

PCE-DC1

Clamp meter 200 A AC/DC & Freq.

- LC display 3 2/3 digits, with backlight
- measures AC / DC current, AC voltage & frequency
- Hold function / DC A zero reset function
- tests voltage without contact
- automatic range selection / Automatic Power Off
- measuring point illuminated by white LEDs



**TOP
seller**

TECHNICAL SPECIFICATIONS

Variable	Range / resolution / accuracy
AC current	200 A / 100 mA / $\pm 3.0\%$ +8 dgt
DC current	200 A / 100 mA / $\pm 2.8\%$ +8 dgt
Frequency	40 ... 50 Hz / 0.01 Hz / $\pm 1.2\%$ +5 dgt 51 ... 510 Hz / 0.1 Hz / $\pm 1.2\%$ +3 dgt 0.51 ... 1 kHz / 0.001 kHz / $\pm 1.2\%$ +3 dgt
AC voltage	100 ... 600 VAC 50 / 60 Hz (no contact)
Clamp Ø	diameter of conductor max. 18 mm
Display	LCD 3 2/3 digits, with backlight
Power supply	2 x 1.5 V batteries AAA
Standards	EN61010-1; CAT II / 600V EN61010-2-032; CAT III / 300V
Dimensions	66 x 155 x 31 mm
Weight	155 g

INCLUDES

Mini clamp meter, batteries, bag, instruction manual

ITEM NO. ITEM

K-PCE-DC1 mini clamp meter 200 AAC/DC

OPTIONAL ACCESSORIES

K-CAL-PCE-DC-Serie calibration certificate

PCE-DC2

Clamp 200 A AC/DC (+ V AC/DC + Ω)

- LC display with 3 2/3 digits and backlight
- measures AC/DC current, voltage & resistance
- Hold function / DC A zero reset function
- tests voltage without contact
- automatic range selection/ Automatic Power Off
- aperture of the clamp: 18 mm



TECHNICAL SPECIFICATIONS

Variable	Range / resolution / accuracy
AC current true RMS	200 AAC / $\pm (2.5\% + 8 \text{ dgt})$
DC current	200 ADC / $\pm (2.0\% + 5 \text{ dgt})$
AC voltage true RMS	600 VAC / $\pm (1.5\% + 8 \text{ dgt})$
DC voltage	600 VDC / $\pm (1.0\% + 2 \text{ dgt})$
Resistance	999.9 Ω / $\pm (1.5\% + 8 \text{ dgt})$
Measuring point	illuminated by white LED
Clamp Ø	diam. of conductor max. 18 mm
Display	LCD 3 2/3 digits, with backlight
Power supply	2 x 1.5 V batteries AAA
Standards	EN61010-1; CAT II / 600V EN61010-2-032; CAT III / 300V
Dimensions	65 x 164 x 32 mm
Weight	175 g

INCLUDES

Mini clamp meter, test leads, batteries, manual

ITEM NO. ITEM

K-PCE-DC2 mini clamp meter 200 A AC/DC

OPTIONAL ACCESSORIES

K-CAL-PCE-DC-Serie ISO calibration cert.

PCE-DC3

High-Resolution Clamp 2/80 A AC/DC

- LC display with 3 2/3 digits and backlight
- measures AC/DC current up to 80 A
- Hold function / DC A zero reset function
- tests voltage without contact
- automatic range selection/ Automatic Power Off
- aperture of the clamp: 18 mm



TECHNICAL SPECIFICATIONS

Variable	Range / resolution / accuracy
AC current	2 A / 1 mA / $\pm 2.8\%$ +10 dgt 80 A / 100 mA / $\pm 3.0\%$ +8 dgt
DC current	2 A / 1 mA / $\pm 3.0\%$ +10 dgt 80 A / 100 mA / $\pm 3.0\%$ +8 dgt
AC voltage	100 ... 600 V 50/60 Hz (no contact)
Measuring point	illuminated by white LED
Clamp Ø	diam. of conductor max. 18mm
Display	LCD 3 2/3 digits, with backlight
Power supply	2 x 1.5 V batteries AAA
Standards	EN61010-1; CAT II / 600V EN61010-2-032; CAT III / 300V
Dimensions	65 x 164 x 32 mm
Weight	175 g

INCLUDES

Mini clamp meter, batteries, bag, instruction manual

ITEM NO. ITEM

K-PCE-DC3 mini clamp meter 80 A AC/DC

OPTIONAL ACCESSORIES

K-CAL-PCE-DC-Serie ISO calibration certificate

PCE-LCT 1

Clamp Meter Resolution from 10 μ A

- meas. current leaks & current up to 100 A (AC)
- measures voltage up to 400 V / continuity test
- Automatic Power Off after 30 min
- measures resistance up to 400 Ω
- Max. / Min. Hold



