ENGINEERING PROD.

GASPOST SENSORS/TRANSMITTERS

ECH-ST Series
February 2012

Carbon Monoxide (CO), Nitrogen Dioxide (NO_2), Oxygen (O_2), Ammonia (NH_3), Hydrogen (H_2), Hydrogen Sulfide (H_2S), Sulphur Dioxide (SO_2), Chlorine (Cl2), etc.

Features

- High-accuracy electrochemical cell sensor
- Two-wire, loop-powered 4-20mA analog output
- Optional 0-1V DC, 0-5V DC or 0- 10V DC analog output with 10-Step bar-graph display of gas levels
- NEMA 3 robust enclosure
- Microprocessor-based control
- Remote sensor/transceiver on a RS-485 communication network compatible with Acme's popular CEL-Series centralized multipoint/multi-gas detection and control systems

Applications

- Energy savings through the intermittent operation of ventilation equipment in enclosed areas
- Commercial or industrial locations where a sudden build-up of toxic gases may occur
- Car parking and bus maintenance garages, tunnels, warehouses, etc.
- Food processing and bottling plants, wastewater treatment plants, steel mills, cryogenic laboratories, incineration rooms, etc.
- Stand-alone with standard analog outputs for direct connection to the existing Building Management System (BMS) or DDCS

The Acme Gaspost toxic gas sensor/transmitter measures the concentration of the target gas in an enclosed area and produces a proportional analog output signal.

The 4-20mA transmitter is designed for standard 2-wire loop-powered operation where the output is supplied via the same pair of wires as the power supply.

The four-wire version of the gaspost is available for all other output signals other than 4-20mA.

The Gaspost employs a range of diffusion-type electrochemical sensors capable of detecting a broad range of toxic and combustible gases. It provides instantaneous detection of these componds and has long term accuracy and trouble free operation.

Designed to act as fixed in-situ safety monitors, the Gaspost transmitters automatically operate the mechanical ventilation system of a facility upon detection of hazardous gases, thereby protecting occupants, personnel and gas-sensitive goods and products.

With the increased use of gas detection in maintenance and industrial facilities, the Gaspost allows installers and users to meet code requirements in an economical fashion using commercial-grade gas detection equipment.

The Gaspost contains all the well-known standard features of ACME's gas detection line; a robust enclosure, the latest sensor technology and state-of-the-art electronics. For more versatile gas detection options, consult the **ACME** binder or website.

Standard unit specifications

GASES DETECTED: CO, NO_2, O_2, NH_3, H_2, H_2S, CL_2, SO_2,

SENSOR TECHNOLOGY: 3-electrode electrochemical cell

SENSING METHOD: Diffusion

POWER REQUIREMENTS: 18-36V DC strictly for the loop-powered 4-20mA model, 24V AC 50/60Hz for other models

OUTPUTS: 4-20mA
0-1V DC
0-5V DC
0-10V DC
RS-485

OPERATING TEMP.: -4°F to 104°F (-20°C to +40°C)*

HUMIDITY RANGE: 15-90% RH

ACCURACY: +/- 5% of calibrated value

REPEATABILITY: 2% of signal

RESPONSE TIME (T90%): < 30 seconds

EXPECTED LIFETIME: 7 years for CO only;
2 years for other gases.

ENCLOSURE: NEMA 3
Cast Aluminum
Surface mounting

DIMENSIONS: 7" x 5.25"x 2.25"
(175mm x 131mm x 56mm)

* Extended temperature ranges available.

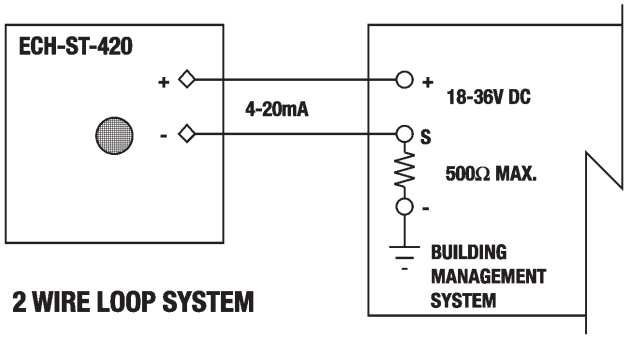
Ordering Information

MODEL NUMBER	GAS DETECTED	RANGE
NH3-ST-X*	Ammonia	0-100PPM
CO-ST-X*	Carbon Monoxide	0-200PPM
H2-ST-X*	Hydrogen	0-1000PPM
H2S-ST-X*	Hydrogen Sulfide	0-200PPM
NO2-ST-X*	Nitrogen Dioxide	0-10PPM
O2-ST-X*	Oxygen	0-25%
CL2-ST-X*	Chlorine	0-5PPM
SO2-ST-X*	Sulphur Dioxide	0-10PPM

Output Signal and other Options

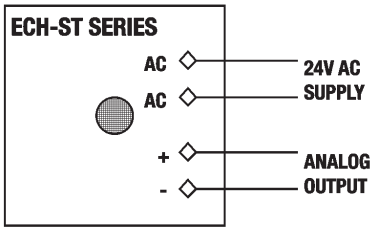
*X	OUTPUT SIGNAL
420	4-20mA, 2-wire loop-powered, 500Ω max
001	0-1V DC, 10KΩ min
005	0-5V DC, 10KΩ min
010	0-10V DC, 10KΩ min
485	RS-485 for CEL systems only

Typical Wiring Diagram for 2-wire 4-20mA



2 WIRE LOOP SYSTEM

Typical Wiring Diagram for 4-wire



4 WIRE SYSTEM

IN THE U.S.A.
ACME ENGINEERING PROD. INC.
Trimex Ind. Bldg., PMB #10
2330 State Route 11
Mooers, N.Y. 12958
Tel. : (518) 236-5659
Fax : (518) 236-6941

IN CANADA
ACME ENGINEERING PROD. LTD.
5706 Royalmount Ave.,
Montreal, Quebec
H4P 1K5
Tel. : (514) 342-5656
Fax : (514) 342-3131

E-mail : info@acmeprod.com • www.acmeprod.com

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