# KF Moisture Titrator - Compact Karl Fischer Water Analyzer - 10 µg-250 mg - 7-inch Touchscreen

Model **MSTITR-41VSWISS, MSTITR-41CSWISS** | Brand **Master Science**







The Master Science KF Moisture Titrator is a compact, budget-friendly Karl Fischer instrument offered as a volumetric model for higher water contents or a coulometric model for trace moisture. Both share a 7-inch high-contrast touchscreen, solvent manager and automatic drift correction.

KEY HIGHLIGHTS

- Choose the right technique
- Safe reagent handling
- Stable endpoints
- Fits small labs
- Easy data export

AT A GLANCE

| 0 to 2000 mV | ±3 %, fluctuation<br>±2.5 %/30 min |
|---|---|
| MV RANGE | POLARISATION CURRENT ACCURACY |

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

support@themsci.com
www.themsci.com

Scan to view online

## Overview

Oven sampling is supported on both versions, extending measurement to solids, gases and samples that release water slowly.

> Labs that need both KF techniques in one unit can choose the Master Science dual-mode Karl Fischer titrator.

## Key Benefits

**Choose the right technique**
the Master Science KF Moisture Titrator comes in volumetric and coulometric versions to suit your water range.

**Safe reagent handling**
the solvent manager drains and refills reagents in a closed system.

**Stable endpoints**
automatic or manual drift correction compensates for ambient moisture.

**Fits small labs**
a compact footprint and simple touchscreen operation.

**Easy data export**
results go to a printer, PC or U-disk.

PASSWORD PROTECTION

**200 GLP result memory**

## Technical Specifications

### GENERAL

| | |
|---|---|
| General | Specifications of the two Master Science KF Moisture Titrator versions: |
| Brand | Master Science |
| Model Number | MSTITR-41VSWISS, MSTITR-41CSWISS |
| SKU | MSTITR-41VSWISS, MSTITR-41CSWISS |
| Models | MSTITR-41VSWISS (volumetric), MSTITR-41CSWISS (coulometric) |
| Water Range | **0.1 to 250.0 mg (volumetric); 10.0 µg to 200 mg (coulometric)** |
| Water Resolution | 1 µg (volumetric); 0.1 µg (coulometric) |
| Water Repeatability | ≤ 0.5 % (volumetric); ≤ 1 % (coulometric) |
| Units | µg, mg, %, ppm, µg/mL, mg/L |
| mV Range | **0 to 2000 mV** |
| mV Resolution | 1 mV (volumetric); 0.1 mV (coulometric) |
| Methods | Auto titration, titer (volumetric), oven, oven blank, coefficient correction (coulometric) |

### POWER

| | |
|---|---|
| Polarisation Current Accuracy | **±3 %, fluctuation ±2.5 %/30 min** |
| Generator Current (coulometric) | ±0.5 %, fluctuation ±0.2 %/10 min |
| Power Supply | AC 100 to 240 V, 47 to 63 Hz |

### DISPLAY & DATA

| | |
|---|---|
| Data Storage | 200 records (GLP) |
| Interfaces | RS232 printer, USB PC software, U-disk CSV export |
| Display | 7-inch color touchscreen |

### DIMENSIONS & WEIGHT

| | |
|---|---|
| Dimensions | 240 × 370 × 270 mm |
| Net Weight | About 4 kg |

### COMMON LABORATORY PROBLEMS AND HOW THIS TITRATOR HELPS

| | |
|---|---|
| Common Laboratory Problems and How This Titrator Helps | How the Master Science KF Moisture Titrator supports routine water testing: |
| Loss on drying is too slow and unspecific | KF titration measures water directly. |
| Reagent exposure | closed solvent handling limits contact. |
| Unstable results in humid labs | drift correction compensates automatically. |
| Hard-to-dissolve samples | oven sampling is supported. |
| Manual result recording | USB and printer output document each run. |

## Applications

**The Master Science KF Moisture Titrator is used for**
Pharmaceutical raw materials Oils, fuels and lubricants Chemicals and solvents Food ingredients Plastics and powders

## Volumetric Version

- Auto titration and titer determination
- Oven and oven blank methods
- 10 mL burette with solvent manager

## Coulometric Version

- Trace water from 10 µg
- Oven, blank and coefficient correction methods
- Generator and measuring electrodes

## Standard Accessories Included

- Volumetric version: solvent manager, 10 mL burette, volumetric vessel, measuring electrode
- Coulometric version: solvent manager, coulometric vessel, measuring electrode, generator electrode

## Optional Accessories

- KF oven
- GMP software
- Printer