

TINYPERM 3

NER's TinyPerm is a portable handheld air permeameter used for measurement of rock matrix permeability or effective fracture apertures on outcrops and at the core scale.

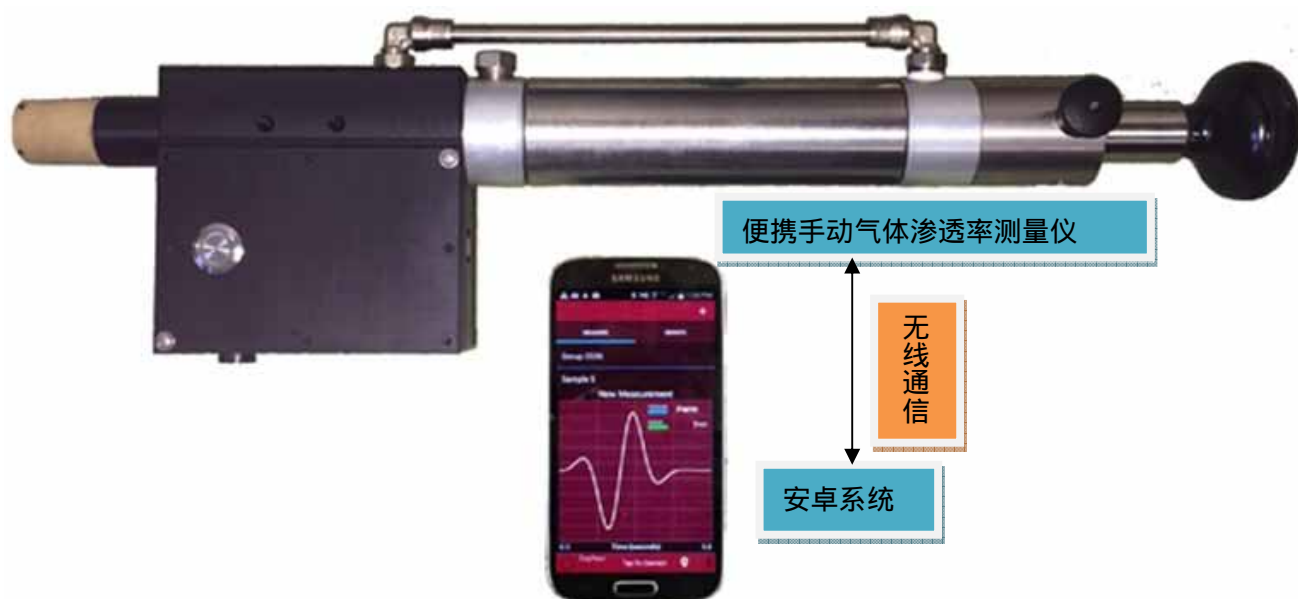
NER 生产的 TinyPerm 是一种手持便携式气体渗透率测量仪，它被用来测量岩石露头 and 岩心尺度范围内的岩石基质渗透率或有效的裂缝开度。

The operator presses a rubber nozzle against the specimen and withdraws air from it with a single stroke of a syringe. As air is pulled from the sample, a microcontroller unit simultaneously monitors the syringe volume and the transient vacuum pulse created at the sample surface.

