



# City Technology Limited

www.citytech.com

Electrochemical / Catalytic / Infrared Sensors

## Electrochemical Sensors

Gas specific electrochemical sensors can be used to detect the majority of common toxic gases such as CO, H<sub>2</sub>S, Cl<sub>2</sub> in a wide variety of safety applications. Electrochemical sensors are compact, require very little power, exhibit excellent linearity and repeatability and generally have a long life span (typically one to three years). Response times, denoted as T<sub>90</sub>, i.e. time to reach 90% of the final response, are typically 30-60 seconds and minimum detection limits range from 0.02 to 50ppm depending upon target gas type.



## Catalytic Sensors

City Technology's Catalytic sensors (also known as CITipels) are catalytic oxidation sensors designed to measure combustible gases (or vapours) at concentration below the Lower Explosion Limit (LEL). These can be used to give a warning prior to an explosive atmosphere building up.



## Infra-Red

Many combustible gases have absorption bands in the infrared region of the electromagnetic spectrum of light and the principle of infrared absorption has been used as a laboratory analytical tool for many years.

City Technology's IR sensors (known as IRcel8) operate using the Non Dispersive Infra-Red (NDIR) absorption method, and utilise smart technology to give high performance within the compact size of the industry standard 4-series envelope.



# RARE GAS PURIFIER MODEL MP-2000

The ideal purifier for purifying argon or helium. Proven record of reliability. Thousands of units in use world-wide. The purifier of choice for spark and plasma emission spectroscopy.

SIRCAL

Specification	
Furnace temperature	880°C
Furnace warm-up time	15 minutes
Furnace temperature control	Dual thermocouple with microcontroller
Operating ambient temperature	0-40°C
Maximum recommended flowrate	10 liters/min
Minimum inlet pressure	1 bar (if pressure sensor fitted)
Maximum inlet pressure	17 bar
Gas connections	Plug-in gas connectors for 1/4" tube is standard 5mm plug-in connectors as optional alternative.
Impurities removed	Oxygen, nitrogen, hydrogen, hydrocarbons, carbon monoxide carbon dioxide and moisture.
Electrical supply	2 models available 230V, 1000 watts, 50 - 60Hz 110V, 1000 watts, 50 - 60Hz
Dimensions (mm)	642 (h) x 349 (w) x 218 (d)
Weight	16kg (42.5 lb)



# PUSH BUTTON REGULATOR

## SINGLE STAGE ESN

The Push Button Regulator features a single-stage design, which allows delivery flow to remain consistent as cylinder pressure declines. Providing the end user with specific, manually timed flows throughout the life of their cylinder with minimal flow loss or gain.



# FIXED FLOW REGULATORS

Brass Nickel Plated & Stainless Steel



# DEMAND FLOW REGULATOR

**UMTE EAT AMOUNT OF GA** With its single-stage design, the Demand Flow Regulator works together with instruments that utilize a pump to draw the calibration gas. This action will provide the exact amount of gas that the instrument pump requires.



**EASY TO USE.** The Demand Flow Regulator was designed to be simple to use, leading to quick and easy calibration. Since calibration is so easy, this leads to the elimination of the need for sample bags, special operator training, or flow meters.

# CONSTANT FLOW REGULATOR

## SINGLE STAGE ESN

The Constant Flow Regulator is an economical regulator with a single-stage design that delivers a consistent, fixed flow rate of gas.

## SPECIFIED FLOW RATE.

The Constant Flow Regulator allows the user to specify the fixed flow rate of the regulator. This provides the user the opportunity to have an array of fixed flow regulators at their disposal to assist them in various applications.





- NIST APPROVED
- ISO17025 APPROVED GAS MIXTURES
- EMBEDDED BARCODE FOR TRACEABILITY ON EVERY CYLINDER
- SUPPLIED WITH WORLD'S MOST RELIABLE REGULATORS
- BEST-IN-CLASS QUALITY PROCESS
- LOWEST RETURN RATE IN THE INDUSTRY
- LONGEST SHELF LIFE/WARRANTY IN THE INDUSTRY
- STATE-OF-THE-ART MANUFACTURING FACILITY



## Handheld gas generators at ppm levels, cost effective and safe

One box— up to eight gases

- Ammonia
- Hydrogen
- HCN
- NO2
- Ozone
- Chlorine
- Chlorine Dioxide



- Easy to transport
- PPM, even PPB levels
- Simple to use
- Robust
- No shelf lives
- NIST traceable



## ACD *Advanced Calibration Designs, Inc.*

[www.gasacd.com](http://www.gasacd.com)

### Calibration Solutions for Toxic Gas Detectors

Chlorine Hydrogen Hydrogen Sulfide / HydrogenCyanide Ammonia Chlorine Dioxide

**The ACD Advantage :** The only hand held source for GLO2

NIST traceable and comply with ISO 6145-11

Multiple concentrations from a single unit

No degradation while on the shelf Non hazardous disposal and shipment

ACD's line of calibration gas generators provide unmatched versatility and reliability in a small lightweight hand held package.

ACD delivers confidence in calibration gas with a family of cost effective solutions for any sized detection network. If you are calibrating a single point or 100 points, once a week or once a year, ACD has the lowest cost, most reliable solution for toxic and corrosive calibration gases.

