

Electricity Meters

PCE-DM12

Digital multimeter with auto-ranging

This digital multimeter is a new device with a rugged double plastic enclosure equipped with a large LCD with high contrast. It meets CAT III / 600 V / IN 61010-1 standard. The PCE-DM12 has an automatic ranging selection and it has a basic AD accuracy of 0.5 %. Its durability and reliability makes it capable of being used in laboratories, in research and development or in technical service.

- Large easy to read LCD, even in adverse conditions
- Several functions
- Auto-ranging
- Data Hold function
- Auto shut-off
- Safety design
- Diode test
- Continuity check
- ISO calibration certificate (optional)



Technical specifications

| | |
|-------------|--------------------------------------|
| DCV | 600 V; $\pm 0.5\%$ |
| ACV | 600 V; $\pm 1.2\%$ |
| DCA | 10 A; 600 V; $\pm 2.5\%$ |
| ACA | 10 A; 600 V; $\pm 3.0\%$ |
| Ohm | 2 / 20 / 40 M Ω ; $\pm 0.8\%$ |
| Capacitance | 200 μ F; $\pm 3.0\%$ |
| Frequency | 10 MHz; $\pm 1.5\%$ |
| Temperature | 760 $^{\circ}$ C; $\pm 3.0\%$ |
| Duty Cycle | 9.99%; $\pm 1.2\%$ |
| Power | 9 V battery |
| Dimensions | 150 x 70 x 48 mm |
| Weight | 255 g |
| Approvals | EN61010-1; CAT III / 600V |



Contents

PCE-DM12 multimeter, test leads, type-K thermo-element, battery and user's manual

| Model No. | Description |
|-----------|--------------------|
| PCE-DM12 | Digital multimeter |

Optional accessories

| | |
|---------|-----------------|
| CAL-DMM | ISO certificate |
|---------|-----------------|

PCE-DM32

Digital multimeter with CAT III 1000 V

This meter is an automatic digital multimeter meeting the CAT III / 1000 V security standard. It has a high contrast LCD with an illumination key. The warning and security indications displayed on the display helps you detect negative polarity, faulty fuses and lower tension connections. It also indicates if voltage must be disconnected in the case of passive functions.

- Several functions: AC/DC V, AC/DC A, Ohm, Frequency, Capacitance and Temperature, measuring duty cycle, diode test and continuity check
- Rugged enclosure with ingress protection against water jet and impact
- Maintenance of value / relative value
- Auto shut-off
- Diode test
- Overload protection
- ISO calibration certificate (optional)



Technical specifications

| | |
|-------------|---|
| DCV | 400 mV / 4 / 40 / 400 / 1000 V; $\pm 0.5\%$; +2 dgt. - 100 μ V |
| ACV | 400 mV / 4 / 40 / 400 / 750 V; $\pm 0.8\%$; +3 dgt. - 100 μ V |
| DCA | 400 μ A / 4 / 40 / 400 mA / 20 A; $\pm 1.2\%$; +8 dgt. - 100 nA |
| ACA | 400 μ A / 4 / 40 / 400 mA / 20 A; $\pm 1.5\%$; +10 dgt. - 100 nA |
| Ohm | 400 Ω / 4 / 40 / 400 k Ω / 4 / 40 M Ω ; $\pm 1.0\%$ +2 dgt. - 100 m Ω |
| Capacitance | 40 / 400 nF / 4 / 40 / 100 μ F; $\pm 3.5\%$ +5 dgt. - 10 pF |
| Frequency | 10 / 100 Hz / 1 / 10 / 100 kHz / 1 / 10 MHz; $\pm 1.2\%$ +2 dgt. - 1 mHz |
| Temperature | -20 to +1000 $^{\circ}$ C; $\pm 3\%$ +2 dgt. - 0.1 $^{\circ}$ C |
| Power | 9 V battery |
| Dimensions | 88 x 197 x 41 mm |
| Weight | 390 g |
| Approvals | IEC1010-1, UL1244, CATIII 1000V/CATIV 600V |

Contents

PCE-DM32 multimeter, soft case, test leads, battery, type-K thermoelement, cable, software and user's manual

| Model No. | Description |
|-----------|--------------------|
| PCE-DM32 | Digital multimeter |

Optional accessories

| | |
|-----------|-----------------------|
| RS232-USB | RS-232 to USB adaptor |
| CAL-DMM | ISO certificate |

DM-9960

Multimeter with Peak measurements and frequency up to 40 MHz

This digital multimeter possesses automatic and manual ranging selection, as well as a dual indicator with a maximum value up to 3999 and an analogical bar graph with 40 segments. It offers you several possibilities in your measurements, like Peak value for impulses of >1 ms. This multimeter has protection against complete input and it meets CAT III 1000 V standard. It has an automatic ranging selection for: DCV, ACV, DCA, ACA, ohms, diode measurements, continuity check, capacity, frequency and temperature.

- Analogue bar graph display with 40 segments
- Battery life indicator
- Peak, Data Hold, minimum and maximum values
- Measures relative value
- Diode test
- Auto-ranging
- ISO calibration certificate (optional)



Technical specifications

| | |
|-------------|--|
| DCV | 400 mV / 4 / 40 / 400 / 1000 V $\pm 0.8\%$ +1dgt.; 100 μ V |
| ACV | 400 mV / 4 / 40 / 400 / 1000 V $\pm 1.0\%$ +2 dgt.; 100 μ V |
| DCA | 0.4 / 4 / 40 / 400 mA / 10 A $\pm 1.5\%$ +2 dgt.; 0.1 μ A |
| ACA | 0.4 / 4 / 40 / 400 mA / 10 A $\pm 1.5\%$ +2 dgt.; 0.1 μ A |
| Ohm | 400 Ω / 4 / 40 / 400 k Ω / 4 / 40 M Ω $\pm 1.5\%$ +2 dgt.; 0.1 Ω |
| Capacitance | 4 / 40 / 400 nF / 4 / 40 / 400 μ F / 4 / 40 mF $\pm 3\%$ +1 dgt.; 1 pF |
| Frequency | 4 / 40 / 400 kHz / 4 / 40 MHz $\pm 0.5\%$ +2 dgt.; 1 Hz |
| Temperature | -20 to +750 $^{\circ}$ C; $\pm 1\%$ +2 $^{\circ}$ C |
| Power | 2 AAA batteries (1.5 V) |
| Dimensions | 88 x 185 x 40 mm |
| Weight | 350 g |
| Approvals | IEC-1010-1; CAT III 1000 V |

Contents

DM-9960 digital multimeter, test leads with alligator clips, batteries and user's manual

| Model No. | Description |
|-----------|--------------------|
| DT-9960 | Digital multimeter |

Optional accessories

| | |
|---------|-----------------|
| CAL-DMM | ISO certificate |
|---------|-----------------|

W-20-TRMS

Multimeter with RS-232 interface, software and effective value measurement

This digital multimeter indicates to you the test leads that you will need to take your measurement depending on the measurement range selected. This meter has a display with symbols for each function, a warning symbol for faulty fuses and a discharge warning symbol. As an additional function it has an audible alarm which indicates all errors that occur. It also offers you the possibility to measure capacity, frequency and temperature.

- Large, high contrast, 3½ digit LCD
- RS-232 C interface and software for Windows 95/98/2000/NT/ME/XP
- Ingress protection for dust and water
- Overload protection
- Effective value measurement
- Relative value
- Data Hold
- Audible alarm
- Diode test
- Manual or automatic ranging
- Measures operating cycle in %



Technical specifications

| | | | |
|--------------------|-------------------------------------|--------------------------|----------|
| Voltage DC | 400 mV | ±0.3 % + 5 dgt. | 100 µV |
| | 4 V | ±0.1 % + 5 dgt. | 1 mV |
| | 40 V | ±0.1 % + 5 dgt. | 10 mV |
| | 400 V | ±0.1 % + 5 dgt. | 100 mV |
| | 1000 V | ±0.5 % + 5 dgt. | 1 V |
| Voltage AC | 400 mV | ±1.5 % + 5 dgt. | 100 µV |
| | 4 V | ±1.0 % + 5 dgt. | 1 mV |
| | 40 V | ±1.0 % + 5 dgt. | 10 mV |
| | 400 V | ±1.0 % + 5 dgt. | 100 mV |
| | 700 V | ±1.0 % + 5 dgt. | 1 V |
| Current DC | 400 µA | ±1.2 % + 10 dgt. | 0,1 µA |
| | 4 mA | ±1.2 % + 10 dgt. | 1,0 µA |
| | 40 mA | ±1.5 % + 10 dgt. | 10 µA |
| | 400 mA | ±1.5 % + 10 dgt. | 100 µA |
| | 20 A | ±2.0 % + 10 dgt. | 10 mA |
| Current AC | 400 µA | ±1.5 % + 10 dgt. | - 0,1 µA |
| | 4 mA | ±1.5 % + 10 dgt. | - 1 µA |
| | 40 mA | ±1.5 % + 10 dgt. | - 10 µA |
| | 400 mA | ±1.5 % + 10 dgt. | - 100 µA |
| Resistance | 400 Ω / 4 / 40 / 400 kΩ / 4 / 40 MΩ | | |
| | | ±1 % + 5 dgt. - 100 mΩ | |
| Capacitance | 4 / 400 nF / 4 / 40 / 100 µF | | |
| Frequency | 10 Hz ... 10 MHz | | |
| | | ±0.1 % + 2 dgt. - 10 mHz | |
| Temperature | -20 to +1370 °C | | |
| | | ±3 % + 5 dgt. - 0.1 °C | |
| Overcurrent safety | CAT II 1000 V / CAT III 600 V | | |
| Power | 9 V battery | | |
| Dimensions | 88 x 178 x 33 mm | | |
| Weight | 315 g | | |

Contents

W-20-TRMS multimeter, software, RS-232 interface, battery, soft case, test leads, type-K thermo-element, spare fuse and user's manual

| Model No. | Description |
|-----------|----------------------|
| W-20-TRMS | W-20-TRMS multimeter |

Optional accessories

| | |
|-----------|-----------------------|
| RS232-USB | RS-232 to USB adaptor |
| CAL-DMM | ISO certificate |

PCE-DM 22

TRUE RMS multimeter with memory, RS-232 interface and software

This handheld multimeter is an instrument which will cover almost all your needs. It determines DCV, ACV, DCA, ACA and resistance values with great precision, as well as capacitance, frequency, revolutions and temperature. It also has diode test and continuity check functions. You will be able to transfer the readings to a PC or portable via the software that is included in the delivery. The integrated data logger allows you make long-term measurements of machines and electric systems. This handheld multimeter is delivered with factory calibration and if you want, you can purchase a laboratory calibration and an optional ISO certificate (with your order or with your annual recalibration).

