



User Manual

Gauss Meter PCE-SFS 10



User manuals in various languages (français, italiano, español, português, nederlands, türk, polski, русский, 中文) can be found by using our product search on: www.pce-instruments.com

Last change: 29 December 2021
v1.0



Contents

1	Safety notes	1
2	Specifications	2
3	Delivery scope	2
4	Device description	3
4.1	Display description	6
5	Battery information	6
6	Switching on and off	7
7	Backlight	7
8	Making a measurement	7
9	Zeroing	7
10	Warranty	8
11	Disposal	8

1 Safety notes

Please read this manual carefully and completely before you use the device for the first time. The device may only be used by qualified personnel and repaired by PCE Instruments personnel. Damage or injuries caused by non-observance of the manual are excluded from our liability and not covered by our warranty.

- The device must only be used as described in this instruction manual. If used otherwise, this can cause dangerous situations for the user and damage to the meter.
- The instrument may only be used if the environmental conditions (temperature, relative humidity, ...) are within the ranges stated in the technical specifications. Do not expose the device to extreme temperatures, direct sunlight, extreme humidity or moisture.
- Do not expose the device to shocks or strong vibrations.
- The case should only be opened by qualified PCE Instruments personnel.
- Never use the instrument when your hands are wet.
- You must not make any technical changes to the device.
- The appliance should only be cleaned with a damp cloth. Use only pH-neutral cleaner, no abrasives or solvents.
- The device must only be used with accessories from PCE Instruments or equivalent.
- Before each use, inspect the case for visible damage. If any damage is visible, do not use the device.
- Do not use the instrument in explosive atmospheres.
- The measurement range as stated in the specifications must not be exceeded under any circumstances.
- Non-observance of the safety notes can cause damage to the device and injuries to the user.

We do not assume liability for printing errors or any other mistakes in this manual.

We expressly point to our general guarantee terms which can be found in our general terms of business.

If you have any questions please contact PCE Instruments. The contact details can be found at the end of this manual.



2 Specifications

Electromagnetic field	
Measurement range	±60 kV DC
Resolution	±20 kV DC: 0.01 kV DC -60 ... -20 kV DC / +20 ... +60 kV DC: 0.1 kV DC
Accuracy	±5 % of reading
Temperature	
Measurement range	-40 ... 123.8 °C
Resolution	0.1 °C
Accuracy	±1.5 °C
Humidity	
Measurement range	0 ... 100 % RH
Resolution	0.1 % RH
Accuracy	±4.5 % RH
Further specifications	
Response time	<100 ms
Audible alarm	when the meter is switched on, 5 seconds before automatic power off, when measurement range is exceeded
Automatic power off	after 5 minutes
Power supply	9 V block battery
Operating time	>20 hours
Operating conditions	0 ... 40 °C, 0 ... 60 % RH, non-condensing
Dimensions	123 x 70.4 x 21.5 mm
Weight	147 g

3 Delivery scope

- 1 x gauss meter PCE-SFS 10
- 1 x earthing cable
- 1 x carrying bag
- 1 x 9 V block battery
- 1 x user manual

