

# ES 4050P

## Description

The **ES4050P** is a portable instrument designed for field calibration of gas analysers, area gas monitors, and detectors. The unit may be used with passive sensors as well as instruments that have a built-in sample pump. Interchangeable permeation or diffusion tubes are used to provide a constant output of the toxic gas. This constant output is mixed with a much larger controlled flow of ambient air to generate an accurate concentration of the standard test mixture.

Changing the dilution flow rate, the tube temperature, or the number of permeation tubes used, can vary the concentration output level. The instrument can also be adapted to produce mixtures of a variety of compounds by installing the appropriate types of permeation tube or diffusion tube.

The **ES4050P** is self-contained and fully portable and traceable. Ambient air is drawn into the unit and purified by passing it through a chemical cartridge type filter. The permeation tube oven temperature is controlled at a pre-set point of 30, 35, 40, or 50°C. Power is provided by a rechargeable, lead acid battery.



For further information call: Eco Scientific Ltd. +44 (0)1453 885059  
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## Benefits Of Using ES4050P

### Safe

- No high pressure cylinders required
- Removes risk of exposure

### Repeatable

- Drift-free output
- Can calibrate all sensors to the same traceable standard

### Easy To Use

- Set the air flow -- no other adjustments required
- Fully portable

### Economical

- No gas cylinders or rental required
- No false results
- Reduces the time required for calibration
- One permeation tube can do hundreds of calibration checks

## Features

**Internal compressor** - provides dilution air

**Rechargeable battery** - for over 5 hours operation or Continuous operation with charger unit or external 12VDC supply

**Intake filter** - cleans ambient air

## Specifications

**Concentration Range:** 0.1 - 100 ppm, depending of type of tube used

**Oven Capacity:** Up to 5 tubes Kin-Tek SRT tubes, or up to 4 Kin-Tek SRT2, or 4 Kin-Tek HRT tubes, with a maximum length of 15cm

**Output Flow:** 500 cc to 1500 cc/min

**Operating Temperature:** 30°C to 50°C

**Ambient Range:** 5°C to 35°C, or 2°C below set-point temperature.

**Battery Pack:** Internal 12VDC, Rechargeable battery.

**Charger input voltage:** 100V to 240VAC 50/60 Hz

**Dimensions:** 31.5cm wide x 16.5cm high x 32.5cm long

**Weight:** 8.5 kg

**Traceability:** Traceable to UKAS

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