

Digital Multimeter

PCE-UT 61E

TRMS DMM with Relative Value

- IEC61010-1; CAT III 1,000 V; CAT IV 600 V
- relative value function & Max./Min. function / auto range selection / diode and continuity tests
- RS-232 interface / data can be recorded by means of software



TECHNICAL SPECIFICATIONS

Diode test	No-load voltage 2.8V, res. 0.001V
Continuity test	No-load voltage 0.45 V, res. 0.1 Ω
Display	22,000 counts, LCD
Range selection	automatic / manual
Meas. range	2 ... 3 / s
Battery level ind.	when battery is low
Functions	Min/Max
Interface	RS-232
Power supply	1 x 9 V battery
Display	LCD
Oper. conditions	0 ... +40 °C / max. 75 % RH (<30 °C)
Dimensions	180 x 87 x 47 mm
Weight	370 g

INCLUDES

Digital multimeter, 1 set of test leads, software, RS-232 interface cable, battery, instruction manual

ITEM NO.	ITEM
K-PCE-UT 61E	digital multimeter

OPTIONAL ACCESSORIES

K-CAL-PCE-UT2	ISO calibration certificate (only for multimeter function)
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TECHNICAL SPECIFICATIONS

Variable	Range	Resolution	Accuracy
45 Hz - 1 kHz			
1 - 10 kHz			
ACV	220 mV	0.01 mV	± (1.0 % +10 dgt)
			± (1.5 % +50 dgt)
	2.2 V	0.0001 V	± (0.8 % +10 dgt)
			± (1.2 % +50 dgt)
	22 V	0.001 V	± (0.8 % +10 dgt)
			± (1.2 % +50 dgt)
	220 V	0.01 V	± (0.8 % +10 dgt)
			± (2.0 % +50 dgt)
	750 V	0.1 V	± (1.2 % +10 dgt)
			± (3.0 % +50 dgt)
ACA	220 µA	0.01 µA	± (0.8 % +10 dgt)
			± (1.2 % +50 dgt)
	2.200 µA	0.1 µA	± (0.8 % +10 dgt)
			± (1.2 % +50 dgt)
	22 mA	0.001 mA	± (1.2 % +10 dgt)
			± (1.5 % +50 dgt)
	220 mA	0.01 mA	± (1.2 % +10 dgt)
			± (1.5 % +50 dgt)
	2.2 A	0.0001 A	± (1.5 % +10 dgt)
			± (2.0 % +50 dgt)
	10 A	0.001 A	± (1.5 % +10 dgt)
			± (2.0 % +50 dgt)
DCV	220 mV	0.01 mV	± (0.1 % +5 dgt)
	2.2 V	0.0001 V	± (0.1 % +2 dgt)
	22 V	0.001 V	± (0.1 % +2 dgt)
	220 V	0.01 V	± (0.1 % +2 dgt)
	1,000 V	0.1 V	± (0.1 % +5 dgt)
DCA	220 µA	0.01 µA	± (0.5 % +10 dgt)
	2.200 µA	0.1 µA	± (0.5 % +10 dgt)
	22 mA	0.001 mA	± (0.5 % +10 dgt)
	220 mA	0.01 mA	± (0.5 % +10 dgt)
	2.2 A	0.0001 A	± (1.2 % +50 dgt)
	10 A	0.001 A	± (1.2 % +50 dgt)
Ohms	220 Ω	0.01 Ω	± (0.5 % +10 dgt)
	2.2 kΩ	0.0001 Ω	± (0.5 % +10 dgt)
	22 kΩ	0.001 kΩ	± (0.5 % +10 dgt)
	220 kΩ	0.01 kΩ	± (0.5 % +10 dgt)
	2.2 MΩ	0.0001 MΩ	± (0.8 % +10 dgt)
	22 MΩ	0.001 MΩ	± (1.5 % +10 dgt)
	220 MΩ	0.01 MΩ	± (3.0 % +50 dgt)
Capac.	22 nF	0.001 nF	± (3.0 % +5 dgt)
	220 nF	0.01 nF	± (3.0 % +5 dgt)
	2.2 µF	0.0001 µF	± (3.0 % +5 dgt)
	22 µF	0.001 µF	± (3.0 % +5 dgt)
	220 µF	0.01 µF	± (4.0 % +5 dgt)
	2.2 mF	0.0001	± (4.0 % +5 dgt)
	22 mF	0.001	no especificado
	220 mF	0.01 mF	no especificado
Freq.	220 MHz	0.001 Hz	± (0.01 % +5 dgt)

DT-9987

DMM True RMS (1 kV, 10 A, 10 MHz)