TECHNICAL SPECIFICATIONS

Variable	ACA current
Meas. range	40 / 400 mA / 4 / 40 / 80 ... 100 A;
Resolution	10 / 100 μ A / 1 / 10 / 100 / 100 mA;
Accuracy	$\pm 2 \% +3$ dgt
AC voltage	400 V / 0.1 V / $\pm 2 \% +3$ dgt
Resistance	40 ... 400 Ω / 0.1 Ω / $\pm 1.0 \% +2$ dgt
	alarm : meas. value $<38 \Omega$
Input impedance	10 M Ω
Interv. meas. val.	2 Hz (num. val.), 20 Hz (bar graph)
Clamp aperture	max. diameter of the conductor 30 mm
Display	LCD, 3 3/4 digits
Oper. conditions	-10 ... +50 $^{\circ}$ C, $<85 \%$ RH
Power supply	1 x 9 V battery
Dimen. / weight	62 x 210 x 36 mm (W x H x D) / 200 g

INCLUDES

Clamp meter, test leads, battery, bag, rubber protector, instruction manual

ITEM NO.	ITEM
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K-PCE-LCT 1	mini clamp meter 100 AAC
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OPTIONAL ACCESSORIES

K-CAL-MZ	ISO calibration certificate
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PCE-LCT 2

Clamp meter up to 80 AAC/DC (CAT III 600 V)

- measures current up to 80 A / measures voltage up to 600 V
- diode test, resistance & capacitance measurement
- max. diameter of the conductor 23 mm
- display with 4,000 counts & backlight
- Peak Hold
- analogue output



TECHNICAL SPECIFICATIONS

Variable	Range / resolution / accuracy
ACA	0 ... 4 A / 1 mA / $\pm 3 \% +10$ dgt 0 ... 80 A / 100 mA / $\pm 3 \% +8$ dgt
DCA	0 ... 4 A / 1 mA / $\pm 2.8 \% +10$ dgt 0 ... 80 A / 100 mA / $\pm 3 \% +8$ dgt
ACV	0 ... 400 mV / 0.1 mV / $\pm 1 \% +30$ dgt 0 ... 4 V / 1 mV / $\pm 2 \% +5$ dgt 0 ... 40 V / 10 mV / $\pm 2 \% +5$ dgt 0 ... 400 V / 100 mV / $\pm 2 \% +5$ dgt 0 ... 600 V / 1 V / $\pm 2 \% +5$ dgt
DCV	0 ... 400 mV / 0.1 mV / $\pm 1 \% +15$ dgt 0 ... 4 V / 1 mV / $\pm 1 \% +3$ dgt 0 ... 40 V / 10 mV / $\pm 1.5 \% +3$ dgt 0 ... 400 V / 100 mV / $\pm 1.5 \% +3$ dgt 0 ... 600 V / 1 V / $\pm 2 \% +15$ dgt
Resistance	0 ... 400 Ω / 0.1 Ω / $\pm 1 \% +4$ dgt 0 ... 4 k Ω / 1 Ω / $\pm 1.5 \% +2$ dgt 0 ... 40 k Ω / 10 Ω / $\pm 1.5 \% +2$ dgt 0 ... 400 k Ω / 100 Ω / $\pm 1.5 \% +2$ dgt 0 ... 4 M Ω / 1 k Ω / $\pm 2.5 \% +3$ dgt 0 ... 40 M Ω / 10 k Ω / $\pm 3.5 \% +5$ dgt
Capacity	0 ... 40 nF / 10 pF / $\pm 5 \% +30$ dgt 0 ... 400 nF / 100 pF / $\pm 3 \% +5$ dgt 0 ... 4 μ F / 1 nF / $\pm 3.5 \% +5$ dgt



	0 ... 40 μ F / 10 nF / $\pm 3.5 \% +5$ dgt 0 ... 100 μ F / 100 nF / $\pm 5 \% +5$ dgt
Frequency	0 ... 10 MHz / 0.001 Hz ... 0.01 MHz/ $\pm 1.5 \% +5$ dgt
Testing conditions	0.5 ... 99 % / 0.1 % / $\pm 1.2 \% +2$ dgt pulse width: 100 μ s ... 100 ms frequency: 5 Hz ... 150 kHz sensitivity: 10 V RMS/min
Impedance	input 7.8 M Ω / output 3 k Ω
Analogue output	10 mV / A
Clamp $\varnothing$	max. 23 mm conductor diameter
Display	4,000 dgt, LCD, with backlight
Oper. conditions	-10 ... +50 $^{\circ}$ C, $<90 \%$ RH
Power supply	2 x 1.5 V AAA batteries
Dimens. / weight	50 x 200 x 35 mm / 200 g

INCLUDES

Clamp meter, test leads, batteries, bag, manual

ITEM NO.	ITEM
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K-PCE-LCT 2	clamp meter 80 AAC/DC
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OPTIONAL ACCESSORIES

K-CAL-MZ	ISO calibration certificate
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PCE-UT232

Power & Energy Meter (Real Time)

- indirect measuring (1 ... 3 phases) by means of integrated clamp
- power measurement: active / apparent / reactive power, power factor, phase angle, active energy
- multimeter: TRMS / voltage, TRMS / current, frequency
- measures temperature / memory for 99 readings which can be shown in display
- memory for Min & Max values & Data Hold / internal calibration mode



