software, SD memory card, rechargeable battery, charger, etc. included

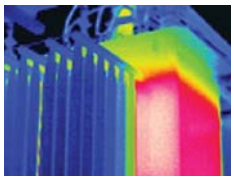
Technical specifications

Temperature range	-20 to +250 °C
Resolution	0.1 °C
Accuracy	±2 % of reading or ±1 °C
Points of measurement	320 x 240 (76.800 points)
Sensor	Uncooled Focal Plane Array (UFPA)
Lens (FOV)	20.6 ° x 15.5 °
Measurement distance	500 mm to infinity
Spectral range	8 to 14 µm
Emissivity	0.20 to 1.00 (adjustable)
Frame rate	50 frames / s (PAL)
Response time	4 ms
Memory	1 GB SD card
Interfaces	USB / Video out
Display	high resolution 3.5" colour
Temerature units	°C, °F or K
Shades	5 variations
Cursor	4 manually moveable cursors
Laser pointer	class II
Power	7.2 V litium battery, rechargeable
Operating time (with battery)	approx. 3 hours
Enclosure	plastic
Operating conditions	-20 to +50 °C / <95 % r.h.
Ingress protection	IP 54
Dimensions	200 x 135 x 95 mm
Weight	1200 g









Contents

PCE-TC 8 thermal imaging camera, rechargeable battery, charger, lens hood, software, 1 GB SD memory card, Video line, carrying case and user's manual

Model No.	Description
PCE-TC 8	Thermal imaging camera

Examples for partners of calibration services

calibración de analizadores de gas S.L.

ISO 9001 CERTIFIED ORGANISATION

United registrar of Systems Certificate No. 86990

UKAS QUALITY MANAGEMENT 043-A

assicontrol

Tel. 0332 220185 Fax 0332 822553

Strumento		
Matricola	Operatore	N° Cert.
Data.	SCADENZA	

Kalibrierdienst Stenger

CERTIFICADO DE APROBACIÓN

Certificamos que el Sistema de Gestión de la Calidad de:

TECNOLOGIAS SERVINCAL, S.L.L.
Valladolid
España

Ha sido aprobado por Lloyd's Register Quality Assurance Limited de acuerdo con las siguientes Normas de Sistemas de Gestión de Calidad:

UNE EN ISO 9001:2000

El Sistema de Gestión de la Calidad es aplicable a:

Calibración y gestión de calibración de equipos de metrología. Control dimensional de piezas, componentes y equipos.

Servincal
Laboratorio de Metrología y Calibración

ENAC CALIBRACIÓN
Nº 145/LC374

LLOYD'S REGISTER QUALITY ASSURANCE ISO9002

Certificado nº
E202297

Deutscher Kalibrierdienst (DKD)
Physikalisch-Technischen Bundesanstalt (PTB)

DeutschenAkkreditierungsRat

Akkreditierung