## Rapid Chloride Permeability Tester

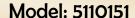


One of the effective factors in reducing the durability of concrete is the penetration of chloride ions. Rapid Chloride Permeability Test (RCPT) allows the evaluation of chloride permeability properties in concrete. In this test method, the amount of electric current passing through a cylindrical sample with a thickness of 50 mm and a diameter of 100 mm is measured over a period of 6 hours. The potential difference of 60 volts DC is kept constant at the end of the sample, while one side of the sample is immersed in sodium chloride solution and the other side is immersed in sodium hydroxide solution. At the end, the total passing charge in the Columbus unit, which is related to the resistance of the sample to the permeability of chloride ions, is recorded as the test result. During the test, the air temperature around the sample should be maintained in the range of 20 to 25 ° C.

It should be noted that the equipment of this test is used in the electrical conductivity of hardened concrete testing (ASTM C1760).

Standard:

ASTM C1202, C1760



## **RCPT Device Specifications:**

Number of Channels	4
Independent Channels	Yes
Customizable Test Duration	Yes
Sampling Rate (minutes)	from 1
Voltage (VDC)	5-60
Current Measurement (mA)	0 - 600
Temperature Measurement (Celsius)	0-100
Internal Memory for Saving Data	Yes
PC Connection	Yes
Short Circuit Protection	Yes

Rapid Chloride Permeability Tester included :

- 1- Device, digital display
- 2-Four Temperature sensors, 0.1C accuracy,
- 3-4Set of Cells, Standard Preparation Package,
- 4-Power Cord, USB Cable, User Manual,
- 5-Vacuum Pump, Vacuum Desiccator, Vacuum gauge, Vacuum Hoses and Connections,
- 6-Dual power supply: 110V,60Hz., or(220V,50Hz.).

7-power consumption: 3 A

8- Model: 5110151, Rapid Chloride Permeability Tester, RCPT (complete set),

Model:5110152, Rapid Chloride Permeability Tester, RCPT (Device Only)