- Auto-ranging
- High basic DC Voltage accuracy
- DCV, ACV, DCA, ACA, resistance, capacity, frequency, temperature, revolutions
- Diode test, continuity check
- Peak function (1 ms)
- Relative value / Min / Max / Hold
- Internal memory (32,000 values)
- RS-232 interface, cable, software
- ISO calibration certificate (optional)



Technical specifications

| | | | |
|--------------------------|--|--------------------------------|----------------------------|
| Voltage DC | 400 mV | ±0.3 % of reading + 2 dgt | 0.1 mV |
| | 4 V | ±0.3 % of reading + 2 dgt | 1 mV |
| | 40 V | ±0.3 % of reading + 2 dgt | 10 mV |
| | 400 V | ±0.3 % of reading + 2 dgt | 100 mV |
| | 1000 V | ±0.5 % of reading + 2 dgt | 1 V |
| Voltage AC | 45 to 500 Hz | | 500 Hz to 1 kHz |
| | 400 mV | ±0.5 % of reading + 5 dgt | ±1 % + 5 dgt |
| | 4 V | ±0.5 % of reading + 5 dgt | ±1 % + 5 dgt |
| | 40 V | ±0.5 % of reading + 5 dgt | ±1 % + 5 dgt |
| | 400 V | ±0.5 % of reading + 5 dgt | ±1 % + 5 dgt |
| Current DC | 400 µA | ±0.8 % of reading. + 2 dgt | 0.1 µA |
| | 4000 µA | ±0.8 % of reading + 2 dgt | 1 µA |
| | 40 mA | ±0.8 % of reading + 2 dgt | 10 µA |
| | 400 mA | ±0.8 % of reading + 2 dgt | 100 µA |
| | 10 A | ±1.0 % of reading + 2 dgt | 10 mA |
| Current AC | 45 Hz to 500 Hz | | 500 Hz to 1 kHz |
| | 400 µA | ±1.3 % of reading + 5 dgt | ±1.6 % + 5 dgt |
| | 4000 µA | ±1.3 % of reading + 5 dgt | ±1.6 % + 5 dgt |
| | 40 mA | ±1.3 % of reading + 5 dgt | ±1.6 % + 5 dgt |
| | 400 mA | ±1.3 % of reading + 5 dgt | ±1.6 % + 5 dgt |
| Other measurement ranges | Resistance: | 400 Ω; 4 / 40 / 400 kΩ; 40 MΩ | ±0.6 % of reading + 2 dgt |
| | Capacitance: | 4/40/400nF; 4/40/400µF; 4/40mF | ±1.9 % of reading + 20 dgt |
| | Frequency: | 4 / 40 / 400 kHz; 4 / 40 MHz | ±0.5 % of reading + 1 dgt |
| | RPM: | 4 / 40 kRPM; 4 / 40 / 400 MRPM | ±0.5 % of reading + 1 dgt |
| | Temperature: | -50 to +1000 °C | ±1.0 % of reading + 2°C |
| Memory / Interface | internal, up to 32,000 values / RS-232 | | |
| Software | included in the delivery | | |
| Power | 9 V battery | | |
| Dimensions / Weight | 198 x 86 x 38 mm / 430 g | | |
| Approvals | IEC 1010-1, CAT III 1000 V | | |

Contents

PCE-DM 22 multimeter, test leads, type-K temperature probe, battery, soft case, RS-232 cable, software and user's manual

| Model No. | Description |
|-----------|-----------------------------|
| PCE-DM 22 | Multimeter with data logger |

Optional accessories

| | |
|-----------|--|
| USB-DM 22 | USB cable for the PCE-DM 22 multimeter |
| CAL-DMM | ISO certificate |

Electricity Meters

PCE-UT803

True RMS bench multimeter with several functions, USB- / RS-232 interface and software

The PCE-UT803 is a high performance and low cost multimeter. It comes with LCD display, shows the information. It is designed by a high-tech team. This instrument combines the bench-top and system features which provides a versatile solution for your testing requirements now and in the future. The capacitance is 6 nF / 60 nF / 600 nF / 6 μ / 60 μF / 600 μF / 6 mF, precision: ±(2 % +5). There is USB interface.

- Auto-ranging
- Several functions: AC/DC V, AC/DC A, Ohm, Frequency, Capacitance and Temperature, measuring duty cycle, diode test and continuity check
- Effective value measurement
- Min- / max- / hold-function
- USB and RS-232 interface
- Data cable and software included
- Frequency range up to 60 MHz
- ISO calibration certificate (optional)



Technical specifications

| | | | |
|---------------------|---|--------------------------|--------|
| Voltage DC | 600 mV | ±0.3 % of reading +2 dgt | 0.1 mV |
| | 6 V | ±0.3 % of reading +2 dgt | 1 mV |
| | 60 V | ±0.3 % of reading +2 dgt | 10 mV |
| | 600 V | ±0.3 % of reading +2 dgt | 100 mV |
| | 1000 V | ±0.5 % of reading +3 dgt | 1 V |
| Voltage AC | 600 mV | ±0.6 % of reading +5 dgt | 0.1 mV |
| | 6 V | ±0.6 % of reading +5 dgt | 1 mV |
| | 60 V | ±0.6 % of reading +5 dgt | 10 mV |
| | 600 V | ±0.6 % of reading +5 dgt | 100 mV |
| | 750 V | ±1.2 % of reading +3 dgt | 1 V |
| Current DC | 600 μA | ±0.5 % of reading +3 dgt | 0.1 μA |
| | 6000 μA | ±0.5 % of reading +3 dgt | 1 μA |
| | 60 mA | ±0.5 % of reading +3 dgt | 10 μA |
| | 600 mA | ±0.8 % of reading +3 dgt | 100 μA |
| | 10 A | ±1.2 % of reading +3 dgt | 10 mA |
| Current AC | 600 μA | ±1.0 % of reading +5 dgt | 0.1 μA |
| | 6000 μA | ±1.0 % of reading +5 dgt | 1 μA |
| | 60 mA | ±1.0 % of reading +5 dgt | 10 μA |
| | 600 mA | ±1.0 % of reading +5 dgt | 100 μA |
| | 10 A | ±2.0 % of reading +6 dgt | 10 mA |
| Resistance | 600 Ω; 6/ 60/ 600 kΩ; 6/ 60 MΩ | ±0.5 to 1.2 % +2 dgt | |
| Capacitance | 6/ 60/ 600 nF; 6/ 60/ 600 μF; 6 mF | ±2.0 to 5.0 % +5 dgt | |
| Frequency | 6/ 60/ 600 kHz; 6/ 60 MHz | ±0.1 % +3 dgt | |
| Temperature | -40 °C to +1000 °C | ±1.0 % +3 dgt | |
| Sampling rate | 2 to 3 / s | | |
| Continuity check | < 30 Ω | | |
| Diode test | < 2,7 V / 1 mA | | |
| Interface | USB and RS-232 | | |
| Software | included | | |
| Display | LCD with backlight | | |
| Power | 230 V / 50 Hz or 6 batteries (1.5 V) | | |
| Dimensions / Weight | 240 x 105 x 310 mm / 2000 g | | |
| Approvals | IEC 1010-1, CAT I 1000 V / CAT II 600 V | | |

Contents

PCE-UT803 multimeter, test leads, alligator clips (large and small), temperature probe (type K), adaptor, batteries, USB cable, RS-232 cable, Software and user's manual (For U.K. customers: incl. U.K. AC Mains Power Adaptor)

| Model No. | Description |
|-----------|------------------|
| PCE-UT803 | Bench multimeter |

Optional accessories

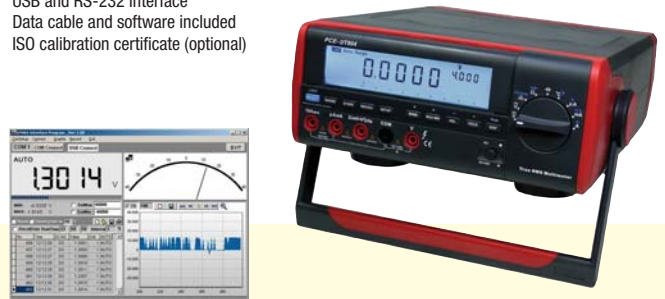
| | |
|---------|-----------------|
| CAL-DMM | ISO certificate |
|---------|-----------------|

PCE-UT804

High precision True RMS bench multimeter with several functions, datalogger, USB- / RS-232 interface and software

The PCE-UT804 is a high performance and low cost clamp multimeter. It comes with LCD display, shows the information. It is designed by a high-tech team. This instrument combines the bench-top and system features which provides a versatile solution for your testing requirements now and in the future. The capacitance is 40 nF / 400 nF / 4 μF / 40 μF / 400 μF / 4 mF / 40 mF, precision: ±(1 % +20). There is USB interface.