PCE-PCM 1

Power Meter with Memory, USB & Software

- power measurement: active (kW), apparent (kVA) & reactive (kVAR) power, power factor (cos ϕ), phase angle, active energy counter (kWh)
- voltage (TRMS), current (TRMS) & frequency
- memory for 99 readings which can be shown in display
- Min, Max, Data Hold memory



TECHNICAL SPECIFICATIONS

Variable	Measurement range; accuracy
Voltage (AC / TRMS)	20 / 100 / 300 / 600 V; $\pm 1.2\%$ +5 dgt
Current (AC / TRMS)	40 / 100 / 400 / 1,000 A; $\pm 2.0\%$ +5 dgt
Active power measurement	0.01 kW ... 600 kW; $\pm 3.0\%$ +5 dgt
Apparent power measurement	0.01 kVA ... 600 kVA; $\pm 3.0\%$ +5 dgt
Reactive power measurement	0.01 kVAR ... 600 kVAR; $\pm 4.0\%$ +5 dgt
Active energy	1 ... 9.999 kWh; $\pm 3.0\%$ +2 dgt
Power factor	0.3 ... 1.00 inductive and capacitive; ± 0.02 +2 dgt
Phase angle	0 ... 360°; $\pm 1.0^\circ$
Frequency	20 ... 500 Hz
Temperature	-50 ... +1,300 °C
Memory	99 readings
Display	9,999 counts, with analogue bar graph, with backlight
Power supply	4 x 1.5 V batteries
Dimensions / weight	303 x 112 x 39 mm / 600 g

INCLUDES

Power meter, test leads, crocodile clips, USB cable, software, batteries, carrying case, instruction manual

ITEM NO.	ITEM
K-PCE-UT232	power meter

OPTIONAL ACCESSORIES

K-CAL-UT232	ISO calibration certificate
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TECHNICAL SPECIFICATIONS

Variable	Measurement range; accuracy
Voltage (ACV / TRMS)	100 / 400 / 750 V; $\pm 1.2\%$ +5 dgt
Current (ACA / TRMS)	40 / 100 / 400 / 1,000 A; $\pm 2.0\%$ +5 dgt
Active power measurement	4 kW ... 750 kW; $\pm 3.0\%$ +5 dgt
Apparent power measurement	4 kVA ... 750 kVA; $\pm 3.0\%$ +5 dgt
Reactive power measurement	4 kVA ... 750 kVAR; $\pm 3.0\%$ +5 dgt
Power factor	0.3 ... 1 inductive and capacitive; ± 0.02 +2 dgt
Phase angle	0° ... 90°; $\pm 2.0^\circ$
Active energy	1 ... 9.999 kWh; $\pm 3.0\%$ +2 dgt
Frequency	50 ... 200 Hz; $\pm 0.5\%$ +5 dgt
Memory / interface	99 readings / USB
Max. conductor diameter	52 mm
Display	LCD display
Power supply	9 V battery
Dimensions / weight	105 x 47 x 294 mm / 495 g

Delivery content

Power meter, test leads, crocodile clips, meas. tips, USB cable, software, battery, bag, instruction manual

ITEM NO.	ITEM
K-PCE-PCM 1	power meter

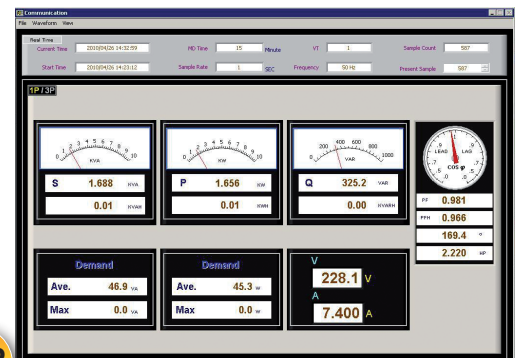
OPTIONAL ACCESSORIES

K-CAL-UT232	ISO calibration certificate
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PCE-GPA 62

3-Phase Power & Energy meter

- measures power factor and phase angle, frequency, energy, active, apparent & reactive power (single- or three-phase in balanced networks)
- max. conductor diameter 55 mm or 65 x 24 mm contact rail
- analyses harmonic waves (harmonics of voltage & current)
- data logger (50,000 sets of data) / graphical display, 128 x 64 mm, with backlight
- automatic range selection / USB interface
- protection, standard: CAT III 600 V, EN 61010-2-032