- 50,000 values, 320 x 240 pixels, TFT colour LCD
- TrendCapture function for easy verification of recorded data
- Bluetooth for easy transfer of data
- 100 kHz bandwidth (voltage / current)
- peak values are registered (up to 250 µs)



TECHNICAL SPECIFICATIONS

Variable	Range	Resolution	Accuracy
DCV	1,000 V	1 µV	±0,025 % +5 dgt
ACV	1,000 V	1 µV	±0.4 % +40 dgt
DCA	10 A	0.01 µA	±0.15 % +2 dgt
ACA	10 A	0.01 µA	±0.07 % +5 dgt
Ohms	50 MΩ	0.01 Ω	±0.05 % +2 dgt
Capacity	10 mF	0.001 nF	±1.0 % +5 dgt
Frequency	10 MHz	0.01 Hz	±0.005 % +1 dgt
Temp.	1,350 °C	0.1 °C	±1.0 % +1 °C
Interface	Bluetooth		
Memory	30,000 meas. values		
Power supply	6 x 1.5 V AAA batteries		
Dimensions / weight	220 x 96 x 60 mm / 631 g		

INCLUDES

Digital multimeter, test leads, batteries, software, temperature sensor, AC adaptor, bag, manual

ITEM NO.	ITEM
K-DT-9987	digital multimeter

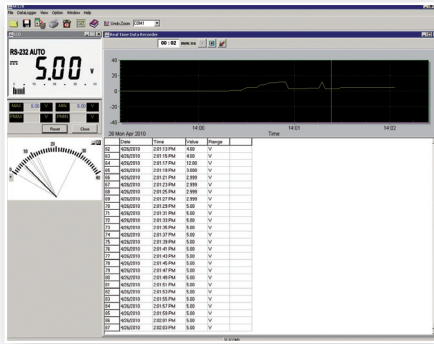
OPTIONAL ACCESSORIES

K-CAL-DMM	ISO calibration certificate
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PCE-DM 22

TRUE RMS Datalogger Multimeter with Memory, RS-232 Interface & Software

- automatic range selection / standard EC 1010-1, 600 V CAT III
- DCV, ACV, DCA, ACA, resistance, capacity, freq., temp., revolutions
- continuity test, diode test
- Peak function (1 ms) / Relative / Min. / Max. / Hold
- internal memory (32,000 values)
- RS-232 interface, data cable, software



TOP
seller



TECHNICAL SPECIFICATIONS

Measurement range

- DCV	400 mV; 4 V / 40 V / 400 V / 1,000 V
- ACV	400 mV; 4 / 40 / 400 / 750 V
- DCA	400 / 4,000 μ A; 40 / 400 mA; 10 A
- ACA	400 / 4,000 μ A; 40 / 400 mA; 10 A
- Ohms	400 Ω ; 4 / 40 / 400 k Ω ; 40 M Ω
- Capacitance	4 / 40 / 400 nF; 4 / 40 / 400 μ F; 4 / 40 mF
- Frequency	4 / 40 / 400 kHz; 4 / 40 MHz
- RPM	4 / 40 kRPM; 4 / 40 / 400 MRPM
- Temperature	-50 ... +1,000 $^{\circ}$ C

Resolution

- DCV	0.1 mV; 0.001 / 0.01 / 0.1 / 1 V
- ACV	0.1 mV; 0.001 / 0.01 / 0.1 / 1 V
- DCA	0.1 / 1 μ A; 0.01 / 0.1 mA; 0.01 A
- ACA	0.1 / 1 μ A; 0.01 / 0.1 mA; 0.01 A
- Ohms	0.1 / 1 / 10 / 100 Ω ; 1 / 10 k Ω
- Capacitance	1 / 10 / 100 pF; 1 / 10 / 100 nF; 1 / 10 μ F
- Frequency	1 / 10 / 100 Hz; 1 / 10 kHz
- RPM	0.01 / 0.1 / 1 / 10 / 100 kRPM
- Temperature	1 $^{\circ}$ C

Accuracy

- DCV	$\pm 0.3\%$ of reading +2 dgt (max 400 V); $\pm 0.5\%$ +3 dgt (above)
- ACV	$\pm 0.5\%$ of reading +5 dgt (max 400 V); $\pm 0.8\%$ +5 dgt (above)
- DCA	$\pm 0.8\%$ of reading +2 dgt (max 400mA); $\pm 1\%$ +2 dgt (above)
- ACA	$\pm 1.0\%$ of reading +5 dgt (max 400mA); $\pm 1.2\%$ +5 dgt (above)
- Ohms	$\pm 0.6\%$ of reading +2 dgt (max 4 M Ω); $\pm 1\%$ +3 dgt (above)
- Capacitance	$\pm 1.9\%$ of reading +20 dgt
- Frequency	$\pm 0.5\%$ of reading +1 dgt
- RPM	$\pm 0.5\%$ of reading +1 dgt
- Temperature	$\pm 1.0\%$ of reading +2 $^{\circ}$ C