- Highest precision
- Auto-ranging
- Several functions: AC/DC V, AC/DC A, Ohm, Frequency, Capacitance and Temperature, measuring duty cycle, diode test and continuity check
- Effective value measurement up to 100 kHz
- Relative value
- Datalogger for 9,999 values with sampling rate from 1 s to 255 s
- Frequency range up to 400 MHz
- USB and RS-232 interface
- Data cable and software included
- ISO calibration certificate (optional)



Technical specifications

| | | | |
|----------------------|---|----------------------------|---------------------------|
| Voltage DC | 400 mV | ±0.025 % of reading +5 dgt | 0.1 mV |
| | 4 V | ±0.05 % of reading +5 dgt | 1 mV |
| | 40 V | ±0.05 % of reading +5 dgt | 10 mV |
| | 400 V | ±0.05 % of reading +5 dgt | 100 mV |
| | 1000 V | ±0.05 % of reading +5 dgt | 1 V |
| Voltage AC | 4 V | ±0.4 % of reading +30 dgt | 1 mV |
| | 40 V | ±0.4 % of reading +30 dgt | 10 mV |
| | 400 V | ±0.4 % of reading +30 dgt | 100 mV |
| | 750 V | ±1.0 % of reading +30 dgt | 1 V |
| | Current DC | 400 μA | ±0.1 % of reading +15 dgt |
| | 4000 μA | ±0.1 % of reading +15 dgt | 0.1 μA |
| | 40 mA | ±0.15 % of reading +15 dgt | 1 μA |
| | 400 mA | ±0.15 % of reading +15 dgt | 10 μA |
| | 10 A | ±0.5 % of reading +30 dgt | 1 mA |
| Current AC | 400 μA | ±1.0 % of reading +30 dgt | 0.01 μA |
| | 4000 μA | ±1.0 % of reading +30 dgt | 0.1 μA |
| | 40 mA | ±1.0 % of reading +30 dgt | 1 μA |
| | 400 mA | ±1.0 % of reading +30 dgt | 10 μA |
| | 10 A | ±2.5 % of reading +40 dgt | 1 mA |
| Resistance | 400 Ω; 4/ 40/ 400 kΩ; 4/ 40 MΩ | ±0.3 to 1.0 % +40 dgt | |
| Capacitance | 40/ 400 nF; 4/ 40/ 400 μF; 4/ 40 mF | ±1.0 to 5.0 % +20 dgt | |
| Frequency | 40/ 400 Hz; 4/ 40/ 400 kHz; 4/ 400 MHz | ±0.01 % +8 dgt | |
| Temperature | -40 °C to +1000 °C | ±1.0 % +30 dgt | |
| TRMS Frequency range | up to 100 kHz | | |
| Memory | 9999 values | | |
| Sampling rate | 1 to 255 s (adjustable) | | |
| Data readout | about Display or Software | | |
| Interface | USB and RS-232 | | |
| Software | included in the delivery | | |
| Display | triple LCD with bargraph and backlight | | |
| Power | 230 V / 50 Hz or 6 batteries (1.5 V) | | |
| Dimensions / Weight | 240 x 105 x 310 mm / 3000 g | | |
| Approvals | IEC 1010-1, CAT I 1000 V / CAT II 600 V | | |

Contents

PCE-UT804 multimeter, test leads, alligator clips (large and small), temperature probe (type K), adaptor, batteries, USB cable, RS-232 cable, Software and user's manual (For U.K. customers: incl. U.K. AC Mains Power Adaptor)

| Model No. | Description |
|-----------|---------------------------------|
| PCE-UT804 | High precision bench multimeter |

Optional accessories

| | |
|---------|-----------------|
| CAL-DMM | ISO certificate |
|---------|-----------------|

PCE-DC4

1000 A AC digital clamp meter

This digital clamp meter measures currents without contact and it has a rugged unbreakable rubber enclosure with ingress protection against fire. Its special design allows you use it in areas with difficult access. All its functions have an overload protection.

- Large 3 1/4 digit LCD (17 mm), maximum indicator: 3999
- Data Hold freeze the current value
- AC current up to 1000 A
- Voltage measurement up to 600 V AC/DC
- Resistance, frequency, capacitance, duty cycle, and temperature measurements
- Diode test and continuity check
- Manual and automatic ranging
- Maximum diameter of 31 mm
- Auto shut-off
- ISO calibration certificate (optional)



Technical specifications

| | |
|---------------|--|
| DCV | 400 mV / 4 / 40 / 400 / 600 V; ±0.8 % + 3 dgt. - 100 µV |
| ACV | 400 mV / 4 / 40 / 400 / 600 V; ±1.8 % + 5 dgt. - 100 µV |
| ACA | 40 / 400 / 1000 A; ±2.5 % + 5 dgt. - 10 mA |
| Ohmios | 400 Ω / 4 / 40 / 400 kΩ / 4 / 40 MΩ; ±1.0 % + 4 dgt. - 100 mΩ |
| Capacitance | 40/400 nF / 4/40/100 µF; ±3 % + 5 dgt - 10 pF |
| Frequency | 5/50/500 Hz /5/50/500 kHz /5/10 MHz; ±1.2 % + 2 dgt. - 1 mHz |
| Temperature | -50 to +1000 °C; ±3 % + 5 °C - 0.1 °C |
| Clamp opening | 31 mm maximum diameter |
| Dimensions | 80 x 229 x 49 mm |
| Weight | 303 g |
| Approvals | IEC-1010-1; CAT III 600 V |



Contents

PCE-DC4, carrying case, test leads, type-K temperature probe, 9 V battery and user's manual

| Model No. | Description |
|-----------|-------------------------------|
| PCE-DC4 | 1000 A AC digital clamp meter |

Optional accessories

| | |
|--------|-----------------|
| CAL-MZ | ISO certificate |
|--------|-----------------|

PCE-DC3

2/80 A AC/DC mini clamp meter with high resolution

This mini clamp meter is ideal for non-contact AC/DC voltage measurements. It has a built-in white flashing LED to illuminate the area being measured. Its small dimensions make it useful in areas with difficult access. The large illuminated display guarantees values can be read even in dark areas, like in distribution frames.

- 3 1/3 digit LCD with backlight
- AC / DC current measurement up to 80 A
- Data logger
- DCA Zero function
- Non-contact AC voltage detector
- Auto-ranging
- Auto shut-off
- 18 mm clamp opening
- ISO calibration certificate (optional)



Technical specifications

| | |
|-----------------------------------|---|
| ACA | 2 A; ±3 % + 8 dgt. - 1 mA 80 A; ±3 % + 8 dgt. - 100 mA |
| DCA | 2 A; ±2.8 % + 8 dgt. - 1 mA 80 A; ±2.8 % + 8 dgt. - 100 mA |
| Voltage control (without contact) | 100 to 600 VAC |
| Clamp opening | 18 mm maximum diameter |
| Dimensions | 65 x 164 x 32 mm |
| Weight | 175 g |



Contents

PCE-DC3, battery and user's manual

| Model No. | Description |
|-----------|-----------------------------|
| PCE-DC3 | 80 A AC/DC mini clamp meter |

Optional accessories

| | |
|--------|-----------------|
| CAL-MZ | ISO certificate |
|--------|-----------------|

CM-9940

600 A AC/DC digital clamp meter

With our digital clamp meter you will be able to measure continuous and alternating current besides using the basic functions of continuous and alternating voltage, resistance, frequency, continuity check and diode tests. It is ideal in the technical sector due to its reduced diameter of 30 mm. It has overload protection for all measurement ranges.

- 4 digit LCD, 11 mm maximum 5000 (frequency range)
- Measurements up to 600 A AC/DC
- Data Hold, continuity check and relative value
- 30 mm clamp opening
- ISO calibration certificate (optional)



Technical specifications

| | |
|---------------------|--|
| DCV | 400 mV / 4 / 40 / 400 / 600 V ±1.0 % + 2 dgt. - 0.1 mV |
| Overload protection | DC 600 V |
| ACV | 400 mV / 4 / 40 / 400 / 600 V ±1.2 % + 5 dgt. - 0.1 mV |
| Overload protection | AC 600 V |
| DCA | 400 / 600 A; ±2 % + 8 dgt. - 0.1 A |
| Overload protection | DC 600 V |
| ACA | 400 / 600 A; ±2 % + 8 dgt. - 0.1 A |
| Overload protection | AC 600 V |
| Ohm | 400 Ω / 4 / 40 / 400 kΩ / 4 / 40 MΩ ±1 % + 5 dgt. up to 400 kΩ, if not ±3.5 % + 5 dgt. - 0.1 Ω |
| Overload protection | AC/DC 400 V |
| Frequency | 5 / 50 / 500 Hz / 5 / 50 100 kHz ±1 % + 5 dgt. - 0.001 Hz |
| Overload protection | AC/DC 250 V |
| Audible alarm | yes |
| Diode test | yes |
| Power | 2 batteries (1.5 V) |
| Dimensions | 178 x 64 x 33 mm |
| Weight | 230 g |
| Approvals | IEC-1010-1, CAT III 600 V |

Contents

CM-9940, carrying case, test leads, batteries and user's manual

| Model No. | Description |
|-----------|---------------------------------|
| CM-9940 | 600 A AC/DC digital clamp meter |

Optional accessories

| | |
|--------|-----------------|
| CAL-MZ | ISO certificate |
|--------|-----------------|

Electricity Meters

CM-9930

2000 A AC/DC clamp meter

This clamp meter is a versatile instrument with a modern design and modern technology. It has a rugged enclosure with ingress protection against breaking and fire and the handle is also protected which prevents the user from touching the clamp or the internal lead (it offers maximum security to the user). All measurement ranges have overload protection.