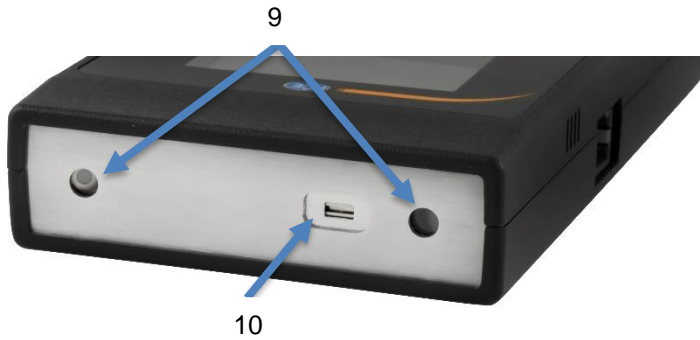
4 Device description



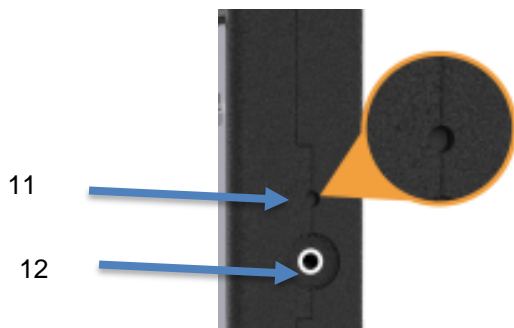
No.	Description
1	Housing
2	Display
3	On and off switch
4	"HOLD" key to freeze the display
5	"ECO" key for switching the backlight on and off
6	Status display



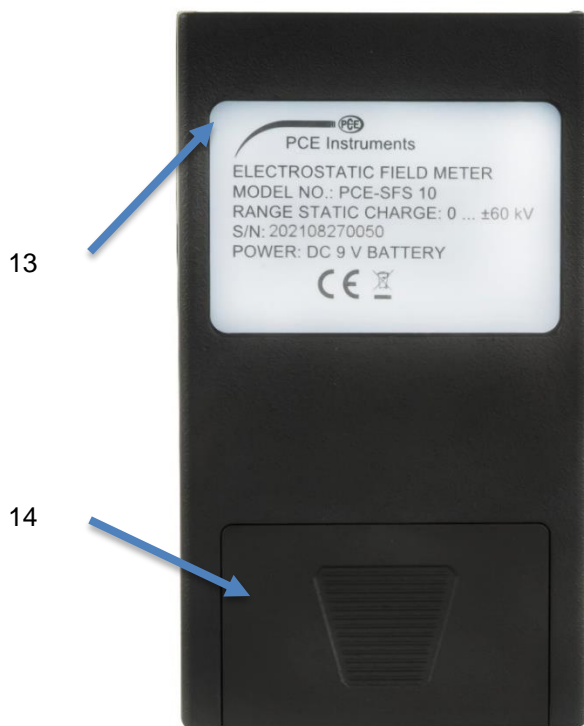
No.	Description
7	Temperature and humidity sensor
8	Service interface



No.	Description
9	Alignment laser
10	Radiation sensor

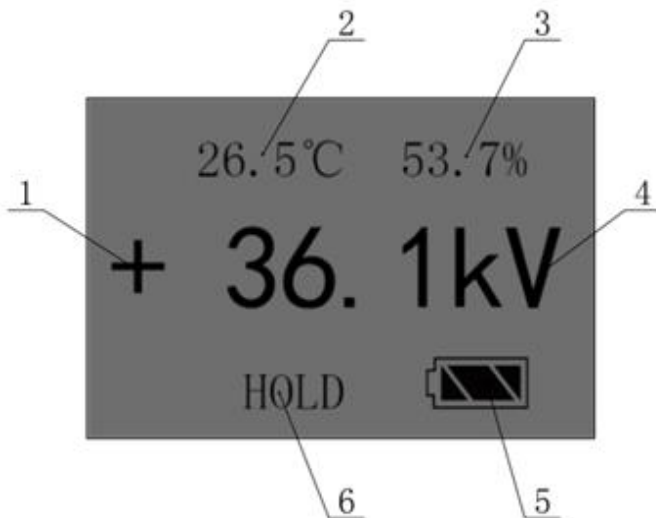


No.	Description
11	"Zero" key for setting the zero point
12	Earth connection



No.	Description
13	Nameplate
14	Battery compartment





4.1 Display description



No.	Description
1	Polarity of the magnetic field
2	Temperature display
3	Humidity display
4	Measured value
5	Battery status display
6	"HOLD" - display is frozen

5 Battery information

The battery life is a maximum of 20 hours. The battery status is continuously shown on the display.

Battery status display	Meaning
	Battery is fully charged.
	Battery is partially discharged.
	Battery almost discharged. The battery should be replaced promptly.
	Battery is discharged. The battery must be replaced for further use.

