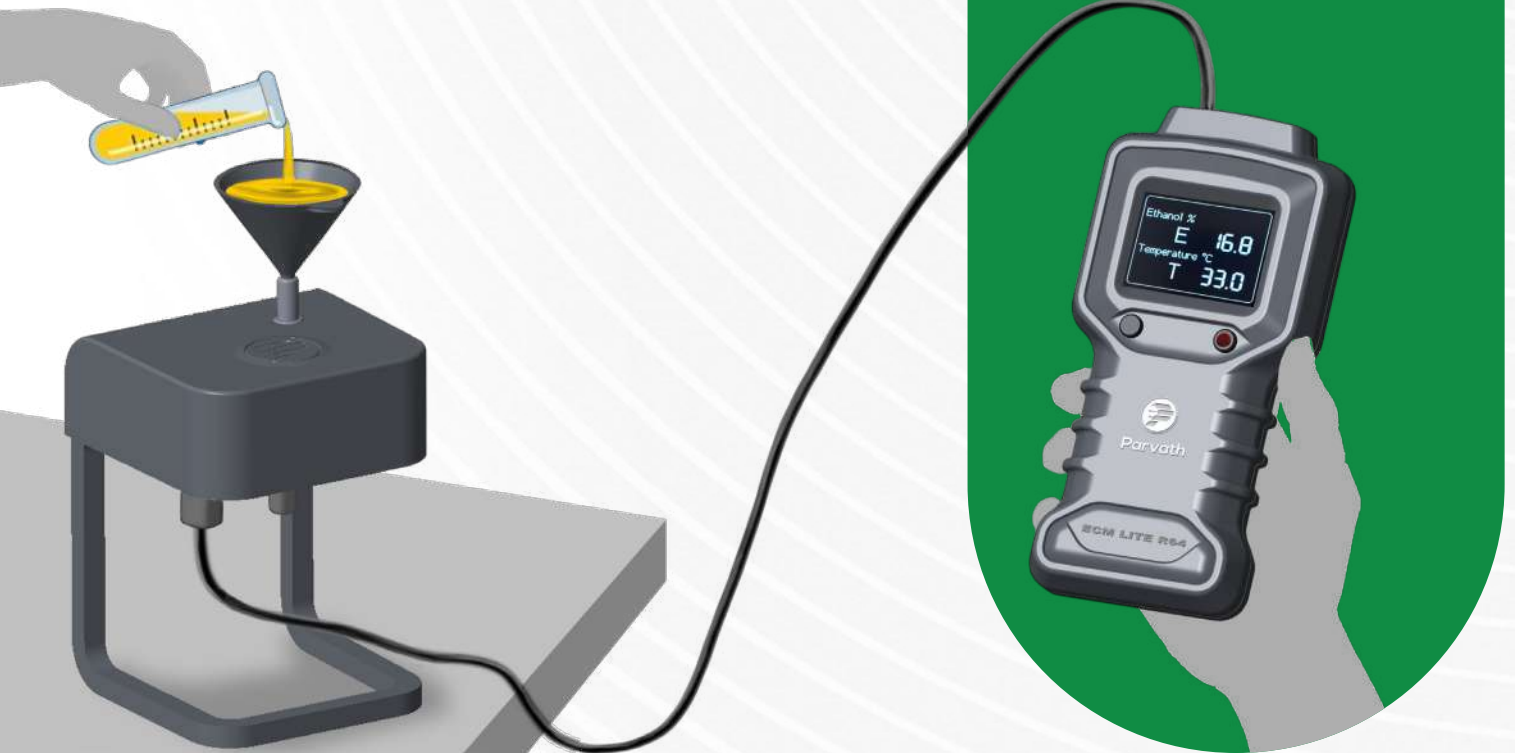


Ethanol Content Monitor – LITE

Essential Ethanol Monitoring,
MADE SIMPLE.