- 4 digit LCD (15 mm), 5000 maximum (frequency range)
- Measurements up to 2000 A AC/DC
- 60 mm clamp opening
- Data Hold, valor efectivo real
- Continuity check
- ISO calibration certificate (optional)



Technical specifications

| | |
|-------------------------|--|
| DCV | 400 mV / 4 / 40 / 400 / 1000 V ±1.0 % + 2 dgt. - 0.1 mV |
| Overload protection | DC 1000 V |
| ACV | 400 mV / 4 / 40 / 400 / 1000 V ±1.2 % + 5 dgt. - 0.1 mV |
| Overload protection | AC 1000 V |
| DCA (direct) | 400 µA / 4 / 40 / 400 mA; ±1.2 % + 5 dgt. (with clamp) 400 / 2000 A; ±2.0 % + 8 dgt. |
| Overload protection | DC 500 mA direct; DC 1000 V clamp |
| ACA (direct) | 400 µA / 4 / 40 / 400 mA; ±1.2 % + 5 dgt. (with clamp) 400 / 2000 A; ±2.0 % + 8 dgt. |
| Overload protection | AC 500 mA direct; AC 1000 V clamp |
| Ohms | 400 Ω / 4 / 40 / 400 kΩ / 4 / 40 MΩ ±1 % + 5 dgt. up to 400 kΩ, or ±3.5 % + 5 dgt. - 0.1 Ω |
| Overload protection | AC/DC 400 V |
| Frequency | 5 / 50 / 500 Hz / 5 / 50 100 kHz ±1 % + 5 dgt. - 0.001 Hz |
| Overload protection | AC/DC 1000 V |
| Capacitance | 50 / 500 nF / 5 / 50 µF; ±3 % + 5 dgt. |
| Effective current value | yes |
| Audible alarm / diodes | yes / yes |
| Power | 9 V battery |
| Dimensions | 255 x 73 x 38 mm |
| Weight | 380 g |
| Approvals | IEC-1010-1, CAT III 1000 V |

Contents

CM-9930, test leads, battery and user's manual

| Model No. | Description |
|-----------|----------------------------------|
| CM-9930 | 2000 A AC/DC digital clamp meter |

Optional accessories

| | |
|--------|-----------------|
| CAL-MZ | ISO certificate |
|--------|-----------------|

PCE-EI-3000

Flexible clamp meter for leads up to 170 mm in diameter and 3000 A

This special digital clamp meter has a flexible AC current probe for big lead cables with a diameter up to 170 mm, something that you could not measure up to now with a normal digital clamp meter. Its special flexible probe allows it to be used in areas with difficult access in which it's impossible to use a typical clamp. It measures net frequencies, currents up to 3000 A AC and voltages up to 600 V AC like real effective value.

- True RMS
- 3000 A AC direct current / 600 V AC Voltage
- 4+4 digit LCD
- Auto-ranging
- Frequency indicator
- Fast Peak function (30 µs)
- MAX / MIN functions
- Auto shut-off
- Cable length from probe to instrument: maximum 170 mm
- ISO calibration certificate (optional)



Technical specifications

| | |
|--------------------------|---|
| ACA Trms | 300 A / 0,1 A 1000 A / 0,1 A 3000 A / 1 A; ±1 % of measurement range |
| ACV Trms | 4.0 to 600 V / 0.1V; ±0.5 % ±5 digit |
| Frequency | 45 to 65 Hz / 0.1 Hz; ±0.2 Hz |
| Cable length dimensions | maximum 170 mm |
| Minimum bending diameter | minimum 35 mm |
| Cable probe diameter | 14 mm |
| Display | 4+4 digit LCD |
| Operating conditions | -10 to +85 °C |
| Power | 2 AA batteries (1.5 V) |
| Dimensions | 130 x 80 x 43 mm |
| Weight | 430 g |



Contents

PCE-EI-3000 flexible clamp meter, batteries and user's manual

| Model No. | Description |
|-------------|-------------------------------|
| PCE-EI-3000 | 3000 A AC digital clamp meter |

Optional accessories

| | |
|--------|-----------------|
| CAL-MZ | ISO certificate |
|--------|-----------------|

PCE-UT232

3 Phase Power Clamp / Meter / Analyzer with Computer Interface (USB) and Software

The product is tri-phasic three lines and tri-phasic four lines. This high effective tool is the best choice for machine analyzing technicians and electricians in a wide field of industrial applications. The clamp can store the measured data (upto 99) and can be transferred to a PC or Portable later on. There are many special functions such as auto measure, large LCD display etc.

- Measures active / apparent / reactive power, power factor, phase angle, active energy
- Self calibration function
- Max / Min data capture / data hold display
- Store / recall saved data
- ISO calibration certificate as option



Technical specifications

| | |
|--------------------|--|
| ACV TRMS | 20 / 100 / 300 / 600 V; ±1.2 % + 5 dgt. |
| ACV TRMS | 40 / 100 / 400 / 1000 A; ±2.0 % + 5 dgt. |
| Active power (P) | 0.01 kW to 600 kW; ±3.0 % + 5 dgt. |
| Apparent power (S) | 0.01 kVA to 600 kVA; ±3.0 % + 5 dgt. |
| Reactive power (Q) | 0.01 kVAR to 600 kVAR; ±4.0 % + 5 dgt. |
| True energy | 1 to 9999 kWh; ±3.0 % + 2 dgt. |
| Power factor (PF) | 0.3 to 1.00; ±0.02 + 2 dgt. |
| Phase angle | 0 to 360°; ±1.0° |
| Frequency | 20 to 500 Hz |
| Temperature | -50 to +1300 °C |
| Memory | 99 values |
| Display | 4 digit LCD with analog bargraph |
| Power | 4 batteries (1.5 V) |
| Dimensions | 112 x 39 x 303 mm |
| Weight | 600 g |



Contents

PCE-UT232 power analyser, 4 x test leads, 4 x alligator clips, USB cable, software, batteries, carrying case and user's manual

| Model No. | Description |
|-----------|----------------|
| PCE-UT232 | Power analyser |

Optional accessories

| | |
|--------|-----------------|
| CAL-MZ | ISO certificate |
|--------|-----------------|

PCE-FC25

10 Hz to 2.6 GHz Frequency counter with telescopic RF pickup antenna

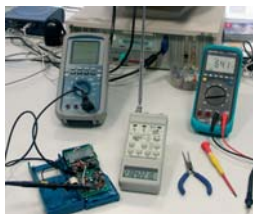
This frequency counter possesses a microprocessor for frequency, period, resolution, data hold, relative measurement and memory (maximum, minimum and average values) functions. Its low consumption and its large display allow you to work comfortably under unfavourable light conditions. The telescopic antenna, which is included in the delivery, makes it possible to measure (only frequency) without cables, a mobile or stationary transmitter.

- Telescoping RF pickup antenna with BNC connector
- Measurement range of 5 to 30 cm
- Auto shut-off
- It can be connected to a 9 V Dc adaptor
- ISO certificate (optional)



Technical specifications

| | |
|-------------------|--|
| Measurement range | 2500 MHz: 50 MHz ... 2500 MHz (max. 2600 MHz) 500 MHz: 10 MHz ... 500 MHz 10 MHz: 10 Hz ... 10 MHz |
| Sensitivity | 2500 MHz: <50 mVeff 500 MHz: <50 mVeff 10 MHz: <50 mVeff |
| Period range | 10 Hz to 10 MHz |
| Sensitivity | <50 mVeff |
| Time base | 4.194 MHz Quartz Crystal |
| Power | 4 batteries (1.5 V) |
| Dimensions | 80 x 173 x 35 mm |
| Weight | 340 g |



Contents

PCE-FC25 frequency counter, telescopic antenna, control cables, batteries and user's manual

| Model No. | Description |
|-----------|-------------------|
| PCE-FC25 | Frequency counter |

Optional accessories

| | |
|------------|-----------------|
| CAL-PCE-FC | ISO certificate |
|------------|-----------------|

PCE-FC27

10 Hz to 2.7 GHz Frequency counter with RS-232 interface

We offer you a bench type frequency counter with 8 digit display, a measurement range from 10 Hz to 2.7 GHz and a time base of 10 MHz with a quartz oscillator controlled by the temperature. Frequency counter connection guarantees great measurement results with high accuracy and high sensitivity. Its ease of use and its versatility makes it very attractive for scientific, laboratory technicians, communications technicians and engineers. All the functions are selected through the keypad.

- RS-232 serial interface (protocol included)
- Self-testing function
- Minimum, maximum and average data storage
- Input for external frequency
- 8 digit LCD
- Relative period measurements
- ISO calibration certificate (optional)



Technical specifications

| | |
|-----------------------------------|--|
| Ranges | 10 Hz to 10 MHz 10 MHz to 500 MHz 100 MHz to 2700 MHz |
| Sensitivity | 10 MHz: 30 mVeff 500 MHz: 50 mVeff 2.7 GHz: 50 mVeff |
| Period ranges | 10 Hz to 10 MHz |
| Sensitivity | 10 Hz a 9 MHz: 15 mVeff |
| Time base | 16.777216 MHz |
| Time base stability / temperature | ±1.5 PPM (+10 to +30 °C) |
| Frequency accuracy | ±(2 PPM +1 dgt); +23.5 °C |
| Input connector | 10 MHz + period: 15 Veff 500 MHz: 4 Veff 2.7 GHz: 4 Veff |
| Power | 6 AA batteries or a 9 V adaptor |
| Dimensions | 280 x 210 x 90 mm |
| Weight | 1200 g |

Contents

PCE-FC27 frequency counter, 1 test cable kit, 6 batteries and user's manual

| Model No. | Description |
|-----------|-------------------|
| PCE-FC27 | Frequency counter |

Optional accessories

| | |
|------------|---------------------------|
| SOFT-LUT | Software and RS-232 cable |
| CAL-PCE-FC | ISO certificate |

PCE-IT55

Insulation tester with three test leads

This insulation meter determines the insulation resistance up to 2000 MΩ (for 250, 500 and 1000 V auxiliary voltages). It also offers the possibility to measure continuous and alternating currents up to 750 V / 1000 V, as well as resistance up to 2 kΩ. It has a continuity check function and a beep tone for insulation measurements. Measurement values can be adjusted by pressing a key. This unit meets DIN 57 411 part 1 / VDE 0411 part 1 standards, which are measurement protection for electronic meters (IEC1010-1) and DIN VDE 0413 (insulation meters).

