

## erajet fame

# FAME IN JET FUEL TESTING: FAST, PRECISE, PORTABLE

High Speed:  
5 min - fully automated measurement

Lab-grade Precision:  
 $r \leq 4$  mg/kg - no false positives  
Range: 10 to 250 mg/kg (ppm)

True Portability:  
10 kg - lightweight & rugged



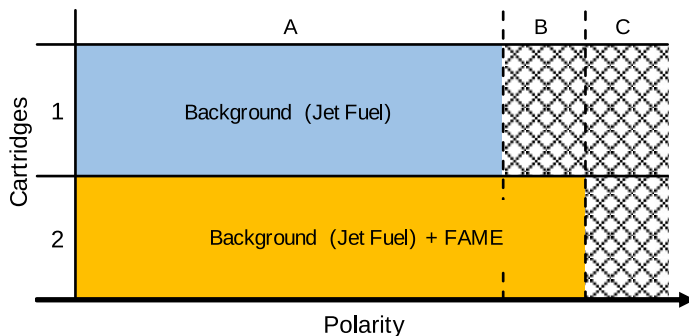
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## economical high speed fame in jet fuel testing

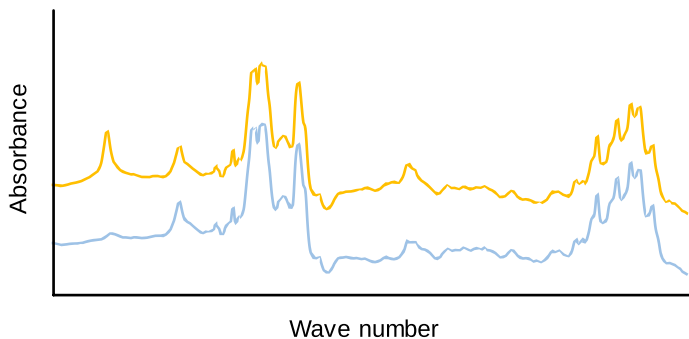
### Measuring Principle

**ERAJET FAME** is a portable, stand-alone FAME in jet fuel analyzer using a unique newly developed measuring principle (patent pending).

First, the test specimen is passed through a cartridge which allows the introduction of only non-polar components into the analyzer. The second cartridge selectively absorbs the more polar contaminants, such as oxidation products, and FAME or other esters are passed through without retention.

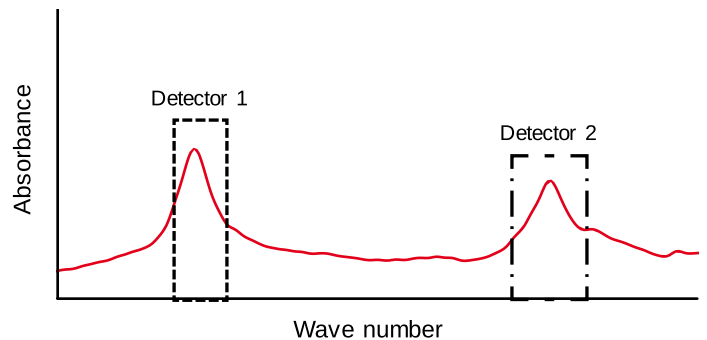


By applying spectral subtraction, the resulting intensities are used for highly accurate FAME determination.



### FIC – FAME Interference Check™

The IR absorption is measured with two independent detectors, each featuring individual optical filters for different wave lengths.



Both observed wavelength ranges and corresponding intensities, are associated with the measured concentration of FAME in the sample, and the result is reported as "FAME in Jet Fuel".

**ERAJET FAME** applies the unique FAME Interference Check (FIC™) by evaluating the intensity ratio of both detectors. For other contaminants, such as plasticizers or other esters, this ratio will be different compared to FAME, and in this case the result is marked as "Total Esters in Jet Fuel".

This superior IR measurement technique makes **ERAJET FAME** the most efficient FAME in Jet Fuel analyzer on the market.

## Maximum Reliability

During jet fuel transportation there is a risk of FAME contamination resulting from poor pipeline cleaning or from a previous fuel transportation process. **eralytics** latest innovation **ERAJET FAME** is a fully automated and compact stand-alone NDIR spectrometer for ultra fast and easy determination of all types of FAME in jet fuel. With a repeatability of only  $r \leq 4$  mg/kg and a reproducibility of  $R \leq 6$  mg/kg **ERAJET FAME** measures with lab-grade precision over a wide measurement range of 10 to 250 mg/kg (ppm) for AVTUR in excellent correlation to international IR (D7797, IP583) as well as GC (IP585, IP590) standards.

## Ultra Fast and Fully Automated

With an unrivalled measurement time of only 5 min **ERAJET FAME** is the fastest available FAME in jet fuel analyzer on the market. With its easy to use interface and the fully automated measurement including the sample introduction **ERAJET FAME** is the perfect and most economical solution even for untrained operators. Cleaning and rinsing of the instrument are an easy task as no special solvent is required. In the case of persistent residues inside the measuring system the analyzer can easily be cleaned and maintained on-site.

## Maximum Connectivity

**ERAJET FAME** is equipped with an industry proven 8.4" multilingual high-contrast color touchscreen and a built-in industrial PC. State-of-the-art connectivity options like LAN, 5 x USB and RS232 allow you to attach printers, keyboards and bar code scanners or to connect the instrument to any Laboratory Information Management System (LIMS).



## Applications

The ultra-light, portable and rugged metal housing with its small footprint makes **ERAJET FAME** equally suited for lab applications and field use. In particular its low weight makes it perfect for a straightforward on-site use even on remote locations with limited access to technical infrastructure. Each measurement offers lab-grade results at any time.

**ERAJET FAME** is mainly used at:

- Airports
- Terminals
- Military facilities
- Governmental bodies

## Features at a Glance:

- Rugged and lightweight NDIR Spectrometer
- Speed: 5 min measurement time
- Range: 10 to 250 mg/kg (ppm) for AVTUR
- Precision: Lab-grade results directly on-site
- Automatic sample introduction
- Detection of all types of FAME

# Technical Specifications of erajet fame

Available Test Method	Rugged NDIR Spectrometer – no moving parts
Correlation to	Infrared spectroscopy: ASTM D7797, IP583 Gas chromatography: IP 585, IP590, IP599
FIC™	FAME Interference Check (patent pending) to exclude false positive FAME results
Cartridge Set	Distinction between FAME and other esters (plasticizers) even at very low concentrations
Sample Volume	35 mL
Measurement Time	5 min
Measurement Range	10 - 250 mg/kg for AVTUR
Method detection limit (MDL)	10 mg/kg
Precision	Repeatability: $r \leq 4$ mg/kg Reproducibility: $R \leq 6$ mg/kg
Automatic sample introduction	Sampling directly from sample bottle
Interfaces	Built-in PC with Ethernet, front and rear USB and RS232 interfaces; Wifi via USB dongle Direct LIMS connectivity via LAN, output to printer or PC and export as CSV or PDF Optional input by keyboard, mouse and barcode reader
Display	Industry proven 8.4" 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 and result analysis
Result Database	Over 100 000 detailed test reports stored in internal memory
Alarm Tracking	All alarm messages are stored in the database together with the result
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	29 x 35 x 34 cm (11.4 x 13.8 x 13.4 in) / 10 kg (22 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/erajet-fame](http://www.eralytics.com/erajet-fame)



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/distribution](http://www.eralytics.com/distribution)

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