

BenchLab 7100 Poro Perm

The 7100 Poro Perm is a bench-top model designed to measure petrophysical rock properties at reservoir pressures in a compact modular setup. This is a perfect system for Universities due to the size and ease of use.

Permeability-Porosity Module

The Permeability-Porosity option is a standalone system (BL7000) that permits routine porosity and permeability measurements in the range 0.001 mD to 10,000 mD using the pulse decay method at effective pressures to 10,000 psi.

Specifications

- Permeability range: 1 μ D to 10D
- Porosity range: 0.1 to 60%
- Max pore pressure: 250 psi
- Length: 0.5 inch to 4 inches
- Diameter: 1.0 inch, 1.5 inches, or 30 mm
- Confining pressure: 400 psi to 10,000 psi
- Power: 110/220 VAC, 50/60 Hz

Key Features

- Permeability using a variety of gases
- Fits for Klinkenberg and inertial coefficients
- Porosity from pore volume
- Pycnometer cell for independent grain volume and density



Core Holder and Pressurization System

A Hassler core holder configuration is used. Samples sizes up to 1.5 inches in diameter and 6 inches in length can be measured and taken to confining pressures up to 10,000 psi. Pressure control and data acquisition functions are all computer controlled for automated testing.

Data Acquisition and Processing

The BenchLab series uses NER's latest Autolab 6 software, which can operate in both Windows and Linux environments. NER's in-house workflows for data reduction and reporting—for example, for low permeability and ultrasonic velocities—are available by default. Autolab 6 also allows scripting for unsupervised testing sequences and the use of virtual channels for extended feedback capabilities.