TECHNICAL SPECIFICATIONS

Variable	Measurement range / resolution / accuracy
Voltage measurement	4 ... 600 V TRMS / 0.1 V / $\pm 0.5\%$ of reading ± 5 dgt
Voltage peaks	50 ... 60 Hz / $\pm 5\%$ +50 dgt (>10 V)
Current measurement	4 ... 1,500 A TRMS / 0.01 A / $\pm 1\%$ of reading ± 5 dgt
Current peaks	50 ... 60 Hz / $\pm 5\%$ +50 dgt (>20 V)
The apparent and reactive power data	are analogous to the active power.
Active power P	10 W ... 9,999 kW in 5 measurement ranges / 0.1 W ... 1 kW each measurement range $\pm 1\%$ of reading +20 dgt (>20 V & >20 A) $\pm 2\%$ of reading +40 dgt (<20 V & <20 A)
Power factor PF	0.000 ... 1.000 0.001 / $\pm 0.04\%$ (>20 V & >20 A) 0.001 / $\pm 0.1\%$ (<20 V & <20 A)
Phase angle	-180 ... +180° / 0.1° / $\pm 1^\circ$ 0 ... +360° / 0.1° / $\pm 1^\circ$
Frequency measurement	46 ... 65 Hz / 0.1 Hz / ± 0.3 Hz
Active energy	0 ... 999.999 kWh / $\pm 1\%$ of reading +20 dgt
Apparent energy	0 ... 999.999 kVAh / $\pm 1\%$ of reading +20 dgt
Reactive energy	0 ... 999.999 kVarh / $\pm 1\%$ of reading +20 dgt
Harmonics in the voltage relative	1st ... 20th / 0.1 % / $\pm 2\%$
50 ... 60 Hz >80 V AC	21st ... 50th / 0.1 % / $\pm 4\%$ of reading $\pm 2\%$

Harmonics in the voltage absolute	1st ... 20th / 0.1 V / $\pm 2\%$ ± 0.5 V
50 ... 60 Hz >80 V AC	21st ... 50th / 0.1 V / $\pm 4\%$ of reading ± 0.5 V
Harmonics in the current relative	1st ... 20th / 0.1 % / $\pm 2\%$
50 ... 50 Hz >20 A	21st ... 50th / 0.1 % / $\pm 4\%$ of reading $\pm 2\%$
Harmonics in the current absolute	1st ... 20th / 0.1 A / $\pm 2\%$ of reading ± 0.4 A
50 ... 50 Hz >20 A	21st ... 50th / 0.1 A / $\pm 4\%$ of reading ± 0.4 A
Total harmonic distortion (THD-F)	0.0 ... 20 % / 0.1 % / 2 %
50 ... 60 Hz >80 V and >20 A	20.1 ... 1,000 % / 0.1 % / $\pm 6\%$ of reading $\pm 1\%$
Display	graphical LCD, 128 x 64, with backlight
Power supply	2 x 1.5 V AA batteries
Operating conditions	-10 ... +50 °C / max. 85 % RH
Dimensions	271 x 112 x 46 mm
Weight	650 g incl. battery

INCLUDES

Harmonics analyser, measuring pins with 2 m cable, batteries, USB cable, software, bag, instruction manual

ITEM NO.	ITEM
K-PCE-GPA 62	power meter, up to 3 phases

Optional accessories

K-CAL-PCE-GPA	ISO calibration certificate
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PCE-360

3-Phase Power & Energy Meter with Data Memory

- category CAT III / 1000 V; clamp: CAT III / 600V
- harmonic wave analysis up to the 31st wave (when used with PC software)
- real-time vmonitoring, recording and analysis of 1- and 3-phase systems
- data logging, memory capacity for 20,000 sets of data (504 KB) 12,000 sets of data per measurement
- voltage / current measurement (TRMS)
- measures power factor and phase angle
- measures active, apparent & reactive power
- with current clamp to measure neutral conductors



TECHNICAL SPECIFICATIONS

Voltage measurement	
Measurement range	50 ... 600.0 V TRMS
Resolution	0.1 V
Accuracy	±1.5 % of reading +10 dgt
Current measurement	
Measurement range	3 ... 999.9 A TRMS
Resolution	0.1 A
Accuracy	±1.5 % of reading +15 dgt
Active power P	
Measurement range	150 W ... 999.9 kW
Resolution	0.1 kW
Accuracy	±1.5 % of reading +20 dgt
Apparent power S	
Measurement range	150 VA ... 999.9 kVA / 0.1 KVA
Accuracy	±1.5 % of reading +20 dgt
Reactive power meas. Q	
Measurement range	150 Var ... 999.9 kVar / 0.1 KVar
Accuracy	±1.5 % of reading +20 dgt
Power (active, reactive & apparent)	
Measurement range	0.0 ... 119.3 MWh / MVAh / Mvarh
Accuracy	±1.5 % of reading +20 dgt
Power factor PF	
Measurement range	0.000 ... +1.000
Accuracy / resolution	±0.06 dgt / 0.001

Phase angle	
Measurement range	-90 ... +90°
Accuracy / resolution	±3° / 0.1°
Frequency meas.	
Measurement range	40 ... 100 Hz / voltage U1
Accuracy	±1 % of reading +2 dgt
Data memory	
	max. 20,000 sets of data (504 KB)
	12,000 sets of data per meas.
Sampling rate	
	5 / 30 s / 1 / 2 min (adjustable)
Interface	
	USB (optical insulation)
Display	
	multifunctional display
Power supply	
	8 x 1.5 V batteries or mains adaptor 12 V / 300 mA
Dimensions / weight	
	235 x 117 x 54 mm / 730 g

INCLUDES

3-phase power meter, current clamps, batteries, crocodile clips, safety test leads, bag, mains adaptor, USB cable, software (English), instruction manual

ITEM NO.

