

# CAL 2000 LT Calibration System



The CAL 2000 LT calibration system is a portable, battery powered gas generator specifically designed for calibrating Chlorine, Hydrogen, Hydrogen cyanide and Hydrogen sulphide gas sensors. It is rated for use in hazardous areas.

The CAL 2000 LT has a built-in mass flow sensor that measures the flow rate of the instrument. This information is used to control the pump to provide the desired flow rate. The generating gas sources are interchangeable. The microprocessor reads the type of gas from a memory chip embedded in the cell body and then it self-adjusts for each type of gas output. When the unit is powered off, the gas is purged from the unit and the hose, leaving it uncontaminated for the next calibration gas. A small, rotary vane, micro air pump draws in ambient air to blend with the generated gas which permeates out of the cell and onto the gas detector sensor. Four heavy duty C alkaline batteries provide approximately 10 hours of operation and the LCD display is capable of showing the menu structure in English, French, German and Spanish.

To ensure proper operation and to maintain NIST certification, the device should be sent back to the factory on a yearly basis for re-calibration of the flow rate, replacement of the internal charcoal filter and electrolyte replacement.

## KEY FEATURES

- » Hand held, easy to use
- » Up to 10 hours of gas source use
- » User defined gas concentration and flow rate outputs
- » Disposable gas generating cells do not expire and are non-hazardous for transport
- » Interchangeable calibration gases
- » Traceable to NIST standards and rated for use in hazardous areas

## TECHNICAL SPECIFICATIONS

### GAS TYPE

Chlorine (Cl<sub>2</sub>), Hydrogen (H<sub>2</sub>), Hydrogen cyanide (HCN), Hydrogen sulphide (H<sub>2</sub>S)  
(1 - 25 ppm range available for all gas types, specify actual ppm concentration required at time of order)

Source Life	10 hours or 25 hours
Accuracy	±10%
Repeatability	±5%

### MECHANICAL

Weight	1360 g (3 lb)
Size	10.8 cm W x 21.59 cm H x 7.62 cm D (4.25" W x 8.5" H x 3" D)

## TECHNICAL SPECIFICATIONS continued

Tubing (supplied)	1.5 m long x 4.76 mm OD (5 ft long x 3/16 in OD) Teflon lined hose
Flow Rate	Range 0.5 or 1.0 LPM (Flow rate must be specified at time of order)

## ELECTRICAL

Power Source	4 alkaline C batteries
Battery Life	approximately 10 hours
Warm-up Time	approximately 5 minutes

## USER INTERFACE

Display	LCD display
Push Buttons	SELECT and POWER push button type switches
Menu Languages	English, French, German, Spanish

## ENVIRONMENTAL

Operating Temperature	0°C to 50°C (32°F to 122°F)
Humidity	0 - 100% RH (intermittent use)

## CERTIFICATIONS

Conforms to: EC Directive 89/336/EEC in accordance with the provisions of Statutory Instrument 2372  
Conforms to: EN 50081-1 and EN 50082-1  
CSA Certified Intrinsically Safe, Class 1, Division 1, Groups A, B, C, & D  
European Standards approval for Zone 0

## PRODUCT CODES

Battery powered, portable calibration unit comes with a 1.5 m long x 4.76 mm OD (5 ft x 3/16 in OD) Teflon lined hose, nylon carrying case, magnetic screwdriver, batteries, internal charcoal filter and manual. <i>Does not include gas source.</i>	
CAL-2000-LT	
CAL-LT-CL2-10	Chlorine (Cl <sub>2</sub> ) specify ppm & flow rate, 10 hours use
CAL-LT-H2-10	Hydrogen (H <sub>2</sub> ) specify ppm & flow rate, 10 hours use
CAL-LT-H2S-10	Hydrogen sulphide (H <sub>2</sub> S) specify ppm & flow rate, 10 hours of use
CAL-LT-HCN-10	Hydrogen cyanide (HCN) specify ppm & flow rate, 10 hours of use
CAL-LT-CL2-25	Chlorine (Cl <sub>2</sub> ) specify ppm & flow rate, 25 hours use
CAL-LT-H2-25	Hydrogen (H <sub>2</sub> ) specify ppm & flow rate, 25 hours use
CAL-LT-H2S-25	Hydrogen sulphide (H <sub>2</sub> S) specify ppm & flow rate, 25 hours of use
CAL-LT-HCN-25	Hydrogen cyanide (HCN) specify ppm & flow rate, 25 hours of use

## ACCESSORIES

FILTER-1	Replacement charcoal filter element, single
FILTER-12	Replacement charcoal filter element, 12 pack

