



Surf Resistivity Meter

The Giatec Surf is a laboratory test device for rapid, easy and accurate measurement of the surface electrical resistivity of concrete based on the four-probe technique. The Surf has a unique and customized setup, which enables the measurement of electrical resistivity with high accuracy by reducing the duration of test and minimizing the ambient effects. The technology automatically measure resistivity around the concrete specimen using four channels of 4-probe array. The PC software generates the required reports according to the standard specifications. Measurements can be used to estimate the resistant to the penetration of chloride ions in concrete.



Application

Surf is a laboratory device that is used for measuring the surface electrical resistivity of concrete samples or concrete cores. This technique can be utilized for various applications such as:

- Performance-based quality control of concrete
- Estimation of chloride diffusion coefficient of concrete
- Service life design of concrete structures
- Estimation of the remaining life of concrete structures
- Crack detection in concrete elements under load
- Monitoring the setting time in fresh concrete

Features

- Patent technology
- Fully compliant with both AASHTO TP95 and upcoming ASTM standards
- Fast measurement
- Four-channel surface resistivity meter
- Variable frequency
- Limiting moisture loss
- Automatic report generation with PC software
- Fresh concrete testing/crack detection applications



Technical Specifications

General:

Type	Value
Measurement Channels	4
Measurement Display on LCD	Yes
LCD Display Area	65x33mm
Dimensions of Device	200x160x70mm
Software	Surf Data Monitor

Reading Range and Accuracy:

Reading Range	Frequency Range	Accuracy
0.1 – 100 KΩ.cm	13 – 100 Hz	± (0.1+1%)
100 – 1000 KΩ.cm	13 – 100 Hz	± (1+1%)

Operating Conditions:

Type	Value
Operating Temperature	15°C - 45°C
Operating Humidity	30% - 80%
Storage Temperature	0°C - 60°C
Operating Voltage/Current	100-240 V, 50/60Hz