ITEM

K-PCE-360 3 phase power meter

OPTIONAL ACCESSORIES

K-CAL-PCE-360 ISO calibration certificate



PCE-PA 8000

3-Phase Power and Energy Analyser

- power analysis of 4-conductor-, 3 phase- / 3-conductor-, 1-phase- / 2-conductor-, 1-phase / 3-conductor networks
- true RMS measurement of current/ voltage; active, apparent & reactive power
- phase angle & power factor / measures active, apparent & reactive energy
- voltage measurement up to 600 V (AC) / current measurements up to 1,200 A (AC)
- measured values are recorded on the SD card / 1 s intervals / RS-232 interface; USB



TECHNICAL SPECIFICATIONS

Variable	Measurement range	Resolution	Accuracy
AC voltage V	10 ... 600 V	0.1 V	± (0.5 % +0.5 V)
AC current A	20 A	0.001 A (<10 A) 0.01 A (≥10 A)	± (0.5 % +0.1 A)
	200 A	0.01 A (<100 A) 0.1 A (≥100 A)	± (0.5 % +0.5 A)
	1,200A	0.1 A (<1,000 A) 1 A (≥1,000 A)	± (0.5 A +5 A)
Active power	0 ... 9.999 kW 10 ... 99.99 kW 100 ... 999.9 kW 1 ... 9.999 MW	0.001 kW 0.01 kW 0.1 kW 0.001 MW	± (1 % +0.008 kW) ± (1 % +0.08 kW) ± (1 % +0.8 kW) ± (1 % +0.008 MW)
The apparent and reactive power data are analogous to the active power.			
Active energy	0 ... 9.999 kWh 10 ... 99.99 kWh 100 ... 999.9 kWh 1 ... 9.999 MWh	0.001 kWh 0.01 kWh 0.1 kWh 0.001 MWh	± (2 % + 0.008 kWh) ± (2 % + 0.08 kWh) ± (2 % + 0.8 kWh) ± (2 % + 0.008 MWh)
The apparent and reactive power data are analogous to the active energy.			
Power factor	0 ... 1	0.01	±0.04
Phase angle	-180° ... 180°	0.1°	±1°
Frequency	45 ... 65 Hz	0.1 Hz	±0.1 Hz
Voltage meas. range 10 ... 600 V AC; automatic range selection			
Current meas. range 0.2 ... 1,200AAC; automatic / manual			
Input resistance	10 MΩ		

Overload protection	720 V RMS 1,300 A with current clamp
Operating frequency	current clamps: 45 ... 65 Hz
Display	3.7" dot matrix LC display (320 x 240 pixels), with backlight
Memory / sampling r.	SD card / 2 ... 7,200 s
Interface	USB or RS-232, depending on connection cable
Power supply	8 x 1.5 AA batteries or 9 V mains adaptor
Oper. conditions	0 ... +50 °C / <80 % RH
Conductor Ø	max. 50 mm
Dimensions / weight	device: 225 x 125 x 64 mm / 948 g (incl. batteries) current clamp: 210 x 64 x 33 mm / 467 g (incl. cable) clamping jaw: 86 mm (external)

INCLUDES

Power analyser, current clamps, test leads, crocodile clips, 2 GB SD card, 9 V DC mains adaptor, batteries, bag, instruction manual

ITEM NO. ITEM

K-PCE-PA 8000 power meter

Optional accessories

K-CAL-PCE-PA 8000 ISO calibration certificate

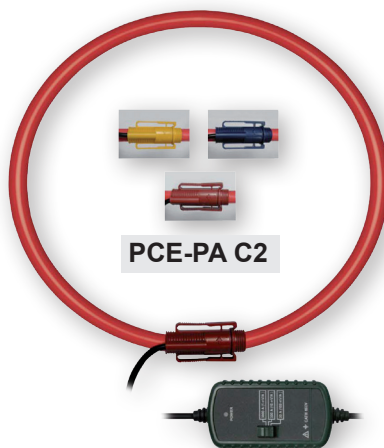
K-NET-LUT 9 V mains adaptor / 1 A

K-SOFT-LUT-USB USB data cable SOFT-LUT-USB incl. software

PCE-PA 8300

1-Phase-Power Meter / 3-Phase Power Analyser with Graphical Display & Harmonics Indication, with Clamps for Big Conductor Ø

- measures harmonics up to the 50th harmonic wave
- current clamps from numerous suppliers can be connected
- measures phase angle / frequency / power factor
- SD memory card with adjustable intervals



PCE-PA C1	
Dimensions	210 x 64 x 33 mm, 4 m cable
Weight	current clamp 490 g
PCE-PA C2	
Dimensions	flex. curr. clamp 600 x 14.5 mm contr. panel: 105 x 56.5 x 33 mm
Weight	467 g (including cable)



