Safeguard Electric field meter, digital, incl. Charge Plate Set (CPS)



The SafeGuard electric field meter uses high-quality components and a conductive plastic housing to guarantee precise measurements for optimum protection against electrostatic discharge (ESD). At the upper end of the device there is a star-shaped influence electrode, with a modulation impeller of the same star shape rotating at a short distance in front of it. The induction electrode is enclosed by a ring electrode system which serves as mechanical protection for the modulation impeller and the field plate. The display on the front panel is a 2x12-digit alphanumeric LCD display.

The charge plate set CPS turns the into a charge plate monitor for monitoring air ionizing units in accordance with DIN EN 61340-5-1 or EOS/ESD S.3.1. The capacity of the charging electrode (20pF) complies with the above-mentioned standards, but not its dimensions (75mm x 150mm instead of 150mm x 150mm). Reproducible measurements can easily be made with the CPS, standard-compliant measurements are possible with the larger Charge Plate Monitor CPM. The device measures the discharge time from +1,000V ... +100V or -1,000V ... -100V with an integrated start-stop timer. Charging takes place via an external HV converter. Please note: In CPS mode, only voltages up to max. 2kV are displayed!

Further functions of the Safeguard electric field meter
Hold function: The measured value can be frozen in the display, allowing accurate measurements to be taken even in places that are difficult to access.
E-field meter ranges: Manually switchable between ± 20kV/m, ± 200kV/m and ± 1MV/m.

With this function, the analog voltage output ±1V is switched on.
• Type of measurement: Influence principle (field mill principle).
• Conversion of the measured field strength over the set measuring distance into the charge in volts
• "One-button" operation
• Very high zero point stability: Necessary adjustment before each measurement is not necessary (compared to other systems)
• Permanent battery voltage monitoring with automatic shutdown
• Two-line, 12-digit alphanumeric LCD display
• Adjustment accuracy: < 5%
• Output voltage (only with man. E-field measurement): ± 1V (Ri > 1kOhm)
• Operating mode: battery operation
• Operating time: approx. 10h with alkaline battery
• Measuring range: 0 to ± 200 kV (distance mode), 0 - 1 MV/m (field strength mode)
• Output: ± 1V (Ri > 1kOhm) proportional to the measured field strength (only in "E-Field Measurement" mode)
• Standard measuring distance: 2cm

Item no.	**WL73725**
Alternative article name	Safeguard SFM PRO CPS
Manufacturer	SAFEGUARD
Manufacturer article no.	SFM PRO CPS
GPSR manufacturer data	Weidinger GmbH Hertha-Sponer-Str. 1a DE-82216 Gernlinden
Length	150 mm
Width	125 mm
Height	75 mm
Scope of delivery	• Electric field meter (EFM) from SafeGuard • 3x 9V NiMH rechargeable battery • 2x spacer: 2cm • HV converter: charging voltage ± > 1.100V, dimensions approx. 86mm x 64mm x 26mm (LxWxH) • Plug-in charger EC109 • CPS socket: conductive foam / aluminum, grounding via 2x banana plugs, dimensions approx. 75mm x 150mm x 35 mm (LxWxH) • Plate capacitor: plate spacing approx. 10mm, capacitance 20pF ±2pF, dimensions approx. 75mm x 150mm (LxW) • Grounding cable 1m and 1,5m • Tapping clamp • Carrying case

	• Instruction manual
Sales unit	1 piece
Content unit	1 piece
Incl. battery	yes
Display type	digital
Measuring range	0 to ± 200 kV (distance mode), 0 - 1 MV/m (field strength mode)
ESD compliant	yes