- Meets IEC1010-1, CAT III 1000 V
- Large dual display with backlight
- Short-term and long-term measurements with "LOCK"
- Over range and battery life indicators
- Beep tone for insulation measurements
- Auto shut-off
- ISO calibration certificate (optional)



Technical specifications

| | |
|----------------------|---|
| Ranges | insulation: 0 to 200 MΩ / 200 to 2000 MΩ ACV: 0 ... 750 V DCV: 0 ... 1000 V ohms: 0 to 200 Ω / 200 to 2000 Ω |
| Resolution | insulation: 100 kΩ to 1 MΩ ACV: 1 V DCV: 1 V ohms: 0,1 Ω / 1 Ω |
| Accuracy | insulation: ±3.5 % ±5 dgts ACV: ±1.2 % ±10 dgts DCV: ±0.8 % ±3 dgts ohms: ±1.0 % ±2 dgts |
| Test voltage | 250 V - 200 MΩ 500 V - 200 MΩ 1000 V - 2000 MΩ |
| Continuity test | beep: <40 Ω, test current 200 mA |
| Power | 6 AA batteries |
| Operating conditions | 0 to +40 °C / <80 % r.h. |
| Dimensions | 200 x 92 x 50 mm |
| Weight | 700 g |
| Approvals | IEC10101, CAT III 1000 V |

Contents

PCE-IT55 insulation tester, cables, test leads, jaw alligator clips, batteries, carrying case and user's manual

| Model No. | Description |
|-----------|-------------------|
| PCE-IT55 | Insulation tester |

Optional accessories

| | |
|----------|-----------------|
| CAL-5500 | ISO certificate |
|----------|-----------------|

Electricity Meters

PCE-IT111

Insulation meter (up to 8 GΩ) with a compact enclosure

The insulation meter detects the resistance of insulation up to a maximum of 8 GΩ (in auxiliary power of 250, 500 and 1000V). The insulation meter also measures direct current and alternative current up to a maximum of 950 VDC and 700 VAC, and resistance up to a maximum of 2 kΩ. It has a tester for energy flow with integrated acoustic signal. Readings can be retained with the touch of a button. The device meets these standards: DIN 57 411 part 1/VDE 0411 part 1, counter measures for electronic measuring instruments (IEC1010-1) and DIN VDE 0413 (insulation meters).

- 2 line and 16 digit LCD
- Automatic polarity indication, range selection and zero reset
- Acoustic signal when there is a discharge to the insulation meter
- Overcharge protection in continuity tests
- Safety function, power is maintained for only 10 seconds (can be deactivated)
- Hold function
- ISO calibration certificate (optional)



Technical specifications

| | |
|-----------------------|--|
| Measurement ranges | 2 GΩ / 250 V 4 GΩ / 500 V 8 GΩ / 1000 V DCV: 0 ... 700 V ACV: 0 ... 950 V ohms: 0,01 ... 1999 Ω |
| Resolution | insulation: 1 / 10 / 100 MΩ DCV: 1 V ACV: 1 V ohms: 0,01 / 0,1 / 1 Ω |
| Accuracy | insulation: ±3 % DC: ±1,5 % AC: ±1,5 % ohms: ±2,0 % |
| DC test voltage | 250 / 500 / 1000 V |
| Short circuit current | 4,0 mA |
| Operating conditions | 0 to +55 °C/ 5 to 95 % r.h. |
| Power | 8 x batteries 1.5 V |
| Dimensions | 175 x 85 x 75 mm |
| Weight | 655 g |
| Approvals | IEC- 1010- 1; EN 61010- 1; CAT III 700; EN 50081- 1; EN 50082- 1 |

Included in the delivery

PCE-IT111, test cables with alligator clips, shoulder strap, batteries and user's manual

| Model No. | Description |
|-----------|------------------|
| PCE-IT111 | Insulation meter |

Recommended Accessories

| | |
|---------|-----------------|
| CAL-HSI | ISO certificate |
|---------|-----------------|

PCE-DI 6300

Professional insulation tester

This PCE-DI 6300 professional insulation tester is a device with high insulation measurement performances (according to standard VDE 0413 part 1) in electrical systems, lead tubes and machines with 100, 250, 500 or 1000V AD voltages.

- Measures according to VDE 0413 part 1
- Multi ranges MΩ
- High voltage insulation measurements; 2.8 mA short circuit current
- Several voltage insulation measurements
- Insulation / continuity test currents
- Battery life and over range indicators
- Auto-zeroing and automatic discharge
- ISO calibration certificate (optional)



Technical specifications

| | |
|----------------------------|--|
| Insulation | 200 MΩ / 100 V 200 MΩ / 250 V 200 MΩ / 500 V 1000 MΩ / 1 kV |
| Accuracy insulation: | ±3 % +1 un / dgt DC: ±2 % +1 un / dgt AC: ±1 % +2 un / dgt resistance: ±4 % +1 un / dgt |
| DC insulation test voltage | 100 / 250 / 500 / 1000 V |
| Short circuit current | approx. 2.6 to 2.8 mA |
| AC Voltage | 600 V |
| Input resistance | 4.5 MΩ |
| Resistance | 200 Ω |
| Measurement interval | 0.4 s |
| Operating conditions | 0 to 50 °C/ 5 to 95 % r.h. |
| Power | 6 batteries (1.5 V) |
| Dimensions | 160 x 120 x 85 mm |
| Weight | 575 g |
| Approvals | IEC- 1010- 1; EN 61010- 1; CAT III 600; EN 50081- 1; EN 50082- 1 |

Contents

PCE-DI 6300, test leads, large jaw clips, belt, batteries and user's manual

| Model No. | Description |
|-------------|-------------------|
| PCE-DI 6300 | Insulation tester |

Optional accessories

| | |
|---------|-----------------|
| CAL-HSI | ISO certificate |
|---------|-----------------|

PCE-IT413 & PCE-IT414

High voltage insulation tester up to 10,000V

The PCE-IT413 and PCE-IT414 high voltage insulation testers belong to a series of very durable meters which are highly accurate and display 6 digits. It's ideal for technical employees indoors and outdoors. One of its advantages is the integral protection circuit which avoids measurement errors due to current leaks. It has an audible and visual alarm.

- Measures according to VDE 0413 part 1
- Insulation test voltage up to 5,000V (model PCE-IT413) and up to 10,000V (model PCE-IT414)
- High quality and great price
- ISO calibration certificate (optional)



Technical specifications

| Models | PCE-IT413 | PCE-IT414 |
|---|--|--|
| DC insulation test voltage | 500 / 1,000 / 2,500 / 5,000 V | 1,000 / 2,500 / 5,000 / 10,000 V |
| Insulation ranges | 30 GΩ / 500 V 60 GΩ / 1,000 V 150 GΩ / 2,500 V 300 GΩ / 5,000 V | 60 GΩ / 1,000 V 150 GΩ / 2,500 V 300 GΩ / 5,000 V 600 GΩ / 10,000 V |
| Accuracy | ±3 % | |
| Voltage output | 1 W max. | |
| Insulation resistance between circuit and housing | 2000 MΩ / 2000 V | |
| Static voltage between circuit and enclosure | 7,000 V AC for max. 1 min | |
| AC circuit warning | voltages > 450 V AC | |
| Power | 8 batteries (1.5 V) | |
| Dimensions | 250 x 110 x 190 mm | |
| Weight | 1.5 kg | |
| Approvals | IEC-1010-1; CAT III ; IEC- 1010-1; EN61010-1; EN50081-1; EN50082-1 | |

Contents

PCE-IT413 or PCE-IT414, silicone control cable, high voltage probe with integrity protection and coaxial relay, batteries and user's manual

| Model No. | Description |
|-----------|---|
| PCE-IT413 | High voltage insulation tester (5,000 V) |
| PCE-IT414 | High voltage insulation tester (10,000 V) |

Optional accessories

| | |
|---------|-----------------|
| CAL-HSI | ISO certificate |
|---------|-----------------|

PCE-ET 3000

Earth resistance voltage tester for building checks and controls

Earth resistance voltage tester measures the lightning rods or lightning rod earth resistance in buildings. It possesses a hermetically sealed enclosure and meets security standard VDE 0413, which is necessary for technicians who work outdoors. It is ideal for measuring ground and lightning rod electrodes, as well as small ground systems, resistance voltage and continuity leads measurements. The most modern computation systems reduces to a minimum voltage and ground electrodes influences.

- Frequency test of 820 Hz
- Battery life indicator
- Overload protection
- Data Hold
- Security: IEC-1010-1 and CAT III 300 V
- 3½ digit LCD (max. 2000)
- 15 m red wire with red plug, 10 m yellow wire, 5 m green wire; auxiliary earth spikes, batteries and user's manual
- ISO calibration certificate (optional)



Technical specifications

| | Range | Resolution | Accuracy |
|-----------------------|--|-------------------|----------------|
| Earth resistance | 20 / 200 / 2000 Ω | 10 / 100 mΩ / 1 Ω | ±2% / +2 pos. |
| AC voltage | 0 to 200 V AC 50/60 Hz | - | ±3% / + 2 pos. |
| Minimum voltage | | 0.01 Ω | |
| Current | | 2 mA / rms | |
| Resistance indication | indicates if electrode resistance is into the range parameters | | |
| Operating conditions | 0 to 50°C/ 5 to 95% r.h. | | |
| Power | 8 batteries (1.5V) | | |
| Dimensions | 250 x 190 x 120 mm | | |
| Weight | 1.5 kg | | |
| Approvals | IEC-1010-1; CAT III 300 V | | |

Contents

PCE-ET 3000, 15 m red control wire, 10 m yellow control wire, 5 m green control wire, earth spikes and user's manual

| Model No. | Description |
|-------------|---------------------------------|
| PCE-ET 3000 | Earth resistance voltage tester |

Optional accessories

| | |
|---------|-----------------|
| CAL-ERD | ISO certificate |
|---------|-----------------|

PCE-MO 2001

Waterproof miliohms tester

This miliohms tester has ingress protection against water jets and can measure resistance from 100 μΩ to 2000 Ω. Measurement values are displayed on the 3½ digit LCD. To obtain the measurement value you must place the tester on the object you wish to measure a continuous current and the miliohms tester measures the voltage load.