TECHNICAL SPECIFICATIONS

Voltage measurement (AC V)	
Meas. range	10 V ... 600 V (phase to neutral), 10 V ... 600 V (phase to phase)
Resolution	0.1 V
Accuracy	±0.5 % +0.5 V
Current measurement (AC A) Set 1	
Meas. range	20 A / 200 A / 1,200 A
Resolution	0.001 A (<10 A), 0.01 A (≥10 A) / 0.01 A (<100 A), 0.1 A (≥100 A) / 0.1 A (<1,000 A), 1 A (≥1,000 A)
Accuracy	±0.5 % +0.1 A / ±0.5 % +0.5 A / ±0.5 A +5 A
Current measurement (AC A) Set 2	
Meas. range	30 A / 300 A / 3,000 A
Resolution	0.001 A (<10 A), 0.01 A (≥10 A) / 0.01 A (<100 A), 0.1 A (≥100 A) / 0.1 A (<1,000 A), 1 A (≥1,000 A)
Accuracy	±0.5 % +0.1 A / ±0.5 % +0.5 A / ±0.5 A +5 A
Active energy data are analogue to active power	
Meas. range	0 ... 9.999 KW / 10 ... 99.99 KW / 100 ... 999.9 KW / 1 ... 9.999 MW
Resolution	0.001 KW / 0.01 KW / 0.1 KW / 0.001 MW

Accuracy	±1 % +0.008 KW / ±1 % +0.008 KW / ±1 % +0.8 KW / ±1 % +0.008 MW
Power factor	Range / resolution / accuracy 0 ... 1 / 0.01 / ±0.04
Phase angle	-180 ... +180° / 0.1° / ±1°
Frequency	45 ... 65 Hz / 0.1 Hz / ±0.1 Hz
The harmonics of the alt. voltage are the same as the harmonics of the alt. current at 50 / 60 Hz	
Meas. range	1st ... 20th / 21st ... 30th / 31st ... 50th
Resolution	0.1 V; 0.1 %
Accuracy	±2 % +0.5 V, ±2 % +10 dgt / ±2 % +0.5 V, ±2 % +20 dgt not specified
General	
Resistance	input: 10 MOhm (AC V)
Operating freq.	current clamps: 40 Hz ... 1 kHz (45 Hz ... 65 Hz tested)
Overload protec.	AC V: 720 V RMS AC A: 1,300 A with clamp SD card
Memory	sampling: 1 s / memory: 2 ... 7,200 s
Interval	USB / RS-232
Interface	LCD 3.7", with backlight
Display	

Power supply	8 x 1.5 AA batteries / 9 V mains adpt
Oper. conditions	0 ... +50 °C / <80 % RH
Conductor Ø	max.50 mm
Dimensions	device: 225 x 125 x 64 mm
Weight	device: 948 g (incl. bat.)

INCLUDES

Power analyser, 3 x clamps (depending on set), crocodile clips, safety test lead, batteries, mains adaptor, bag, 2 GB SD card, instruction manual

ITEM NO.	ITEM
K-PCE-PA 8300-1	power analyser set 1 current clamps up to 1,200 A
K-PCE-PA 8300-2	power analyser set 2 flex. clamps up to 3,000 A

OPTIONAL ACCESSORIES

K-CAL-PCE-PA 8000	ISO calibration certificate
K-PCE-PA C1	3 x current clamps
K-PCE-PA C2	3 x flex. current clamps

PCE-IT181

Insulation Meter for Telecommunications

- specifically for telecommunications
- meets safety standards
- automatic discharge of measuring circuit
- battery level indicator
- 3 DC test voltages
- fuse protection / analogue scale

Insulation measurements are necessary for all kinds of new installations and modifications, changes and repairs. Additionally, industrial installations require regular checks at fixed intervals. For privately used installations, regular status checks should be carried out in certain intervals as insulation values can deteriorate over time due to harmful factors such as ageing, climate, moisture, damage, etc.



TECHNICAL SPECIFICATIONS

Insulation range	20 MΩ 50 MΩ 100 MΩ
Accuracy	±5 % +1 dgt /
Test voltage	50 V / 125 V / 250 V
Short circuit current	2 mA DC
AC V	600 V; ±2.5 %
Ohms	50 Ω; ±5 %
Buzzer	not included
Display	analogue scale
Power supply	8 x 1.5 V batteries
Dimensions	165 x 170 x 92 mm
Weight	970 g



INCLUDES

Insulation meter, test lead, clips, 8 x batteries, instruction manual

ITEM NO.	ITEM
K-PCE-IT181	insulation meter for telecommunications

OPTIONAL ACCESSORIES

K-CAL-PCE-IT-Series	ISO calibration certificate
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PCE-UT 512

Insulation Meter up to 100 GΩ

- standard IEC10101, CAT III 1,000 V / test voltage up to 2,500 V
- memory for 18 readings / USB interface for data transfer
- display with backlight & bar graph
- alarm when predetermined measurement limit values are exceeded
- data logger function when connected to a PC



