GeoSpec LT

NMR Core Analyser

GeoSpec LT is ideal for petrophysicists requiring simple NMR measurements including pore size distributions and porosity.

Ease of use

GeoSpec LT is designed with ease of use in mind, with a small benchtop footprint and the same industry leading software interface used in the rest of the **GeoSpec** product line. **GeoSpec LT** is optimized for samples up to 1" in diameter.

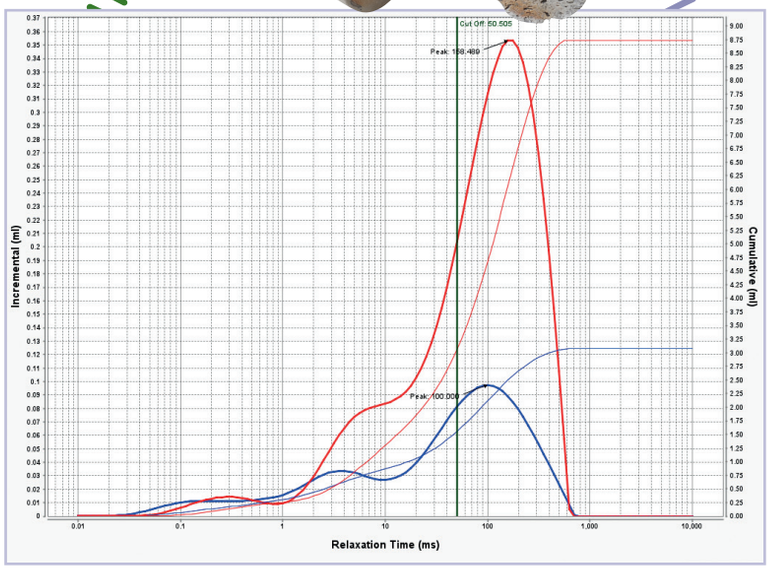
High sensitivity

GeoSpec LT offers the high sensitivity needed for measurements on all types of rock samples, including shales and other unconventional rock types, and even non-consolidated samples.

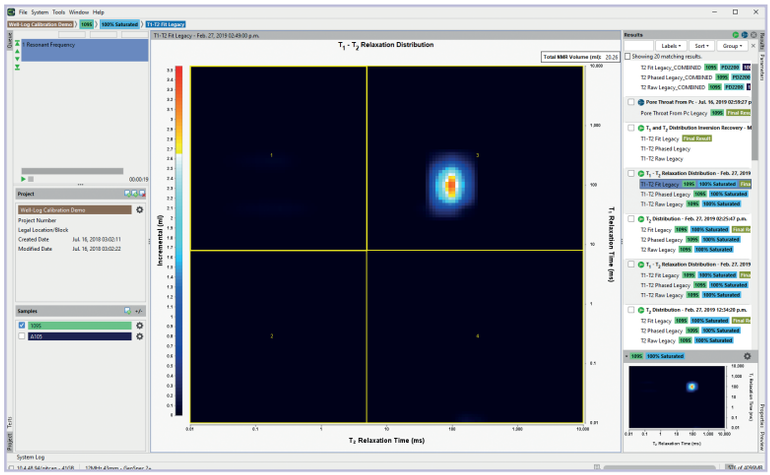
GIT software

GeoSpec LT comes complete with **GIT Systems LT** software, adapted specifically for **GeoSpec LT** from the well-proven **GIT Systems** software suite. **GIT Systems LT** covers a range of common core measurements including:

- T_1 and T_2 pore size distributions
- T_1-T_2 analysis
  - Free Fluid Index (FFI)
  - Bound Volume Irreducible (BVI)
  - Clay Bound Water (CBW)
  - Effective porosity
- Hydrogen Index determination
- T_2 Cut-Off for calibrating well logs
- NMR permeability estimation from T_1 and T_2
- Permeability from T_1 or T_2



Measurement of pore size distributions and porosity



2D data maps for fluid typing

GIT GREEN IMAGING TECHNOLOGIES, INC.

OXFORD INSTRUMENTS

GeoSpec LT

NMR Core Analyser

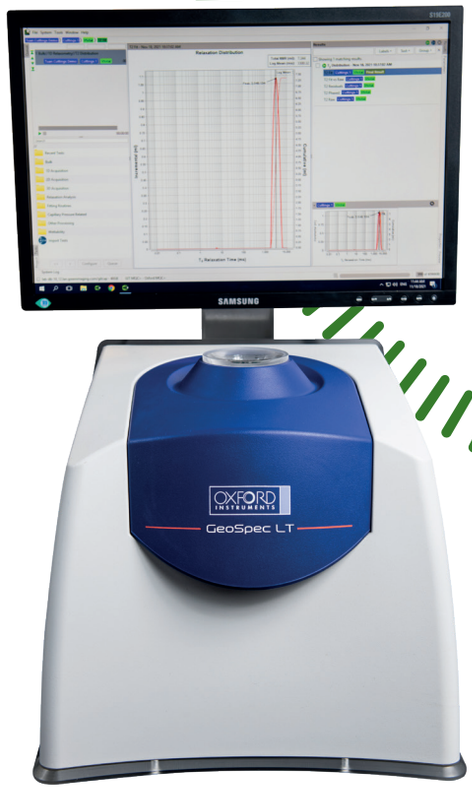
GeoSpec LT also includes critical advanced measurements, based on 2D correlation maps, that are becoming increasingly popular in oil and gas exploration research. These measurements benefit significantly from the higher field of **GeoSpec LT** and include:

- 2D maps (T_1-T_2, T_2-Store-T_2)
- 2D Cut-Off analysis for T_1-T_2 maps (for fluid typing)
- Artefact removal for 2D maps
- Reprocessing of 2D maps

To support the wide array of measurements possible on **GeoSpec LT**, a package of helpful data processing tools is also included in the **GIT System LT** software:

- Reprocessing of 1D inversions
- Background subtraction of data
- Exponential fitting of data
- Gaussian fit of distributions
- Multi-sample permeability models optimization
- Air permeability versus NMR permeability comparison
- Combine acquisition results

Finally, **GeoSpec LT** implements the variable tau CPMG pulse sequence used in other **GeoSpec** models to reduce RF heating of the samples and provide more accurate porosity results. More information on this feature and other applications can be found on our website.



Specification

Maximum sample diameter:	29mm
Maximum sample length:	25mm
Field strength:	0.54T (23 MHz ^{1}H frequency)
Maximum number of echoes:	4000 (effectively 200k with variable tau CPMG)
Minimum tau:	30µs
External PC benchtop footprint:	700mm wide x 400mm deep (plus PC)

For more information visit: **nmr.oxinst.com/geospec**

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