Electricity Meters

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 Vdc 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

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 /.	±1.5 PPM (+10 to +30 °C)	
temperature		
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 $2000~M\Omega$ (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 $2~K\Omega$. 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 aremeasurement 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 M Ω / 200 to 2000 M Ω
	ACV: 0 750 V
	DCV: 0 1000 V
	ohms: 0 to 200 Ω / 200 to 2000 Ω
Resolution	insulation: 100 k Ω to 1 M Ω
	ACV: 1 V
	DCV: 1 V
	ohms: $0,1~\Omega/1~\Omega$
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

ontents

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 acces	ssories
CAL-5500	ISO certificate

Electricity Meters

PCE-IT111

Insolation meter (up to 8 G Ω) with a compact enclosure

The insulation meter detects the resistance of insulation up to a maximum of 8 $\mbox{G}\Omega$ (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 k Ω . 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 measing 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
- Overcharge protection in continuity tests
- Safety function, power is maintained for only 10 seconds (can be deactivated)
- Hold function
- . ISO calibration certificate (optional)



Technical specification	ns
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
11000144011	DCV: 1 V
	ACV: 1 V
	ohms: 0,01 / 0,1 / 1 Ω
Accuracy	insulation · +3 %
Accuracy	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) 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 insul 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 specification	IS
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 voltag	e 100 / 250 / 500 / 1000 V
Short circuit current	approx. 2.6 to 2.8 mA
AC Voltage	600 V
Input resistance	4.5 ΜΩ
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;
CA	T III 600; EN 50081 - 1; EN 50082 - 1

Contents

PCE-DI 6300, test leads, large jaw clips, belt, batteries and

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)



Models	PCE-IT413	PCE-IT414
DC insulation test vo	Itage 500 / 1,000 /	1,000 / 2,500 /
	2,500 / 5,000 V	5,000 / 10,000 V
Insulation ranges	$30~G\Omega$ / $500~V$	60 GΩ / 1,000 V
	60 GΩ / 1,000 V	150 GΩ / 2,500 V
	150 GΩ / 2,500 V	300 GΩ / 5,000 V
	$300~\text{G}\Omega$ / $5,000~\text{V}$	600 GΩ / 10,000 V
Accuracy	±3	3 %
Voltage output	1 W	max.
Insulation resistance circuit and housing	between 2000 MC	2 / 2000 V
Static voltage between	on 7 000 V AC f	or max. 1 min
circuit and enclosure		UI IIIAX. I IIIIII
AC circuit warning	voltages >	> 450 V AC
Power	8 batteri	es (1.5 V)
Dimensions	250 x 110	x 190 mm
Weight		5 kg
Approvals	IEC-1010-1; CAT	III ; IEC- 1010-1;
	EN61010-1; EN50	081-1; EN50082-1

Contents

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

Model No. PCE-IT413 PCE-IT414	Description High voltage insulation tester (5,000 V) High voltage insulation tester (10,000 V)
Optional acc	essories
CAL-HSI	ISO certificate