TECHNICAL SPECIFICATIONS

Test voltage	Meas. range	Open c. voltage	Test current
500 V	0.5 MΩ ... 5.0 GΩ	DC 500 V +20 %	1 ... 1.2 mA / 500 kΩ
1,000 V	2 MΩ ... 10 GΩ	DC 1,000 V +20 %	1 ... 1.2 mA / 1 MΩ
1,500 V	5 MΩ ... 20 GΩ	DC 2,500 V +20 %	1 ... 1.2 mA / 1.5 MΩ
2,500 V	10 MΩ ... 100 GΩ	DC 2,500 V +20 %	1 ... 1.2 mA / 2.5 MΩ
Short circuit curr.	<2.0 mA		
Accuracy	100 kΩ ... 100 MΩ: ± (3 % +5 dgt) / 100 MΩ ... 10 GΩ: ±(5 % +5 dgt) / 10 ... 100 GΩ: ±(10 % +5 dgt)		
Interface	USB		
Display	LCD with bar graph, 123 x 58 mm		
Power supply	8 x 1.5 V batteries (LR 14)		
Oper. conditions	0 ... +40 °C / <80 % RH		
Dimens. / weight	202 x 155 x 94 mm / 1,800 g		

INCLUDES

Insulation meter, test leads, crocodile clips, software, USB cable, batteries, instruction manual

ITEM NO.	ITEM
K-PCE-UT 512	insulation meter

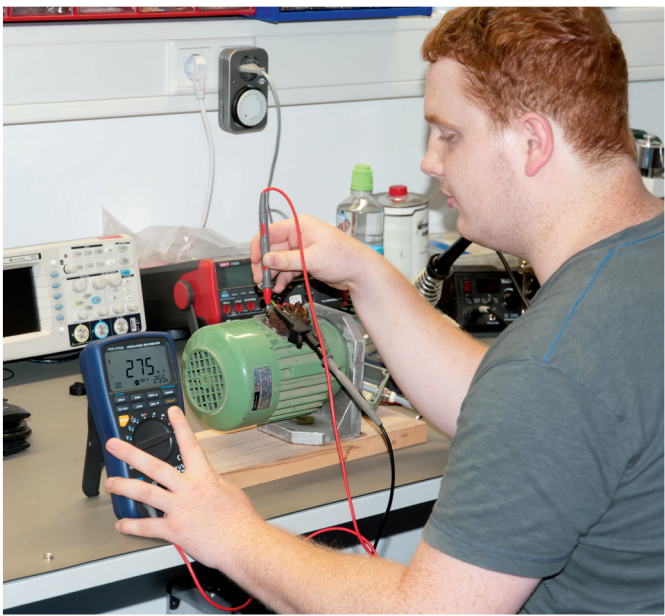
OPTIONAL ACCESSORIES

K-CAL-PCE-UT 512	ISO calibration certificate
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PCE-UT 532

2-in-1 Multimeter & Insulation Meter up to 2 GΩ

- complies with IEC 1010, CAT III 1,000 V, CAT IV 600 V
- automatic range selection / capacitance measurement
- TRMS for current measurement / integrated insulation meter
- large LC display (6,000 counts) with backlight
- internal memory / Hold function / frequency measurement



TECHNICAL SPECIFICATIONS

Test voltage	250 V / 500 V / 1,000 V / 1,000 V
Meas. range	0.2 ... 99.9 MΩ / 100 ... 250 MΩ / 0.5 ... 99.9 MΩ / 100 ... 500 MΩ / 4 ... 99.9 MΩ / 100 ... 999 MΩ / 1 MΩ ... 2 GΩ
Resolution	0.1 MΩ / 1 MΩ / 0.1 MΩ / 1 MΩ / 0.1 MΩ / 1 MΩ / 10 MΩ
Accuracy	± (3 % +5 dgt) / ± (5 % +5 dgt) (in 1 MΩ ... 2 GΩ)
AC voltage	Meas. range 6,000 / 60.00 / 600.0 / 1,000 V Resolution 1 / 10 / 100 mV / 1 V Accuracy ± (1.0 % +3 dgt) / ± (2.0 % +3 dgt) ± (2.0 % +3 dgt) / ± (2.0 % +6 dgt); in 1,000 V
DC voltage	Meas. range 60.00 / 600.00 mV / 6,000 / 60.00 / 600.0 / 1,000 V Resolution 10 / 100 μV / 1 / 10 / 100 mV / 1 V Accuracy ± (0.09 % +6 dgt) / ± (0.09 % +6 dgt) ± (0.09 % +6 dgt) / ± (0.09 % +6 dgt); in 1,000 V
AC	Meas. range 60.00 / 600.0 mA Resolution 10 / 100 μA Accuracy ± (1.5 % +2 dgt) / ± (1.5 % +2 dgt)
DC	Meas. range 60.00 / 600.0 mA Resolution 10 / 100 μA Accuracy ± (1.0 % +2 dgt) / ± (1.0 % +2 dgt)
Resistance	Meas. range 600.0 Ω / 6,000 / 60.00 / 600.0 kΩ / 6,000 / 40.00 MΩ Resolution 0.1 / 1 / 10 / 100 Ω / 1 / 10 kΩ Accuracy ± (0.9 % +2 dgt) / ± (0.9 % +2 dgt) ± (1.5 % +3 dgt) / ± (0.9 % +2 dgt); in 40,00 MΩ