General

Meas. range	0.5 Hz
Alarm	if below x Ω
Memory	internal, for 32,000 values
Saving interval	1 s ... 20 min (adjustable)
Interface	RS-232
Software	included (English)

Display	LCD display with backlight, with 3 $\frac{3}{4}$ digits
Power supply	9 V battery
Auto Power Off	device is automatically disconnected after 30 min of inactivity
Oper. conditions	0 ... +50 $^{\circ}$ C max. 85 % RH
Protection	IP 65
Standard	IEC 1010-1, 600 V CAT III
Dimensions	198 x 86 x 38 mm
Weight	430 g

INCLUDES

Multimeter, test leads, K-type wire temperature sensor, battery, holster, RS-232 cable, software (English), instruction manual (German)

ITEM NO.	ITEM
K-PCE-DM 22	datalogger multimeter

OPTIONAL ACCESSORIES

K-RS232-USB	USB adaptor
K-CAL-PCE-DM 22	ISO calibration certificate

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

Digital Multimeter

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



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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PCE-PCM 1

Power Meter with Memory, USB & Software

- power measurement: active (kW), apparent (kVA) & reactive (kVAR) power, power factor ($\cos \phi$), 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 (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

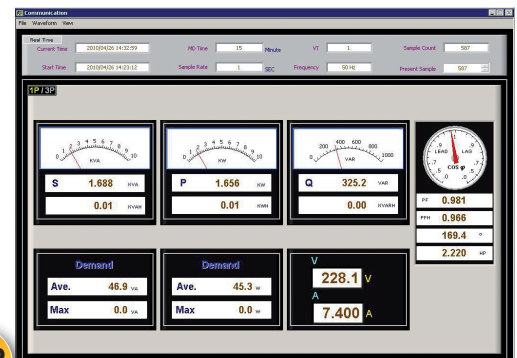
OPTIONAL ACCESSORIES

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 / ±0.5 % of reading ±5 dgt
Voltage peaks	50 ... 60 Hz / ±5 % +50 dgt (>10 V)
Current measurement	4 ... 1,500 A TRMS / 0.01 A / ±1 % of reading ±5 dgt
Current peaks	50 ... 60 Hz / ±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 ±1 % of reading +20 dgt (>20 V & >20 A) ±2 % of reading +40 dgt (<20 V & <20 A)
Power factor PF	0.000 ... 1.000 0.001 / ±0.04 % (>20 V & >20 A) 0.001 / ±0.1 % (<20 V & <20 A)
Phase angle	-180 ... +180° / 0.1° / ±1° 0 ... +360° / 0.1° / ±1°
Frequency measurement	46 ... 65 Hz / 0.1 Hz / ±0.3 Hz
Active energy	0 ... 999.999 kWh / ±1 % of reading +20 dgt
Apparent energy	0 ... 999.999 kVAh / ±1 % of reading +20 dgt
Reactive energy	0 ... 999.999 kVarh / ±1 % of reading +20 dgt
Harmonics in the voltage relative	1st ... 20th / 0.1 % / ±2 %
50 ... 60 Hz >80 V AC	21st ... 50th / 0.1 % / ±4 % of reading ±2 %

Harmonics in the voltage absolute	1st ... 20th / 0.1 V / ±2 % ±0.5 V
50 ... 60 Hz >80 V AC	21st ... 50th / 0.1 V / ±4 % of reading ±0.5 V
Harmonics in the current relative	1st ... 20th / 0.1 % / ±2 %
50 ... 50 Hz >20 A	21st ... 50th / 0.1 % / ±4 % of reading ±2 %
Harmonics in the current absolute	1st ... 20th / 0.1 A / ±2 % of reading ±0.4 A
50 ... 50 Hz >20 A	21st ... 50th / 0.1 A / ±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 % / ±6 % of reading ±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

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
Voltage	Accuracy	±0.03 % +5 dgt
	(max. 1 mA)	
	Range	-3 ... 15 V
Thermocouples	Resolution	1 mV
	Accuracy	±0.1 % +5 dgt
Frequency	Range	depends on type
	Resolution	0.1 °C
	Accuracy	depends on type
Measurement		
	Range	0.3 ... 20,000 Hz
	Resolution	0.1 Hz
Current	Accuracy	0.002 ... 2 Hz
	Range	-4 ... 24 mA
Voltage	Resolution	1 µA
	Accuracy	±0.1 % +5 dgt
Frequency	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
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