Cooking Oil Quality Tester, TPM 0-50% ±1.5%, 0-200°C, <3 s Response, IP67 Handheld

Model **MSCOA-H200SWISS** | Brand **Master Science**





The Cooking Oil Quality Tester checks frying oil on site by measuring total polar compounds (TPM) from 0 to 50% with ±1.5% accuracy, even in hot oil up to 200°C. Results appear in under 3 seconds, with flashing prompts at different rates to signal oil quality.

KEY HIGHLIGHTS

- Instant Oil Checks
- Works in Hot Oil
- Food-Safe Probe
- Rugged and Portable

AT A GLANCE

0-50% TPM RANGE	**0-200°C** TEMPERATURE RANGE
±1.5% TPM ACCURACY	**0.1°C** TEMPERATURE RESOLUTION

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

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Overview

A capacitive TPM sensor and PTC temperature sensor sit in a 316 food-grade stainless steel probe shaped to shed oil and wipe clean easily. The Cooking Oil Quality Tester is IP67-rated, runs at least 30 hours on a 900 mAh rechargeable battery with Type-C charging, stores 10,000 readings and offers adjustable TPM alarm limits and user calibration.

For laboratory fat content tests, see our Automatic Fat Analyzer, a lab partner to the Cooking Oil Quality Tester.

Judging frying oil by color or smell causes the issues below. The Cooking Oil Quality Tester resolves each one.

Key Benefits

Instant Oil Checks
TPM and temperature readings in under 3 seconds.

Works in Hot Oil
Measures directly in oil up to 200°C.

Food-Safe Probe
316 stainless steel probe avoids secondary contamination.

Rugged and Portable
IP67 protection and 30+ hours of battery life.

Technical Specifications

UNDEFINED	
Brand	Master Science
Model Number	MSCOA-H200SWISS
SKU	MSCOA-H200SWISS
TPM Range	**0-50%**
TPM Accuracy	**±1.5%**
TPM Resolution	0.1%
TPM Response Time	< 3 s
Temperature Range	**0-200°C**
Temperature Resolution	0.1°C
Temperature Accuracy	**±1°C**
TPM Sensor	Capacitive
Temperature Sensor	PTC
Quality Prompt	High and low frequency flashing
Display	OLED, 5-level brightness
Probe Material	316 food-grade stainless steel
Housing	PC engineering plastic
Protection	IP67
Battery	900 mAh lithium-ion, Type-C charging, ≥ 30 h use
Data Storage	10,000 readings
Operating / Storage Temperature	0-50°C / -40 to 70°C
Net Weight	275 g
Package Size	120 × 120 × 600 mm
Gross Weight	1.4 kg

PROBLEMS THE COOKING OIL QUALITY TESTER SOLVES	
Guessing when to change oil	TPM readings show oil degradation objectively.
Waiting for oil to cool for testing	The probe measures directly in hot oil up to 200°C.
Lab tests take too long	Results appear in under 3 seconds on site.
No record of checks	10,000 readings are stored in the meter.

Applications

- **Frying oil quality checks in restaurants and canteens**
- **Food safety inspections**
- **Quality control in snack and fried food production**
- **Oil change decisions in commercial kitchens**

Measurement

- TPM 0-50%, ±1.5%, 0.1% resolution
- Capacitive TPM sensor and PTC temperature sensor
- Oil temperature 0-200°C, ±1°C
- Response under 3 seconds

Operation

- Flashing quality prompts
- Adjustable upper and lower TPM alarm limits
- User calibration and factory reset
- 10,000 readings stored

Design

- Streamlined, ergonomic body
- Shuttle-shaped probe for easy cleaning
- IP67 protection
- 900 mAh battery with Type-C charging

Standard Accessories Included

- Cooking oil quality tester

Optional Accessories

- Standard calibration oil