Capacitance	Meas. range 10.00 / 100.0 / 1,000 nF / 10.00 / 100.0 μF Resolution 10 / 100 pF / 1 / 10 / 100 nF Accuracy ±(3.0 % +5 dgt) / ±(3.0 % +5 dgt)
Frequency	Meas. range 60.00 / 600.0 Hz / 6,000 / 60.00 / 600.0 kHz Resolution 0.01 / 0.1 / 1 / 10 / 100 Hz Accuracy ±(0.1 % +3 dgt) / ±(0.1 % +3 dgt)
Temperature	-40 ... +537 °C / 1 °C / ±(1.0 % +10 dgt)
Diode test	open circuit voltage: approx. 3 V, resolution: 1 mV
Continuity test	open circuit voltage: approx. 3 V, resolution: 0.1 Ω
Display	LCD with backlight, 6,000 counts
Power supply	6 x 1.5 V batteries
Oper. conditions	0 ... +40 °C / max. 75 % RH (below 31 °C)
Dimensions / weight	97 x 202 x 46 mm / approx. 505 g (with batteries)
The accuracy indicated is related to the frequency. (50 ... 60 Hz / 60 Hz ... 1 kHz)	

INCLUDES

Multimeter & insulation meter, 1 pair of measuring tips, 1 pair of crocodile clips with cable, thermocouple adaptor, thermocouple, batteries, bag, instruction manual

ITEM NO.	ITEM
K-PCE-UT 532	multimeter & insulation meter
OPTIONAL ACCESSORIES	
K-CAL-PCE-UT1	ISO calibration certificate (only for multimeter function)

PCE-123

Setpoint Device for Simulation

- proceses calibrator for any operation
- temperature: K-, J-, E-, T-type sensors (°C and °F)
- standardised signals: 4 ... 20 mA / 0 ... 100 mV / 0 ... 1 V / 0 ... 12 V
- frequency range: 1 ... 62,500 Hz



TECHNICAL SPECIFICATIONS

Sensor type	K, J, E, T
Ranges	-200 ... 0 °C & 0 ... +1,370 °C; 4 ... 20 mA / 0 ... 20 mA / 0 ... 24 mA; 0 ... 100.00 mV / ... 10.000 V / ... 1.0000 V 1 ... 125 Hz & 126 ... 62.5 kHz
Resolution	1 °C; 1 µA; 10 µV / 1 mV / 1.0000 V; 1 Hz / from 126 Hz 604 pre-set frequencies
Accuracy	±0.025 % ±3 µA; ±0.05 % ±30 µV / ±3 mV / ±300 µV; ≤1.1 °C (p. sensor type)
Display	LC display
Power supp.	1 x 9 V or 6 x 1.5 V battery pack
Oper. condit.	0 ... +50 °C, <85 % RH
Dimensions	88 x 168 x 26 mm
Weight	330 g

INCLUDES

Calibrator, K-type adaptor, pack of batteries, test leads with crocodile clips, carrying case, instruction manual

ITEM NO.	ITEM
K-PCE-123	process calibrator

OPTIONAL ACCESSORIES

K-CAL-PCE-123	ISO calibration certificate
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PCE-789

Multifunctional Calibrator / Simulator

- simulates and measures current, voltage, frequency, temperature (types: K, J, E, T, R, S, N, L, U, B, C)
- integrated function generator
- graphical display with backlight
- data logging function / powered by rechargeable battery
- individually created signal waveforms can be displayed



TECHNICAL SPECIFICATIONS

Simulation / generation		
Current	(no charge voltage > 15 V)	
Range	-4 ... 24 mA	
Resolution	1 µA	
Accuracy	±0.03 % +5 dgt	
Voltage	(max. 1 mA)	
Range	-3 ... 15 V	
Resolution	1 mV	
Accuracy	±0.1 % +5 dgt	
Thermocouples		
Range	depends on type	
Resolution	0.1 °C	
Accuracy	depends on type	
Frequency		
Range	0.3 ... 20,000 Hz	
Resolution	0.1 Hz	
Accuracy	0.002 ... 2 Hz	
Measurement		
Current		
Range	-4 ... 24 mA	
Resolution	1 µA	
Accuracy	±0.1 % +5 dgt	
Voltage		
Range	-3 ... 15 V	

Resolution	1 µV
Accuracy	±0.1 % +5 dgt
Thermocouples	
Range	depends on type
Resolution	0.1 °C
Accuracy	depends on type
General	
Power s.	internal recharg. battery or mains adaptor
Environmental conditions	
Operation	0 ... +50 °C, 85 % RH
Storage	-20 ... +60 °C, 75 % RH
Dimens.	214 x 99 x 56 mm
Weight	650 g
INCLUDES	
Multifunctional calibrator, K-type adaptor, 2 x test leads, 2 x crocodile clips, 2 x measuring tips, software, USB cable, mains adaptor, carrying case, instruction manual	
ITEM NO.	ITEM
K-PCE-789	multifunctional calibrator
OPTIONAL ACCESSORIES	
K-CAL-PCE-789	ISO calibration certificate