

# ECHO 2 / 4

## Detection unit

Wall mount controllers  
Continuous monitoring of toxic  
and/or combustible gases

The ECHO 2/4 is a wall mount control panel offering a cost effective solution for light industrial applications. The unit combines ease of installation with an intuitive interface giving low cost maintenance.

### Easy installation

The ECHO 2/4 detection unit can be easily installed without specific tools.

System configuration is achieved using a keypad and a friendly user interface.

### Flexibility

The ECHO 2/4 controllers can be interfaced with all SIMTRONICS detectors: combustible gas detectors (4-20 mA or 3 wire mV Wheatstone bridge), toxic gas detectors (for hazardous areas or not) with 2 or 3 wires and flame detectors. They are also designed to interface with third party products having 4-20 mA or relay outputs.

The ECHO 2/4 provides the following outputs, as standard. 4 adjustable alarm thresholds per channel, Modbus output, configurable relays (zoning).

### Features

Wall mounted unit

ModBus interface

Integral buzzer

Configurable relays

8 relay external module

High power relays

### Benefits

Self contained, no cabinet or rack

Data handling processed by PLCs

No need for additional sounder

Flexible outputs for third party interfaces

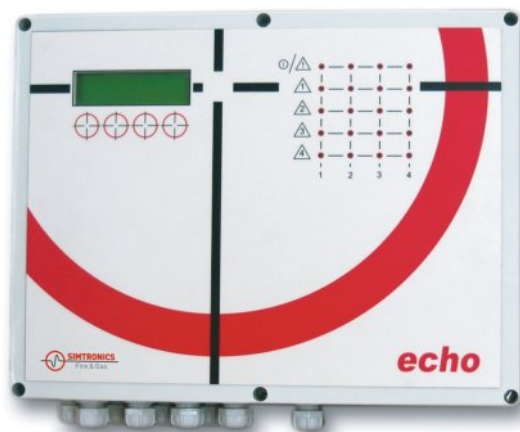
Additional flexibility to third party systems

Optional control of flashing beacons, sounder beacons or solenoid valves

### Applications

The ECHO 2/4 is ideal for light industrial or service sector applications, such as:

- Laboratories
- Boiler rooms
- Wastewater treatment plants
- Solvent storage



## Technical data

### GENERAL

Mounting Wall mounted enclosure  
 Inputs 4-20mA or mV Wheatstone bridge

### PERFORMANCES

Capacity 2 or 4 channels  
 Display Digital on LCD with back-lit screen  
 - Number of channels  
 - Measured value  
 - Units

LED display  
 - Green: healthy  
 - Red: high and low alarms  
 - Yellow: fault or alarm check

Measurement ranges Configurable  
 - ppm, %LEL, %Vol., others

Alarm thresholds 4 upper and lower alarm levels by measurement channel

Keyboard Test key  
 [check of the controller sounder and visual devices]  
 - Acknowledge key

Buzzer Integral

### OUTPUT SIGNAL

Relay outputs 5 integral relays  
 - 1 general fault  
 - 4 configurable alarm relays

Relay rating 230 V AC - 2A  
 - Optional 8 relay expansion module  
 (max. capacity 64 configurable relays, max. distance between controller and relay module 2km)

Digital output RS232 ModBus  
 - Option RS485

Remote acknowledge function

### ELECTRICAL

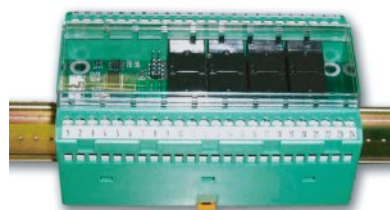
Power supply 115 V AC or 230 V AC or 24 V DC  
 - Option Integral battery back-up

### ENVIRONMENTAL

Temperatures  
 - Storage -20°C to +70°C  
 - Operational 0°C to +45°C  
 Humidity 90% RH (non-condensing)

### HOUSING

Wall mounted 315 x 230 x 90 mm (l, w, d)  
 Connection Cable gland + terminal block



8 relay expansion module

### APPROVALS

LOW VOLTAGE 73/23 CEE, 93/68 CEE directive and ATEX directive  
 EN 61779-1:2000, EN 61779-4:2000,  
 EN 61779-5:2000, CEI EN 60065 (Ex CEI  
 1213), CEI EN 60335-1

ELECTROMAGNETIC COMPATIBILITY 89/336 CEE directive  
 EN 50081-1, EN 50082-1

### REFERENCES AND OPTIONS

ECHO 2 2 measurement channel units  
 ECHO 4 4 measurement channel units  
 MODBAT Optional integral battery back-up  
 MODREL 8 relay expansion module

### OTHER ECHO LINE PRODUCTS

ECHO 28 Expandable unit 4 to 28 channels  
 ET08 Toxic gas detector  
 E008 Oxygen depletion detector  
 EX05 Combustible gas detector  
 SAMSYS Sampling detection units CO/NO<sub>2</sub> for car parks