操作者把橡胶管嘴顶在岩样上并使用一个单冲程的吸抽器抽取气体。当岩样中的气体被抽取时，设备的微控制器同时监测抽取气体的体积和在样品表面产生的瞬间真空脉冲。

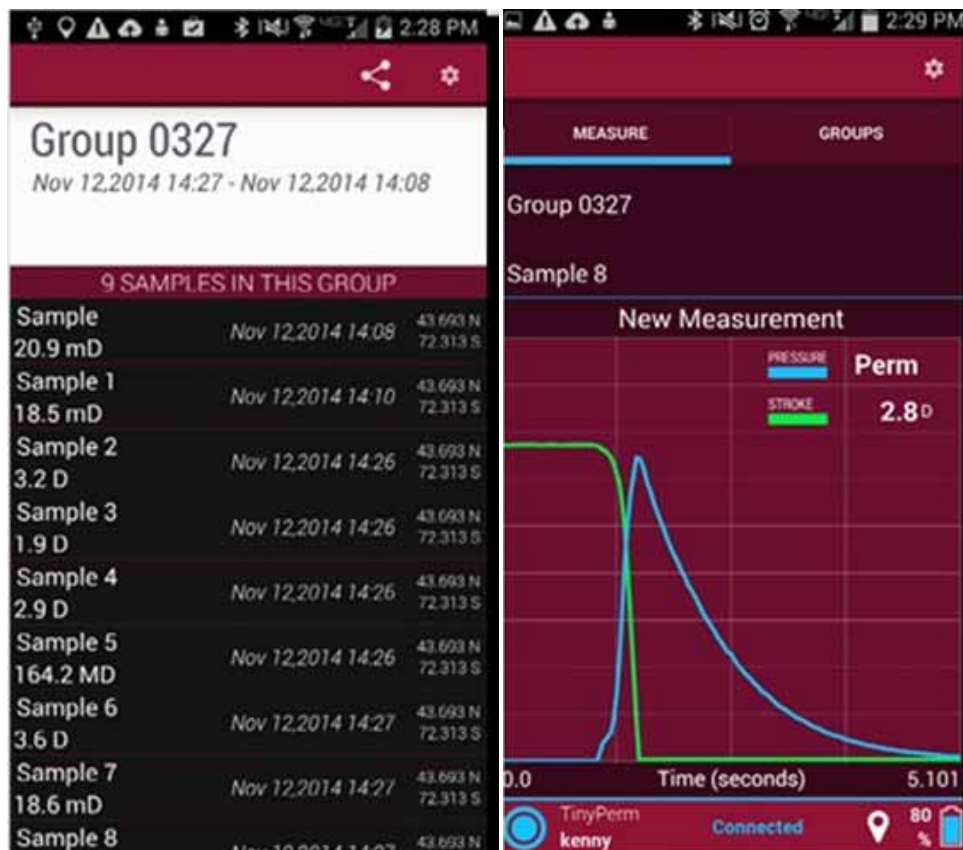
Measurements are automatically stored and cataloged on the NER-supplied Android™ device, communicating wirelessly with the TinyPerm permeameter. The Android device shows a plot of the time-domain pressure and volume data in real time as a measurement is taking place. New capabilities in TinyPerm allow faster measurement times at low permeabilities.

测量结果会被自动地存储并归类在 NER 提供的安卓系统里面，安卓系统与 TinyPerm 渗透率仪之间为无线通信。在测量进行过程中，安卓设备实时显示时间域压力和体积图。TinyPerm 的新特点是允许对低渗透率快速多次测量。



The measurement data, along with GPS-derived latitude and longitude coordinates, serial number of the TinyPerm permeameter, date, barometric pressure, ambient temperature and humidity, and sample images, are captured in data files that are easily exported from the Android device to desktop computers for additional analyses.

测量数据，连同GPS获得的经纬度坐标，TinyPerm 渗透率测量仪的序列号，日期，大气压力，环境温度和湿度，以及样品图象这些数据会被存储在数据文件中，这些数据数据文件很容易从安卓设备中输出到台式计算机中为了便于以后的分析。



For intact rock, the permeability measurement range is from 1 millidarcy to 10 darcys. Similarly, fracture apertures from approximately 10 microns to 2 millimeters can be determined.

对于完整的岩样，渗透率的测量范围为1mD~10D。类似的，能够确定的裂缝开度的范围为10微米~2毫米。

The TinyPerm system, which includes the permeameter, Android device and software, spare nozzle, and operator's manual, comes in a rugged case for transportation and shipping.

TinyPerm 系统由以下部分组成：安卓设备和软件，备用管嘴，操作手册和便于运输的保护套。

KEY FEATURES

主要特点

Innovative technology

创新技术

- The TinyPerm app on the Android device permits wireless data collection; no more pen and paper in the field.
安卓设备下的 TinyPerm app 移动客户端具有无线数据采集功能；无需在野外使用纸和笔。
- Conversion from response function to permeability or aperture measurement is automatic.
从响应函数到渗透率或开度的转换测量自动化。

- Samples are given unique names and can be assigned to groups.
样品被命名并能被分配到组。
- GPS-derived latitude and longitude, barometric pressure, ambient temperature, and humidity are recorded for each measurement.
GPS获得的经纬度，大气压力，环境温度，和湿度信息每一次测量时都被记录下来。

Fast results

快速结果

- Using the new “Extrapolate Data” option, TinyPerm can measure millidarcy range permeabilities in less than a minute.
使用最新的“外推数据即 “Extrapolate Data” 选项，TinyPerm 能够在少于一分钟之内测量出 mD范围的渗透率。
- Time-domain pressure and volume data are plotted in real time, allowing the user to gauge how long the measurement will take.
时域压力和体积数据被实时绘制出来，允许使用者设定测量所使用的时间。

Portable and all-inclusive

便携及功能多样

- The system is easily portable: the syringe measures 38cm x 12.5cm x 5cm and weighs 1.2 kg.
便携式系统：吸抽器尺寸38cm x 12.5cm x 5cm，重1.2kg。
- TinyPerm 3 ships with everything you need to capture accurate, spreadsheet-compatible data.
TinyPerm 3 能提供用户所有所需的，兼容的电子表格数据。

中文仅供参考，请以英文为准。