To replace the battery, first switch off the meter and remove the earthing cable from the meter. Then open the battery compartment and replace the battery with a new 9 V block battery. Then close the battery compartment. The measurement can be resumed.

6 Switching on and off

To switch the meter on and off, press the on/off switch. The measurement is made after a few seconds. To switch the meter off again, press the on/off switch again.

7 Backlight

When the meter is switched on, the backlight is activated. To switch off the backlight, press and hold the "ECO" key for two seconds. To switch the backlight back on, press and hold the "ECO" key again for two seconds.

8 Making a measurement

To make a measurement, first connect the earthing cable to the meter and to an earthed conductor. Then switch on the meter. The measurement will start after a short time. Point the measuring device at the object to be measured. You have reached the correct distance as soon as the lasers cross. Now you can read the measured value.

9 Zeroing

To zero the meter, first ground it with the earthing cable. Then switch on the meter and wait until the reading has stabilised. Then press the zero key to set the displayed reading to zero.

NOTE:

Make sure that there is no static charge on the sensor side. This can influence zeroing.



10 Warranty

You can read our warranty terms in our General Business Terms which you can find here: <https://www.pce-instruments.com/english/terms>.

11 Disposal

For the disposal of batteries in the EU, the 2006/66/EC directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose.

In order to comply with the EU directive 2012/19/EU we take our devices back. We either re-use them or give them to a recycling company which disposes of the devices in line with law.

For countries outside the EU, batteries and devices should be disposed of in accordance with your local waste regulations.

If you have any questions, please contact PCE Instruments.



PCE Instruments contact information

Germany

PCE Deutschland GmbH
Im Langel 26
D-59872 Meschede
Deutschland
Tel.: +49 (0) 2903 976 99 0
Fax: +49 (0) 2903 976 99 29
info@pce-instruments.com
www.pce-instruments.com/deutsch

United Kingdom

PCE Instruments UK Ltd
Unit 11 Southpoint Business Park
Ensign Way, Southampton
Hampshire
United Kingdom, SO31 4RF
Tel: +44 (0) 2380 98703 0
Fax: +44 (0) 2380 98703 9
info@pce-instruments.co.uk
www.pce-instruments.com/english

The Netherlands

PCE Brookhuis B.V.
Institutenweg 15
7521 PH Enschede
Nederland
Telefoon: +31 (0)53 737 01 92
info@pcebenelux.nl
www.pce-instruments.com/dutch

France

PCE Instruments France EURL
23, rue de Strasbourg
67250 Soultz-Sous-Forêts
France
Téléphone: +33 (0) 972 3537 17
Numéro de fax: +33 (0) 972 3537 18
info@pce-france.fr
www.pce-instruments.com/french

Italy

PCE Italia s.r.l.
Via Pesciatina 878 / B-Interno 6
55010 Loc. Gragnano
Capannori (Lucca)
Italia
Telefono: +39 0583 975 114
Fax: +39 0583 974 824
info@pce-italia.it
www.pce-instruments.com/italiano

United States of America

PCE Americas Inc.
1201 Jupiter Park Drive, Suite 8
Jupiter / Palm Beach
33458 FL
USA
Tel: +1 (561) 320-9162
Fax: +1 (561) 320-9176
info@pce-americas.com
www.pce-instruments.com/us

Spain

PCE Ibérica S.L.
Calle Mayor, 53
02500 Tobarra (Albacete)
España
Tel. : +34 967 543 548
Fax: +34 967 543 542
info@pce-iberica.es
www.pce-instruments.com/espanol

Turkey

PCE Teknik Cihazları Ltd.Şti.
Halkalı Merkez Mah.
Pehlivan Sok. No.6/C
34303 Küçükçekmece - İstanbul
Türkiye
Tel: 0212 471 11 47
Faks: 0212 705 53 93
info@pce- cihazlari.com.tr
www.pce-instruments.com/turkish