

# FTIR In-Service Oil Analysis

Lyza 7000 Used Oil Package

**Lyza 7000 is a benchtop FTIR spectrometer for oil condition monitoring, compliant with the most important ASTM and DIN standards.**



Find out more

Benefits

The Lyza 7000 Used Oil Package includes Anton Paar's reliable and intuitive FTIR spectrometer, the correct transmission cell for your oil condition monitoring needs, and pre-installed methods. It merges measurement, processing and spectral analysis into one convenient guided workflow.

Easily create your own specialized library and develop your personal methods to optimize efficiency. Set them up as fast pass/fail checks so even untrained users can analyze samples.

Measure and analyze spectra directly in the instrument's embedded software – no need for an external PC. Save lab space with the compact spectrometer's small footprint.

Compliance

ASTM E2412, D7214, D7412, D7414, D7415, D7418, D7624, D7844, DIN 51452 and 51453

Highlights

- Ideal solution for oil condition monitoring: Convenient analysis with predefined lubricant methods
- All you need to know at a glance: System health monitoring and performance tests according to ASTM E1421 including a humidity sensor with active warning system
- High resolution, 10.1", adjustable touchscreen
- Save bench space in your lab: Compact design, no external PC needed
- Quick analysis of oxidation, nitration, sulfate by-products, antiwear components (ZDDP), and contaminations with water, gasoline, diesel, ethylene glycol (antifreeze), and soot
- 15-year warranty on IR source, laser, and interferometer



| Lyza 7000                         |                                                                                                                   |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Detector                          | Pyroelectric DLaTGS detector                                                                                      |
| Optics                            | Hermetically sealed aluminum casing with gold-coated mirrors, KBr windows, and beam splitter                      |
| Signal-to-noise ratio             | 55,000:1 (1 min, 8 cm <sup>-1</sup> , 2,100 cm <sup>-1</sup> to 2,200 cm <sup>-1</sup> )                          |
| Spectral range                    | 350 cm <sup>-1</sup> to 7,500 cm <sup>-1</sup>                                                                    |
| Spectral resolution               | 1.0 cm <sup>-1</sup> to 16 cm <sup>-1</sup>                                                                       |
| Wavenumber accuracy               | <0.05 cm <sup>-1</sup> (at 900 cm <sup>-1</sup> to 3,000 cm <sup>-1</sup> )                                       |
| Wavenumber precision              | Repeatability <0.0005 cm <sup>-1</sup> at 2,000 cm <sup>-1</sup> (standard deviation of 10 repeated measurements) |
| Photometric accuracy              | Better than 0.06 % transmittance                                                                                  |
| Typical measurement time          | <30 seconds                                                                                                       |
| Laser type                        | Single-mode vertical-cavity surface-emitting laser (VCSEL)                                                        |
| Laser class                       | Class 1, enclosed hermetically                                                                                    |
| IR source                         | SiC composite                                                                                                     |
| Interferometer                    | Permanently aligned cube corner interferometer                                                                    |
| Desiccant                         | Molecular sieve with color indicator, user-replaceable                                                            |
| Operating temperature range       | 10 °C to 30 °C (50 °F to 86 °F) (non-condensing)                                                                  |
| Instrument dimensions (L x W x H) | 365 mm x 315 mm x 382 mm (14.4 in x 12.4 in x 15 in)                                                              |
| Weight                            | 12.8 kg (28.2 lbs)                                                                                                |
| Display                           | 10.1", PCAP touchscreen, multitouch                                                                               |
| Controls                          | Touchscreen, optional keyboard, mouse, and barcode reader                                                         |