Product Description

- The Ethanol Content Meter – LITE is a reliable, portable, and rugged tool for accurately measuring **ethanol concentration and fuel temperature in real time**. Engineered for OEM testing, professional tuning, service centers, garages, and workshops, it delivers fast, stable readings with an easy-to-read color display.
- With its **inbuilt rechargeable battery**, field-friendly design, and rigid sensor mounting system, the ECM-LITE is equally at home in a lab, workshop, or remote field location.

Applications:

- OEM & R&D fuel testing
- Professional tuning garages
- Service centers & inspection stations
- Field fuel quality checks
- Educational and research laboratories



Key Features

Dual Parameter Measurement	Simultaneous ethanol percentage & fuel temperature display.
High Reliability & Fast Response	0.1s measurement frequency, 0.1% resolution.
Integrated BMS	Optimized battery life and safety.
Auto Sleep Mode	Conserves power when idle.
Smart Charging System	LED charge/full indicators, overcharge protection.
Low Battery Alert	Visual warning for timely recharge.
Long Battery Life	Up to 20 hours continuous operation.
Dual Power Options	Battery or direct AC supply (charger included).
Accurate Averaging Algorithm	Stable, repeatable readings even in fluctuating conditions.
Portable & Rugged	Compact, lightweight, and built for demanding environments.
Sensor Stand with Funnel	Stable testing setup with funnel for remote refueling.
Table Stand for Bench Testing	Perfect for workshop and laboratory use.

Technical Specifications

Display

- Parameters: Ethanol percentage (%) & fuel temperature (°C)
- Screen: 2.4" TFT color display, 320 × 240 resolution
- Update Rate: 0.5 seconds

Measurement Performance

- Measuring Principle: Capacitive sensing
- Range: 0–100% ethanol
- Accuracy: ±2% ethanol
- Frequency: 0.1s measurement cycle
- Resolution: 0.1% ethanol
- Output Signal: Frequency-based (50–150 Hz = 0–100% ethanol)
- Temperature Encoding: Low state time of output signal
- Temperature Formula: $\text{Temp (}^{\circ}\text{C)} = ((T_{\text{pulse}} - 1 \text{ ms}) \times 41.25 \text{ }^{\circ}\text{C/ms}) - 40 \text{ }^{\circ}\text{C}$

• Power & Battery

- Battery: 3 × 18650 Li-ion, 3.7V, 2.9Ah (in series)
- Battery Life: Up to 20 hours continuous use
- Charging Time: ~2 hours (0–100%)
- Charger: Pro-Range 3S Li-Ion, 12.6V 2A, CV/CC, auto cut-off
- Internal Power: 12V DC from battery
- External Power: 150–270 VAC ±5%, 50/60Hz
- Indicators: Dual-LED charging/full status, low battery LED

• Operating Conditions

- Device Ambient Temp: -20°C to +50°C
- Fuel Temp: -40°C to +80°C
- Max Fuel Pressure: 13.5 bar (189 psi)

Connectivity & Interfaces

- Sensor Input: BNC connector
- Power Input: DC jack (5.5 × 2.5 mm)
- Output: On-screen display for ethanol % and fuel temperature, plus frequency-based signal encoding for external systems

Physical Specifications

- ECM Unit: Compact handheld design
- Sensor Stand: Rigid hexagonal stand with funnel

Dimension

- Sensor with Stand and Funnel
164 mm x 185 mm x 195 mm

- Display Unit
37 mm x 109 mm x 210 mm



Included in the Box

1. ECM – LITE main unit
2. Ethanol sensor
3. Sensor connecting cable
4. Sensor stand with funnel
5. Charging kit

Terms & Conditions:

We reserve the right to change product design and specifications for improvement without notice or liability.

Advantages Over Traditional Testers

- Rugged and portable for both field and lab use
- More accurate and faster than manual ethanol testing kits
- Smart charging and long battery life for extended operations
- Easy switch between workshop and remote site testing



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