

## Soil Nutrient NPK Detector Analyzer



The **MSSEM2270SWISS Portable Soil Nutrient NPK Detector Analyzer** is a robust, high-sensitivity tool designed for efficient soil analysis, featuring a large 3-inch TN LCD screen for real-time readings. It uses advanced detection circuits, ensuring excellent repeatability and sensitivity, and is encased in high-strength industrial composite plastic, providing durability.

### Key Specifications:

- **Power Supply:** 1.5V (3 AA batteries)
- **Display:** 3-inch TN LCD
- **Operating Conditions:**
  - Temperature: -20°C to 50°C
  - Humidity: Up to 90% relative humidity (non-condensing)

### Measurement Parameters:

## 1. **Conductivity:**

- Range: 0-10,000  $\mu\text{S/cm}$
- Resolution: 10  $\mu\text{S/cm}$
- Accuracy:  $\pm 3\%$  (0-10,000  $\mu\text{S/cm}$ );  $\pm 5\%$  (10,000-20,000  $\mu\text{S/cm}$ )

## 2. **Soil Moisture:**

- Range: 0-100%
- Resolution: 0.1%
- Accuracy:  $\pm 2\%$  (0-50%),  $\pm 3\%$  (50-100%)

## 3. **Soil Temperature:**

- Range:  $-40^{\circ}\text{C}$  to  $80^{\circ}\text{C}$
- Resolution:  $0.1^{\circ}\text{C}$
- Accuracy:  $\pm 0.5^{\circ}\text{C}$

## 4. **Soil pH:**

- Range: 3-9 pH
- Resolution: 0.1 pH
- Accuracy:  $\pm 0.3$  pH

## 5. **Soil NPK (Nitrogen, Phosphorus, Potassium):**

- Range: 0-1999 mg/kg
- Resolution: 1 mg/kg
- Accuracy:  $\pm 2\%$  Full Scale (F.S)

Additional Features:

- **Communication:** RS485, Modbus serial communication protocol
- **Response Time:** Less than 3 seconds
- **Dimensions:** 170mm x 93mm x 29mm

This versatile analyzer is suitable for various soil quality assessments, offering precise and rapid measurements.