

eraspec X

PORTABLE FTIR FUEL ANALYSIS

THE NEXT ERA



eraspec X

The NEXT ERA of FTIR fuel analysis

The **eraspec X** is the world's smallest lab-grade mid-FTIR fuel analyzer. At the push of a button **eraspec X** delivers a detailed fingerprint of gasoline and diesel fuels using only 3 mL of sample. Thanks to its rugged, full metal housing **eraspec X** is the perfect tool for ultrafast measurements inside mobile labs or even directly in the field, still offering lab-grade precision.


THE NEXT ERA

Xtra VERSATILE

eraspec X is the perfect solution for FTIR fingerprinting of fuels, providing a detailed view on the fuel's composition and quality, including the measurement of aromatics, oxygenates and FAME. It outperforms GC methods in terms of cost efficiency, speed, and operational simplicity without the loss of analytical capabilities.

Xtra RUGGED

eraspec X is a lab-grade mid-FTIR spectrometer built inside a portable and rugged aluminum housing making it ideal for on-site fuel analysis. Whether you are testing gasoline or diesel fuel, **eraspec X** provides fast and reliable results in the lab as well as in the field.

Xtra FAST & EASY

eraspec X is factory calibrated and comes with a built-in reference cell that allows for fully automated reference measurements. The measurement itself is fully automated and requires only 3 mL of sample. In less than one minute **eraspec X** delivers a detailed fingerprint of gasoline and diesel fuels with lab-grade precision.

Xtra ACCURATE

With its modular design the analysis of gasoline or diesel fuel becomes simple routine. Specialized modules cover the detection of benzene (EN 238) and FAME (EN 14078). Advanced modules for the measurement of fuel ethanol and fuel methanol are also available. **eraspec X** directly derives the concentrations of all relevant fuel components and immediately displays the results.

Optionally **eraspec X** offers chemometric models to evaluate the spectrum for significant parameters such as RON, MON, DVPE, cetane number, distillation and evaporation fractions without needing complex and time-consuming methods.

eraspec X is available with the following modules:

- Gasoline module (ASTM D5845, D6277)
- EU Benzene module (EN 238)
- Diesel fuel module (ASTM D7806)
- EU FAME module (EN 14078)
- Fuel ethanol module
- Fuel methanol module

Fuel Modules

Technical Specifications of eraspec X

Available Test Methods	ASTM D5845, D6277, D7806, EN 238, EN 14078
Spectrometer Type	Patented mid-FTIR interferometer Laser and temperature controlled design
Measurement Cell	20 µm and 100 µm path length cell, reference cell Optimized triple position cell design incl. fully automated reference measurement
Calibration	Factory calibrated
Measurement Time	< 60 seconds, warm-up time 30 seconds
Sample Volume	3 mL with a syringe
Gasoline	14 Aromatics incl. Benzene (ASTM D6277), 18 Oxygenates incl. Ethanol & Methanol Total Aromatics, (Di)Olefines, Oxygens and Saturates (Anilines, Esters) Optional: RON, MON, Distillation, Evaporation and RVP
Diesel	Total Aromatics, Polynuclear Aromatics, Cetane Improver, Benzene, FAME (ASTM D7806), Vegetable Oil Optional: Cetane Number, Cetane Index, Distillation, Evaporation, CFPP, Viscosity
Interfaces	Built-in PC with Ethernet, 5x USB-A, 1x USB-B, and RS232 interfaces; Wifi via USB dongle Direct LIMS connectivity via LAN and output to printer or PC Optional input by keyboard, mouse and barcode reader
Display	Industry proven multilingual color touchscreen
Remote Control	Remote service capability via Ethernet interface
PC Software	erasoft RCS – remote control Windows® software for multi-instrument remote control, convenient data transfer, viewing spectra and result analysis
Result Database	50 000+ detailed test reports and spectra storable in internal memory
Alarm Tracking	All alarm messages are stored in the database together with the results
Power Requirements	Auto-switching 85–264 V AC, 47–63 Hz, max. 150 W (multi-voltage power supply) Field application: 12 V DC (vehicle battery) adapter available
Dimensions / Weight (W x D x H)	18.0 x 28.6 x 29.3 cm (7.1 x 11.2 x 11.5 in) / 7 kg (15.4 lb)

Due to continuing product development, specifications are subject to change.

All eralytics products are manufactured under ISO 9001 regulations and are CE, ROHS and UL/CSA compliant. www.eralytics.com/eraspec-x



eralytics instruments are available worldwide.
An international network of over 50 authorized and well-trained distributors
is ready to answer your inquiries and to offer local support and service.
www.eralytics.com/sales

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