



# Automated fuel analysis with OMNIS NIR

Fast, safe, compliant with ASTM D8340, ASTM D8321, and ASTM D6122

PEOPLE  
YOU  
CAN  
TRUST

 **Metrohm**

# Automated fuel analysis with uncompromising compliance and safety

The combination of the OMNIS near-infrared analyzers with the OMNIS Sample Robot – NIR is a perfect match for labs with high throughput needs for fuel analysis. Just three simple steps are required for automated fuel analysis.

## STEP 1

Collect the fuel samples from different sampling points and/or locations. Only 1 mL of sample is needed to fill the vials. Stoppers are put on the vials to avoid evaporation and prevent fire hazard.

## STEP 2

Place the fuel samples in the rack of the OMNIS Sample Robot with a capacity of 77 samples. For the larger OMNIS Sample Robot M – NIR with 3 racks, this amounts to a total capacity of 231 samples.

## STEP 3

In combination with the autosampler OMNIS Sample Robot – NIR, the OMNIS NIR Analyzer measures your samples in one run, completely unattended, with precise temperature control.

## INCREASE PRODUCTIVITY

NIRS allows you to determine one or multiple quality parameters quickly in a single run, without the need for any sample preparation. With the OMNIS Sample Robot – NIR, you can measure series of up to 231 samples completely unattended so you can concentrate on other tasks.

## SAFETY AND COMPLIANCE

The samples for the automated NIR measurements are filled in closed vials with small volumes. This reduces the risk of fire for fuel samples to an absolute minimum. The precise temperature control and algorithms ensure that all samples are measured in compliance with ASTM D8340, ASTM D8321, and ASTM D6122.

## BOOST PROFITABILITY

NIRS has much lower running costs than competing wet chemistry methods. Neither solvents, nor reagents are needed, which makes a real difference to your bottom line. Furthermore, the automation setup with small, disposable vials is an elegant method to reduce solvent usage even more compared to traditional flow-through-cell setups.

## TYPICAL APPLICATIONS

- RON/MON and aromatics in gasoline
- Cetane Index / Cetane Number in diesel
- Cloud point / freeze point in jet fuel
- RON and aromatics in isomerate / reformat
- Diene Value in PyGas



## PLATFORM AND CLIENT/SERVER

OMNIS is a fully integrated platform where OMNIS NIR Analyzers, Sample Robots and Titrators are controlled by the same software – OMNIS. This reduces the effort needed to validate instruments and simplifies the learning process for operators.

OMNIS Software can be used for stand-alone installations and client/server networks. OMNIS Client/Server supports large networks with up to 1000 clients, making it ideal for large organizations with multiple laboratories worldwide.



## Swiss-made quality

Your OMNIS NIR Analyzer and OMNIS Sample Robot – NIR are developed and made in Switzerland. Swiss-made quality means years of reliable instrument operation. It goes without saying, that the unique Metrohm guarantees also apply:

- 3-year instrument warranty
- 5-year software support guaranteed
- 10-year guaranteed availability of spare parts

**Metrohm**  
Swiss Quality



### ARTICLE NUMBERS

#### OMNIS NIR automated fuel solution

2.1070.0010	OMNIS NIR Analyzer Liquid
6.07401.070	Holder OMNIS NIR, vial, 8 mm
2.1073.0010	OMNIS Sample Robot S – NIR
2.1074.0010	OMNIS Sample Robot M – NIR
6.02041.080	OMNIS Sample rack, 77 x 8 mm
6.7402.240	Disposable vials, 8 mm, transmission
6.06003.012	OMNIS stand-alone with 2 instrument licenses
6.06008.008	Pre-calibration, gasoline, liquid
6.06008.009	Pre-calibration, diesel, liquid