

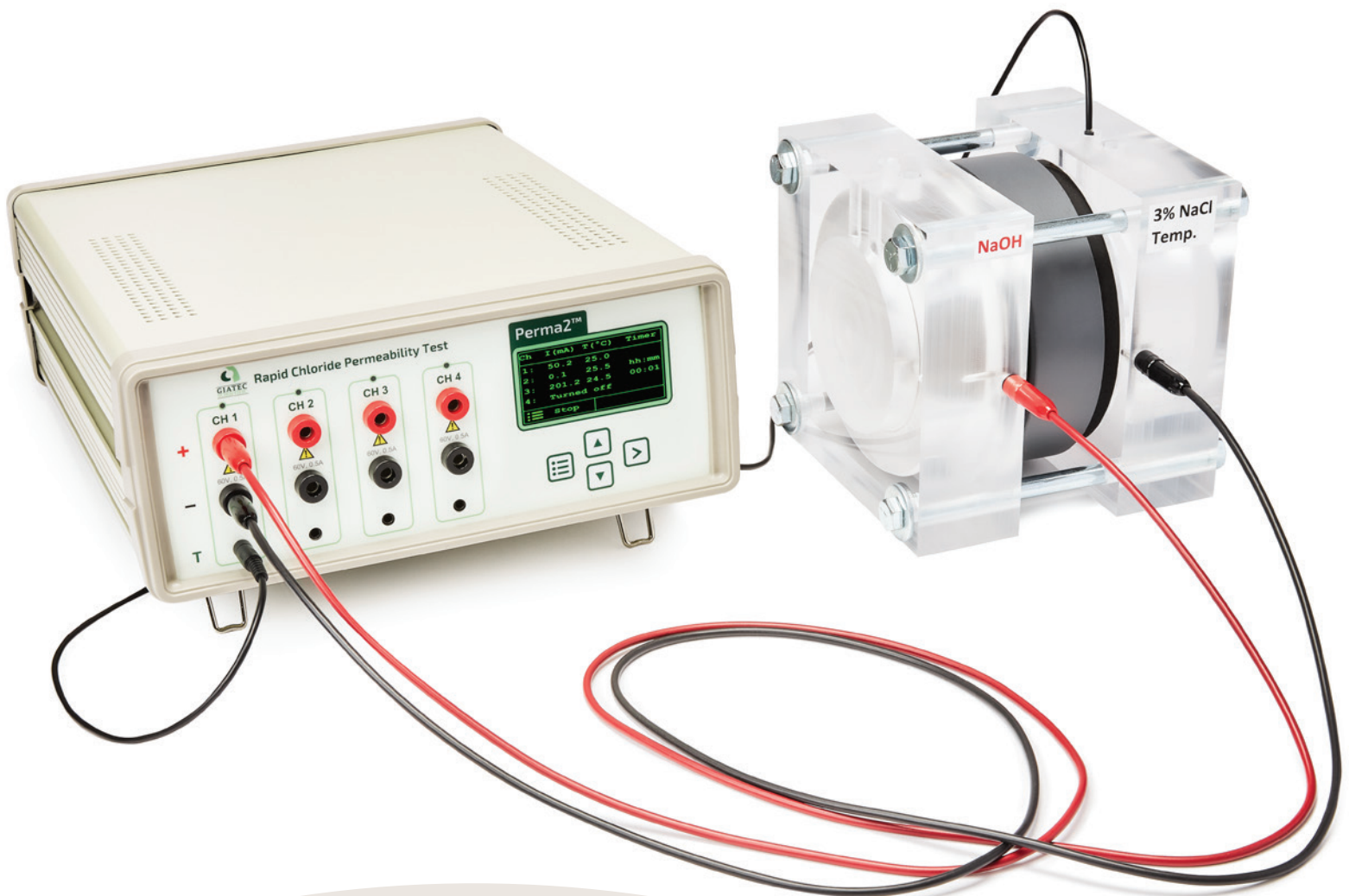


GIATEC



PermaTM

Laboratory Device for Testing the
Rapid Chloride Permeability of Concrete



Four Measurement
Channels



Flexible Logging
Intervals



Customizable
Setup

Overview

Perma is a laboratory device for measuring the electrical resistance of concrete against the penetration of chloride (RCPT). This data is used to estimate the chloride diffusion coefficient of concrete for predicting service life, durability-based design, and durability-based quality control, of concrete structures. Perma is electrically certified for rapid chloride penetrability tests in concrete laboratories. This device is the only RCPT device that has a CSA electrical safety certification mark for use in concrete laboratories.

Features

Software

- Automatic temperature control system
- Accurate (± 0.1 mA)
- Flexible logging interval time (1 to 10 min)
- Free user-friendly PC software

Hardware

- Four measurement channels
- Customizable setup
- Verification kit included
- Stand-alone operation device
- Auto-sealable cells with rubber gasket and spacer

Chloride Penetration	56-Day Rapid Chloride Permeability Charge
High	>4000
Moderate	2000-4000
Low	1000-2000
Very Low	100-1000
Negligible	<100



Applications

- Measurement of chloride penetration resistance
- Bulk electrical conductivity of concrete
- Performance-based quality control of concrete
- Estimation of chloride migration and diffusion coefficient of concrete
- Service life design of concrete structures

Technical Specifications

Measurement Channels
4

Range of Current Measurements
0 ~ 500 mA \pm 0.1 mA

Temperature Measurement Range
0 ~ 100°C

Standards
AASHTO T277, ASTM C1760, ASTM C1202, & ASTM C1556

Software
Free PC program