# Liquid NIR Spectrophotometer - Near Infrared Transmission Analyzer - 900-2500 nm - 8 nm Bandwidth

Model **MSSP-LIF430SWISS** | Brand **Master Science**





The Master Science Liquid NIR Spectrophotometer is a grating-monochromator instrument for fast, non-destructive analysis of oils, alcohol, beverages and other liquids. It works in transmission from 900 to 2500 nm.

KEY HIGHLIGHTS

- No sample preparation
- Sample stays intact
- Stable wavelength scale
- Automatic referencing
- Traceable conditions

AT A GLANCE

| | |
|---|---|
| **900 to 2500 nm** WAVELENGTH RANGE | **8 nm** BANDWIDTH |
| **±0.2 nm** WAVELENGTH ACCURACY | **≤0.05 nm** WAVELENGTH REPEATABILITY |

**Request a Quotation**
Contact us for pricing, configuration options and delivery details.

support@themsci.com
www.themsci.com

Scan to view online

## Overview

The procedure is short: fill the cuvette, place it on the sample platform and start the scan in the software. A spectrum is ready in about one minute, and with the matching NIR data model several components are reported at once.

> For solids and powders, see the Master Science NIR spectrophotometer with integrating sphere.

## Key Benefits

**No sample preparation**
the Master Science Liquid NIR Spectrophotometer measures the liquid as it is.

**Sample stays intact**
non-destructive reading.

**Stable wavelength scale**
polystyrene standard filter monitoring.

**Automatic referencing**
built-in PTFE reference module.

**Traceable conditions**
temperature and humidity saved with each spectrum.

## Technical Specifications

### GENERAL

| | |
|---|---|
| Brand | Master Science |
| Model Number | MSSP-LIF430SWISS |
| SKU | MSSP-LIF430SWISS |
| Brand | Master Science |
| Model Number | MSSP-LIF430SWISS |
| SKU | MSSP-LIF430SWISS |
| Measurement Mode | Transmission |
| Noise | ≤0.0005 Abs |
| Analysis Time | 1 minute or above |
| Output | USB 2.0 |
| Power Supply | 90-250 V, 50/60 Hz |

### OPTICAL PERFORMANCE

| | |
|---|---|
| Wavelength Range | **900 to 2500 nm** |
| Bandwidth | 8 nm |
| Wavelength Accuracy | **±0.2 nm** |
| Wavelength Repeatability | **≤0.05 nm** |
| Stray Light | ≤0.1% |

### ENVIRONMENT

| | |
|---|---|
| Operating Temperature | 5 to 35 °C |
| Operating Humidity | 5 to 85% RH |

### DIMENSIONS & WEIGHT

| | |
|---|---|
| Dimensions | 360 × 460 × 240 mm |
| Weight | 12 kg |

### COMMON PROBLEMS AND HOW THIS ANALYZER HELPS

| | |
|---|---|
| Common Problems and How This Analyzer Helps | How the Master Science Liquid NIR Spectrophotometer speeds up liquid testing: |
| Time-consuming chemical assays | spectrum in about one minute. |
| Sample lost to testing | non-destructive measurement. |
| One test per component | several components from a single scan. |
| Unknown measuring conditions | environment data logged automatically. |

## Use

- **Cuvette-based sampling**
- **Software-controlled scan**
- **Multiple components from one spectrum with a data model**

## Applications

**The Master Science Liquid NIR Spectrophotometer is used for**
Oil analysis Alcohol analysis Beverage analysis Other liquid samples

## Optics

- Grating monochromator
- Automatic reference calibration
- Wavelength monitoring

## Data

- Ambient temperature and humidity monitoring
- USB connection

## Standard Accessories Included

- Main instrument, 1 set
- Power cord, 1 pc
- Data processing software package, 1 set
- USB cable, 1 pc
- User manual, 1 pc
- Fuses (2 A), 2 pcs
- 1 cm quartz square sample cells, 1 pair
- 2 mm quartz micro sample cells, 1 pair