Profometer Corrosion Potential

PM8500

The most complete half-cell solution for rapid on-site mapping of corrosion potential

Productivity

Boost your productivity up to 40 times faster than any other rod electrode on the market using our unique wheel electrodes

Ergonomics

Compact, ultra-light and wireless for comfortable measurements in all types of concrete elements

Onsite Data

Best-in-class app for corrosion assessment with several views for easy data evaluation and interpretation

Profometer App Corrosion
Tech Specs

Display Unit	Any compatible Apple iPad (iOS 11.0 and higher)
Measurement Modes	• Basic Mode • Expert Mode • Spot Scan (rod electrode) • Line Scan (wheel electrode) • Area Scan (wheel electrode) • Fixed Grid (rod electrode) • Flexible and Variable Grid (Wheel electrodes) • Autosave mode (rod electrode) • Grid set up (Origin of coordinates; Grid size; Cell size; Direction of measurement; Pattern of measurement) • Delete and overwriting information (Cells; Lines; Whole scan) Skipping data (Cells; Lines; Fixed distance) • Pause and resume • Stop and start
Review Modes	• Potential View for displaying a heat map with the potential values • Statistic View - distribution and cumulative graph • Chipping graph view for displaying the corroder areas based on the analysis
Advanced Features	• Support for copper, silver, mercury and SCE calomel electrodes • Temperature correction • Zoom in and out
Calibration Features	• Calibration of length
On-site annotations	• Markers - comments and voice notes • Photos • Geolocation
Reporting	• Cloud connectivity • Workspace integration • Share via URL • Automatic Logbook • Raw data export • Instant report generation
Export formats	• JPG (Screenshot) • PNG • CSV • HTML
Display Unit Specs*:	• Latest Apple® iPad recommended (iPad with iOS 11.0 and higher) • Screen size: From 7.9" to 12.9" • Resolution: Up to 2732-by-2048 • Memory: Up to 2TB • Weight: Down to 301 g / 10.6 oz • Camera: Up to 12MP Wide and 10MP Ultra Wide • Optional: USB-C, 5G, Face ID
Display Unit Sensors*:	• LiDAR Scanner (optional) • Three-axis gyro • Accelerometer • Ambient light sensor • Barometer • Built-in GPS/GNSS

Instrument
Tech Specs

Technology	Half Cell Potential
Measured Quantity	Corrosion potential in milivolts [mV]
Connection	Wireless - Bluetooth
Cover Measuring depth	First rebar layer
Voltage Measurement Range	-3000mV to +3000mV
Resolution	+-1mV
Input Impedance	100MOhm
Encoder Accuracy	+/- 0.5 mm / 0.02 in + 0.78% of measured length Resolution: 3.3 mm / 0.13 in (128 steps / rotation)
Max Scanning Speed	1 m/s - 3.3 ft/s
Max Area Scan	50 x 50 m - 165 x 165 ft

Dimensions

Sensor unit	(127 x 59 x 56)mm / (5 x 2.3 x 2.2)in without holder (127 x 98 x 72)mm / (5 x 3.9 x 2.8)in with holder
Rod electrode	D= 36mm x 155mm / D=1.4 in x 6.1in with protection-cap
One wheel electrode	(194 x 138 x 127)mm / (7.6 x 5.4 x 5)in without telescopic rod (2000 x 138 x 127)mm / (78.7 x 5.4 x 5)in with extended telescopic rod (700 x 138 x 127)mm / (27.6 x 5.4 x 5)in with pulled in telescopic rod
Four wheel electrode	(830 x 350 x 140)mm / (32.6 x 13.8 x 5.5)in without telescopic rod (2150 x 830 x 140)mm / (84.6 x 32.6 x 5.5)in with extended telescopic rod (840 x 830 x 140)mm / (32.8 x 32.6 x 5.5)in with pulled in telescopic rod

Weight

Sensor unit	150g / 0.33 lbs without holder 220g / 0.49 lbs with holder
Rod electrode	120g / 0.26 lbs without cable / without cupper sulfate, without Interface-Box
One wheel electrode	2000g / 4.41 lbs without fluid, with interfacebox an telescopic rod + 435g / 0.96 lbs including fluid
Four wheel electrode	6900g / 15.2 lbs without fluid + 435g / 0.96 lbs per wheel including fluid
Standard kit (all items including carrying case)	7400g / 16.3 lbs
One wheel kit (all items including cartoon box)	2900g / 6.39 lbs
Four wheel kit (all items including carrying case)	17660g / 38.93 lbs
Battery	1xAA (NiMH) rechargeable or non rechargeable Removable Flight-safe 8 Hours autonomy USB-C charger
Environmental Conditions	Humidity <95% RH, non-condensing Operating temperature: -10°C to +50°C

Standards & Guidelines	Description
ASTM C 876-15	
DGZfP B3	
JGJ/T 152 (China)	
JSCE E 601	
RILEM TC 154-EMC	
SIA 2006 (Switzerland)	
UNI 10174	
ОДМ 218.3.001-2010	