- Engine coils, generators, transformers, e.g. in parallel, contiguous or compact computation circuits, switching equipments and relay measurements
- Chemical binding energy in mines, on planes, tracks, boats, as well as home and industrial systems
- Cyclic system (Ringbus) pitch controls in home and industrial environments
- Overhead line checks, maintenance or testing of switchboards, etc.
- ISO calibration certificate (optional)



Technical specifications

| | |
|--------------------|---|
| Measurement ranges | 0 to 200 mΩ in steps of 100 μΩ / 0 to 2000 mΩ: 1 mΩ / 0 to 20 Ω: 10 mΩ / 0 to 200 Ω: 100 mΩ / 0 to 2000 Ω: 1 Ω |
| Accuracy | ±0.75% of reading ±2 pos. full range temperature range of -15 to 55°C (for measure with control cable included in the delivery) |
| Control current | 1 mA (range: 2000 Ω) 10 mA (ranges: 200 / 20 Ω) |
| Accuracy | ±0.1% |
| Power | 230 V AC, 50 / 60 Hz |
| Dimensions | 250 x 180 x 200 mm |
| Weight | 1.35 kg |
| Approvals | IEC-1010-1; CAT IV 20 V |

Contents

PCE-MO 2001, test and power leads and user's manual (For U.K. customers: incl. U.K. AC Mains Power Adaptor)

| Model No. | Description |
|-------------|-----------------|
| PCE-MO 2001 | miliohms tester |

Optional accessories

| | |
|----------|-----------------|
| CAL-2001 | ISO certificate |
|----------|-----------------|

PCE-MO 2002

Highly accurate, battery powered miliohm tester in a water resistant enclosure

This battery powered milli-ohm tester in a water resistant enclosure (sealed by a O-ring joint) allows measurement of resistance from 100 μΩ to 2000 Ω. It's ideal for on-site technicians thanks to it being battery powered. To detect the measurement value, a constant current is put through the object being measured and the fall in power of the object is then determined by the device.

- Measurement system of 4 conductors
- 5 measurement ranges
- 3 test currents with fuse
- Overload protection
- Large display
- Information about the resistance of the line being tested
- Auto-Hold and Auto shut-off functions
- LED to indicate permitted overload limits for Rp, Rc and temperature
- ISO calibration certificate (optional)



Technical Data

| | |
|--------------------|--|
| Measurement ranges | 0 ... 200 mΩ in steps of 100 μΩ / 0 ... 2000 mΩ: 1 mΩ / 0 ... 20 Ω: 10 mΩ / 0 ... 200 Ω: 100 mΩ / 0 ... 2000 Ω: 1 Ω |
| Accuracy | ±0.5 % of reading ±2 pos. full range temperature range of -15 ... +55 °C (for measure with control cable included in the delivery) |
| Control current | 1 mA (range: 2000 Ω) 10 mA (ranges: 200 / 20 Ω) 100 mA (ranges: 2000 mΩ / 200 mΩ) |
| Accuracy | ±0.1 % |
| Power supply | 8 batteries of 1,5 V |
| Dimensions | 250 x 190 x 110 mm |
| Weight | 1.5 kg |
| Approvals | IEC-1010-1; CAT IV 20 V |

Contents

PCE-MO 2001, test leads, 8 batteries and user's manual

| Model No. | Description |
|-------------|-----------------|
| PCE-MO 2002 | miliohms tester |

Optional accessories

| | |
|----------|-----------------|
| CAL-2002 | ISO certificate |
|----------|-----------------|

Electricity Meters

TM-10

TV and satellite signal level meter

This TV and satellite signal level meter measures the quality of TV VHF / UHF signals from an antenna to the customer's IRD. It is compact, portable and very easy to use, making it the ideal test instrument for satellite installers. It is very useful for optimising the placement or orientation of installations. Its large LCD with bar graph shows the reading of several values, such as frequency, field value, operative option and the unit of measurement. The metal enclosure provides good protection of internal systems or outdoor applications.

- TV and satellite signal level measurements
- PLL tuning control for frequency selection
- Audio level measurement of 4.5 / 5.5 / 6 and 6.5 MHz
- Line voltage measurement (70 V)
- Rechargeable battery / Auto shut-off
- 99 favourite channel memory
- Peak holder function for detecting maximum input level
- Buzzer for acoustic signal strength monitoring
- Automatically records selected adjustment



Technical specifications

| | |
|-----------------------|---|
| Frequency range | 5 to 862 MHz; 250 kHz |
| Tuning control | PLL control |
| for frequency | (tuning control of frequency) |
| Input level range | 30 to 120 dB μ V; ± 3 dB (0 to +40 °C) -0.1 dB |
| HF input | F connector |
| Audio | A: +4.5 MHz / B: +5.5 MHz C: +6 MHz / D: +6.5 MHz |
| Frequency range | frequency |
| resolution | (5 to 862 MHz in steps of 250 kHz) |
| Memory | video, audio, peak value |
| Units | dB, μ V, DCV, ACV |
| Power | 12 V / 1200 mA rechargeable batteries |
| Battery life | 3 hours |
| External power supply | 12 V DC, 500 mA |
| Indicators | frequency, channel, level, dB, μ V, ACV, DCV function, battery level, audio level (bandwidth) and bar graph |
| Dimensions | 180 x 75 x 150 mm |
| Weight | 1500 g |



Contents

TM-10 TV and satellite signal level meter, carrying case, battery charger, internal batteries and user's manual (For U.K. customers: incl. U.K. AC Mains Power Adaptor)

| Model No. | Description |
|-----------|-------------------------------------|
| TM-10 | TV and satellite signal level meter |

PCE-123

Multifunction calibrator for thermocouple and frequency inputs

This precision multifunction calibrator is a device that doesn't need mains connection and it has a frequency source of 1 Hz to 62.5 kHz in over 700 steps. You will be able to simulate phase regulation signals and individual signals in your technical checks and adjustments (MSR). You will be able to check and calibrate all the measurement parameters. The nominal value indicator allows you to prepare an electrical output signal. This calibrator also possesses an automatic graduation, set output percentage steps (0 to 100%) and a direct indication of the output value.

- 4 to 20 mA (1 k Ω , 24 V power supply)
- 0 to 100 mV / 0 to 1 V / 0 to 12 V
- K, J, E, T thermocouples (°C and °F)
- Frequency range: 1 to 62500 Hz
- Basic accuracy: 0.025 %
- Easy to use
- Step and auto-ramp features
- Output 0 to 100 %
(mA, mV, V)
- ISO calibration certificate (optional)



Technical specifications

| mA DC Current (1 k Ω max. load , 24 V power supply) | |
|--|--|
| Range | 4 to 20 mA / 0 to 20 mA / 0 to 24 mA |
| Resolution | 1 μ A |
| Accuracy | ± 0.025 % ± 3 μ A |
| mV, V DC Voltage (1 mA power supply) | |
| Ranges / Resolution | 0 to 100.00 mV / 10 μ V 0 to 10.000 V / 1 mV 0 to 1.0000 V / 100 μ V |
| Accuracy | ± 0.05 % ± 30 μ V ± 0.05 % ± 3 mV ± 0.05 % ± 300 μ V |
| K, J, E, T Thermocouples | |
| Ranges | -200 to 0 °C and 0 to +1370 °C |
| Resolution | 1 °C |
| Accuracy | ± 1.1 °C and ± 0.8 °C |
| Frequency | |
| Ranges | 1 to 125 Hz and 126 to 62.5 kHz |
| Resolution | 1 to 125 Hz / 1 Hz 126 to 62.5 kHz in 604 steps |
| Accuracy | ± 0.04 Hz |
| Power | 9 V battery or 6 batteries (1.5 V) |
| Dimensions | 88 x 168 x 26 mm |
| Weight | 330 g |

Contents

PCE-123 precision multifunction calibrator, carrying case, type-K adaptor, batteries, test cables with alligator clips and user's manual

| Model No. | Description |
|-----------|--------------------------|
| PCE-123 | Multifunction calibrator |

Optional accessories

| | |
|---------|-----------------|
| CAL-123 | ISO certificate |
|---------|-----------------|

PCE-OC 1

Handheld Digital Storage Scope Meter / Oscilloscope with USB-Interface

This programmable universal oscilloscope offers enhanced features that similar types test instruments on the market today don't have. The most frequent use of the oscilloscope is troubleshooting malfunctioning electronic equipment. One of the advantages is that the oscilloscope can be used in a frequency range of 5 MHz in real 2-channel-use and shows the signals graphically: where a single voltmeter may show a totally unexpected voltage, the scope may reveal that the circuit is oscillating.

- Dual channel and auto calibration
- DC to 5 MHz, 1 MHz oscilloscope band width
- Built-in auto ranging true RMS multimeter
- PC interface for transferring measurement data and waveform
- Backlight display, 132 x 128 pixels
- Data hold and run mode
- Low battery indicator
- ISO calibration certificate (optional)



Technical specifications

| Oscilloscope | |
|------------------------|--|
| Input channels | 2 |
| Band width frequency | 5 MHz DC |
| Sampling rate | 25 MS/s (dual) / 50 MS/s (single) |
| Input | AC, DC |
| Input impedance | 1 M Ω |
| Accuracy | ± 3.0 % vertical / ± 0.01 % horizontal |
| Waveform memory | 16 curves |
| Multimeter | |
| Ranging | auto, manual |
| Voltage DC | 1000 V DC / ± 0.3 % +3 dgt. |
| Voltage AC | 750 V AC (TRUE RMS) / ± 0.75 % +5 dgt. (50 to 450 Hz) |
| Resistance | 5 / 50 / 500 k Ω / 5 M Ω / ± 0.5 % +5 dgt. |
| Continuity buzzer | 1.7 V test voltage |
| Frequency | 100 Hz / 1 / 10 / 100 kHz / 1 / 10 MHz ± 0.05 % +5 dgt. |
| Revolutions | 240 to 60,000 r.p.m. |
| General specifications | |
| Display | 132 x 128 pixels |
| Power | 3.7 V Li-Ion battery or mains power adaptor |
| Interface | USB |
| Dimensions / Weight | 90 x 195 x 40 mm / 460 g |
| Approvals | DIN 57 411 / VDE 0411; IEC 1010; EN 61010; CAT III / 600 V |

Contents

PCE-OC 1 oscilloscope, software, USB cable, test leads, case, holster, batterie charger, Li-Ion battery and user's manual

| Model No. | Description |
|-----------|--------------|
| PCE-OC 1 | Oscilloscope |

Optional accessories

| | |
|--------------|-----------------------------|
| CAL-PCE-OC 1 | ISO certificate |
| PCE-CA 502 | Amp clamp adaptor to 1000 A |

Serie PCE-UT

Digital storage 2 channel oscilloscopes

High performance, 2 channel oscilloscopes with colour display (PCE-UT2025B monochrom display) that are an ideal replacement for analogue scopes in service, quality testing, repair and education environments. The Serie are 2-channel oscilloscopes with 25 MHz up to 250 MHz bandwidth, 250 MS/s up to 500 MS/s sampling rate. With the software you can carry out communication between a computer and an oscilloscope through serial or USB, and in turn perform remote control. This software also provides testing, waveform and sampling data reading functions to facilitate further signal testing and analysis.

- Up to 500 MS/s real time or 25 GS/s ET sampling rate (depending on model)
- PC interface for transferring measurement data, waveform and sampling data reading
- 5,7 " colour display, 320 x 240 pixels (PCE-UT 2025B monochrom display)
- FFT, ADD, SUB, MULT, DIV and REV maths functions
- Extensive cursor measurements
- USB and RS-232 interface
- Comes with 2 x probes, software and user manual
- ISO calibration certificate (optional)



Technical specifications

| Model | PCE-UT 2025B | PCE-UT 2042C | PCE-UT 2082C | PCE-UT 2152C | PCE-UT 2202C |
|---------------------------------|---|---|---|---|---|
| Band width frequency | 25 MHz | 40 MHz | 80 MHz | 150 MHz | 200 MHz |
| Rise Time | <14 ns | <8.7 ns | <4.5 ns | <2.3 ns | <2.3 ns |
| Sample rate | 250 MS/s | 500 MS/s to 1 GS/s | 500 MS/s to 1 GS/s | 500 MS/s to 1 GS/s | 500 MS/s to 1 GS/s |
| Vertical sensitivity | 2 mV to 5 V/div | 2 mV to 5 V/div | 2 mV to 5 V/div | 2 mV to 5 V/div | 2 mV to 5 V/div |
| Record length (max) | 1 M | 1 M | 1 M | 1 M | 1 M |
| Sample rate | real time 500 MS/s to 1 GS/s, equivalent: 25 GS/s | real time 500 MS/s to 1 GS/s, equivalent: 25 GS/s | real time 500 MS/s to 1 GS/s, equivalent: 25 GS/s | real time 500 MS/s to 1 GS/s, equivalent: 25 GS/s | real time 500 MS/s to 1 GS/s, equivalent: 25 GS/s |
| Scan time base | 20 ns to 50 s/div | 10 ns to 50 s/div | 5 ns to 50 s/div | 2 ns to 50 s/div | 2 ns to 50 s/div |
| Trigger type | Edge, Pulse, Video and Alternate | Edge, Pulse, Video and Alternate | Edge, Pulse, Video and Alternate | Edge, Pulse, Video and Alternate | Edge, Pulse, Video and Alternate |
| Automatic waveform measurements | 28 | 28 | 28 | 28 | 28 |
| Ports | RS-232 | USB Device, USB Host, RS-232 | USB Device, USB Host, RS-232 | USB Device, USB Host, RS-232 | USB Device, USB Host, RS-232 |
| Mathematics | Add, Subtract, Divide, Reverse and FFT | Add, Subtract, Divide, Reverse and FFT | Add, Subtract, Divide, Reverse and FFT | Add, Subtract, Divide, Reverse and FFT | Add, Subtract, Divide, Reverse and FFT |
| Memory | 1Mb (2x 512k) and 10 settings | 1Mb (2x 512k) and 10 settings | 1Mb (2x 512k) and 10 settings | 1Mb (2x 512k) and 10 settings | 1Mb (2x 512k) and 10 settings |
| Display | Monochrome LCD, 320 x 240, diagonal 145 mm | 64 k, full colour LCD, 320 x 240, diagonal 145 mm | 64 k, full colour LCD, 320 x 240, diagonal 145 mm | 64 k, full colour LCD, 320 x 240, diagonal 145 mm | 64 k, full colour LCD, 320 x 240, diagonal 145 mm |
| Power | 100 to 240 V, 45 Hz to 440 Hz | 100 to 240 V, 45 Hz to 440 Hz | 100 to 240 V, 45 Hz to 440 Hz | 100 to 240 V, 45 Hz to 440 Hz | 100 to 240 V, 45 Hz to 440 Hz |
| Dimensions | 320 x 150 x 130 mm | 320 x 150 x 130 mm | 320 x 150 x 130 mm | 320 x 150 x 130 mm | 320 x 150 x 130 mm |
| Weight | 4.1 kg | 4.1 kg | 4.1 kg | 4.1 kg | 4.1 kg |
| Approvals | CAT II | CAT II | CAT II | CAT II | CAT II |

Contents

PCE-UT oscilloscope (one of these models), probe x 2 (1x, 10x switchable), software, power cord and english user's manual

Model No.

Description

| | |
|--------------|--|
| PCE-UT 2025B | 25 MHz Oscilloscope, monochrom Display |
| PCE-UT 2042C | 40 MHz Oscilloscope, colour Display |
| PCE-UT 2082C | 80 MHz Oscilloscope, colour Display |
| PCE-UT 2152C | 150 MHz Oscilloscope, colour Display |
| PCE-UT 2202C | 200 MHz Oscilloscope, colour Display |

Optional accessories

| | |
|-------------|-----------------|
| CAL-PCE-UTO | ISO certificate |
|-------------|-----------------|



Electricity Meters

PCE-PA6000

Power meter with RS-232 interface

PCE-PA6000 power meter is designed for bench use and measures power, power factor, current, alternating voltage and current, current and continuous voltage, resistance and frequency. This device has an RS-232 interface, and with software you will be able to transfer data to a PC to check and manipulate readings more comfortably.

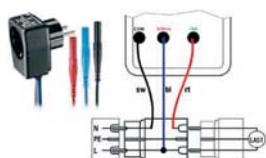
- Auto-ranging
- Direct power measurement through a probe or power clamp
- Data Hold / High / Low alarm functions
- Powered by adaptor or batteries
- RS-232 interface
- ISO calibration certificate (optional)



Technical specifications

| | |
|--|---|
| Volts measurement (AC) | 1 W to 6 kW; |
| True power value | 1 W; |
| Direct measurement | ±1.5 % + 1 dgt. |
| Volts measurement (AC) with external clamp adapter | 1 W to 999.9 kW; 1 W; |
| VA measurement | ±1.5 % + 1 dgt. |
| | 0.01 VA to 9.999 kVA; 0.01 VA; |
| | ±1.5 % + 1 dgt. |
| Power factor (cos φ) | 0.00 to 1.00; 0.01; ±1.5 % + 2 dgt. |
| KWh counter | 0.001 Wh to 9999 kWh; 0.001 Wh; |
| | ±1 % + 1 dgt. |
| ACV / DCV | 0.1 V to 600 V; 0.1 / 1V; ±1 % + 1 dgt. |
| ACAeff/rms | direct max 10 A; 10 mA, probe |
| DCAeff/rms | max. 1000 A; 1 A |
| | ±1 % + 1 dgt. |
| ACA with clamp | up to 2000 A (depending on clamp) |
| Frequency | 10.0 ... 999 Hz; 0.1 Hz; 1 % + 1 dgt. |
| Ohm | 1 Ω ... 19.99 kΩ; 1 / 10 Ω; ±1 % + 1 dgt. |
| Power | 6 AA batteries (1.5 V) or adaptor |
| Dimensions | 280 x 210 x 90 mm |
| Weight | 1100 g |

PCE-PA-ADP power adaptor (optional)



Contents

PCE-PA6000 power meter, control cable, software, RS-232 interface and user's manual

| Model No. | Description |
|------------|-------------|
| PCE-PA6000 | Power meter |

Optional accessories

| | |
|------------|-----------------------|
| PCE-PA-ADP | Power adaptor |
| NET-300 | Adaptor |
| RS232-USB | RS-232 to USB adaptor |
| CAL-2535 | ISO certificate |

PCE-360

3-Phase power analyser (in real time) with data logger, PC interface and software

The PCE-360 power analyser is ideal for measuring power in one or three phases. Its large display shows up to 10 values. You can attach, at the same time, up to 4 current sensing clamps. The manual option allows you to store 99 readings directly. In data storage mode you can record up to 20,000 values, making the 3-phase power analyser ideal for long-term analysis. You can transfer the measurements to a PC for later analysis (includes software and USB cable).

- Real time control, record and assess one or three systems
- Current and power measurements
- Power factor and phase angle
- Active, apparent and reactive power
- Harmonics measurements
- Connectors for 4 current sensing clamps
- 512K Data logger (20,000 readings)
- Memory to record up to 99 measurements
- RS-232 interface, cable for PC and software included
- LCD can display 10 readings
- ISO certificate (optional)



Technical specifications

| | | |
|---|----------------|--|
| Power measurement | Range: | 0 to 999.9 Veff / TRUE RMS three inputs with the same "N" reference point |
| | Resolution: | 0.1 V |
| | Accuracy: | ±0.3 % of reading + 10 D for >80V powers |
| | Frequency: | 50 Hz (not for FU use) |
| Current measurement | Range: | phase 1 – 3 (0 to 1000 A) / TRUE RMS range "N" (0 to 250 A) / TRUE RMS |
| | Resolution: | 0.1 A |
| | Accuracy: | ±0.5 % of reading + 15 D ±1 % |
| Active power (P) | Range: | 0 to 999.9 KW |
| | Accuracy: | ±1 % of reading + 20 D |
| Apparent power (S) | Range: | 0 to 999.9 KVA |
| | Accuracy: | ±1 % of reading + 10 D |
| Reactive power (Q) | Range: | 0 to 999.9 KVAR |
| | Accuracy: | ±1 % of reading + 20 D |
| Energy (true, apparent and reactive work) | Ranges: | 0.0 to 9999 MWh / 0.0 to 9999 Mvarh / 0.0 to 9999 MVAh |
| | Resolution: | 0.1 KWh / 0.1 Kvarh / 0.1 KVAh |
| | Accuracy: | ±1 % of reading + 20 D |
| Power factor (PF) | Range: | 0.000 to 1.000 |
| | Accuracy: | ±1 dgt |
| Phase angle | | -0 to 90 ° |
| Frequency measurement | Range: | 40 to 100 Hz / U1 power |
| | Accuracy: | ±1 % of reading + 2 D |
| Memory | data logger: | max. 20,000 readings (512 k), in and out time adjustable |
| | manual memory: | 99 readings |
| Measurement interval | | 5 s, 30 s, 1 min, 2 min (adjustable) |
| Data transfer / Interface | | RS-232 interface with optic insulator |
| Software / USB cable | | in English, included |
| Display | | multi-function display |
| Frequency range | | 42 to 63 Hz |
| Power | | 8 batteries (1.5 V) or 12 V / 300 mA adapter |
| Enclosure | | ABS plastic |
| Dimensions | | 235 x 116 x 54 mm |
| Weight | | 730 g |
| Approvals | | CAT III/600 V; DIN VDE 0411/ EN 61010 / IEC 61010; class II; IP 30; degree 2 |

Contents

PCE-360 3-phase power analyser, 4 test leads with alligator clips, 4 current clamp transducers, 4 safe measurement cables, 8 batteries, adaptor, carrying case, RS-232 cable for PC, software and user's manual (For U.K. customers: incl. U.K. AC Mains Power Adaptor)

| Model No. | Description |
|-----------|-------------------------|
| PCE-360 | 3-Phases power analyser |

Optional accessories

| | |
|-------------|-----------------------|
| RS232-USB | RS-232 to USB adaptor |
| CAL-PCE-360 | ISO certificate |

PCE-830

Power and harmonics analyser with 3 phases as well as an energy meter (real time) and harmonics analyser with memory, PC port and software

The PCE-830 energy and harmonics analyser is used to measure one of three phases of electrical magnitudes for alternative current. Also, to detect the magnitudes of "normal" measurements like voltage, current, frequency, power, energy and also indicates, according to standard EN50160, harmonic, inter-harmonic and asymmetrical values. Interference in power such as interruptions, shortages, temporary surges (from 16 μ s) are detected with their corresponding values. The LCD, that has good contrast, a points matrix and backlight, shows up to 35 simultaneous parameters. It can incorporate up to 3 current clamps at the same time. In data registration mode, it can save up to 17,470 readings (3 phases / 4 conductors), or more simple, up to 52,400 readings (1 phase / 2 conductors), divided between 85 inspections. All of this makes the PCE-830 energy and harmonics analyser ideal for measurements over extended periods of time. The readings obtained can be transferred to a computer and be analysed with the corresponding software. Included with the analyzer are all the things required to measure and analyse the readings, including the software and data cable. Although the analyzer comes calibrated at the factory, and optional laboratory calibration certificate which meets ISO standards, can be ordered (with the first order for annual recalibrations).

- Analysis of power networks of 3 phases/4 conductors, 3 phases/3 conductors, 1 phase/2 conductors or 1 phase/3 conductors
- Measurement of active energy (W, KW, MW, GW)
- Potency factor (PF), phase angle (Φ)
- Measurement of current of 0.1 mA to 3000 A, permitting, for example, an analysis of the needs of reserve energy in a factory
- The conditions CT (1 to 600) and PT (1 to 3000) programmable
- Average power (AD en W, KW, MW)
- Indication of wave forms, performance parameters and harmonic distortion
- Maximum potency (MD en W, KW, MW) with programmable time periods
- Indication on the display up to a 50 form of harmonic wave
- Analysis of absolute distortion (%THD-F)
- Detects up to 28 transistors (time and cycles) with a programmable threshold (%)
- Factor of 3 phases of energy or asymmetrical current (d0%, d2%)
- Programmable time intervals and integrated calendar to record data
- Measurement of Real Effective Value (V 123 and I 123)
- Measurement of apparent and reactive energy (KVA, KVAR)
- Measurement of energy and work (Wh, KWh, KVARh, PFh)
- Large LCD that shows up to 35 parameters simultaneously (3P4W [=3 phases/4 conductors])
- Indication of superimposed current wave forms and voltage
- 512 KB of memory with programmable intervals for readings (measurement intervals of 2 to 3000 seconds, 17,470 readings using a system of 3 phases / 4 conductors)
- Analysis of harmonic distortion up to 99 types of waves lengths
- Indication of the wave form with maximum value (1024 readings/period)
- Diagram of grafic equilibrium with parameters of a 3 phase system
- Relation of 3 phases of energy or asymmetrical current (VUR)
- USB port, optically insulated
- ISO calibration certificate (optional)



Set 1:
Range: up to 100 A
Dia. electrical conductor: max. 30 mm



Set 2:
Range: up to 1000 A
Dia. electrical conductor: max. 55 mm



Set 3:
Range: up to 3000 A
Dia. electrical conductor: max. 170 mm

| Technical specifications | | Set 1 (incl. PCE-6801) | Set 2 (incl. PCE-6802) | Set 3 (incl. PCE-3007) |
|---|--|--|---|--|
| Watts AC (50 or 60 Hz, PF 0,5 up to 1,0) | Range / accuracy | 5,0 to 999,9 W / ± 1 % 1,000 to 9,999 kW / ± 1 % 10,00 to 99,99 kW / ± 1 % 100,0 to 999.9 kW / ± 1 % 1000 to 9999 kW / ± 1 % | 5,0 to 999,9 W / ± 1 % 1,000 to 9,999 kW / ± 1 % 10,00 to 99,99 kW / ± 1 % 100,0 to 999.9 kW / ± 1 % 1000 to 9999 kW / ± 1 % 0,000 to 9,999 MW / ± 1 % | 5,0 to 999,9 W / ± 1 % 1,000 to 9,999 kW / ± 1 % 10,00 to 99,99 kW / ± 1 % 100,0 to 999.9 kW / ± 1 % 1000 to 9999 kW / ± 1 % |
| Current AC | Range / accuracy | 0,040 to 1,000 A / $\pm 0,5$ % 0,40 to 10,00 A / $\pm 0,5$ % 4,0 to 100,0 A / $\pm 0,5$ % | 0,400 to 10,000 A / $\pm 0,5$ % 4,00 to 100,00 A / $\pm 0,5$ % 40,0 to 1000,0 A / $\pm 0,5$ % | 0,0 to 300,0 A / ± 1 % 300,0 to 999,9 A / ± 1 % 1000 to 3000 A / ± 1 % |
| Voltage AC | Range / accuracy (measurement between phase and neutral) (measurement between two phases) | 20,0 to 500,0 V / $\pm 0,5$ % 20,0 to 600,0 V / $\pm 0,5$ % | 20,0 to 500,0 V / $\pm 0,5$ % 20,0 to 600,0 V / $\pm 0,5$ % | 20,0 to 500,0 V / $\pm 0,5$ % 20,0 to 600,0 V / $\pm 0,5$ % |
| Power factor | | 0,00 to 1,00 / $\pm 0,04$ | 0,00 to 1,00 / $\pm 0,04$ | 0,000 to 1,000 / $\pm 0,04$ |
| Gap angle | | -180,0° to +180,0° / ± 1 ° | -180,0° to +180,0° / ± 1 ° | 0 to 180,0° / ± 1 ° |
| General specifications | | | | |
| Maximum measurement of AC current and voltage | | | 50 + 60 Hz / ± 5 % | |
| Measurement of peak value of AC current and voltage | | | 1,00 to 99,99 / ± 5 % | |
| Frequency range | | | 45 to 65 Hz / $\pm 0,1$ Hz | |
| Memory | | 512 kB (memory is not volatile) up to 52,420 readings carrying out a 1 phase/2 conductor measurement | | |
| Interface | | USB (optically isolated) | | |
| Display | | grafic LCD with backlight | | |
| Power | | 8 AA batteries 1.5 V | | |
| Dimensions / Weight | | 257 x 155 x 57 mm / 1160 g | | |
| Operating conditions | | -10 to +50 °C / max. 85 % r.h. | | |
| Approvals | | IEC 61010, 600 V / CAT III | | |

Contents

PCE-830 energy and harmonics analyser, 3 amp clamps (according to the model ordered), 4 insulated terminals, 4 safe test lines, 8 batteries, mains adaptor, case, USB cable, software and user's manual (For U.K. customers: incl. U.K. AC Mains Power Adaptor)

| Model No. | Description | Optional accessories |
|-----------|--|---|
| PCE-830-1 | Energy analyser Set 1 (incl. PCE-6801) | PCE-6801 Set of clamps 1 (for replacement or extension) |
| PCE-830-2 | Energy analyser Set 2 (incl. PCE-6802) | PCE-6802 Set of clamps 2 (for replacement or extension) |
| PCE-830-3 | Energy analyser Set 3 (incl. PCE-3007) | PCE-3007 Set of clamps 3 (for replacement or extension) |
| | | CAL-PCE-830 ISO certificate |