Manufacturers' Representative:

![CAPITAL ENERGY EQUIPMENT, INC.]

BETTER IAQ SOLUTIONS
tel. (703) 437-8161
info@capitalenergyequipment.com

Critical
Environment
Technologies™

ANALOG OR DIGITAL GAS DETECTORS DATASHEET

cGas DETECTOR for Indoor Public Spaces

FIXED SYSTEMS

Designed for use in publicly occupied and frequented spaces. Ideal for use where integrated demand controlled ventilation (DCV) is used for air quality and energy savings; for continuous monitoring of refrigerants where high-efficiency, high volume refrigerant cooling and heating systems (VRF) are used to keep the indoor environment comfortable; and for other continuous monitoring of hazardous gases in publicly frequented areas. The low profile, aesthetically pleasing enclosure is designed to reduce the noticeability of the device by the public eye. It is secured by a mounting plate that can be mounted proud of the wall or flush with the wall using a junction box.

Both the analog and digital models are powered by 24 VDC or ground referenced AC, come with an LCD display, temperature compensation and thermal resetting fuse. Sensor replacement is easy with true Plug & Play smart sensors that arrive pre-calibrated. The firmware and configuration can be upgraded in the field using the USB connection.

The digital models are user configurable in the field for BACnet® MS-TP RS-485 or Modbus® RTU RS-485 output for communicating with a controller, Building Automation System or other control panel.

Both the analog and digital models may be configured with an internal gas sensor or a remote refrigerant sensor (dongle). The internal sensor model is ideal for mounting flush with the wall. The remote refrigerant sensor model has a 9m / 29.5ft dongle cable that is ideal for use in packaged terminal air conditioner (PTAC) applications.
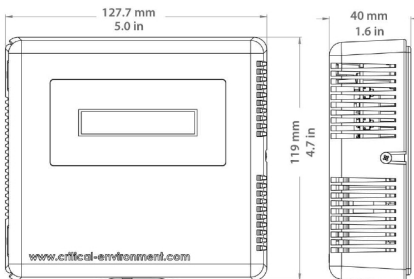
KEY FEATURES

» One 4-20 mA analog output, or user configurable Modbus® RS-485 RTU or BACnet® MS/ TP communication protocols for communication with a Controller or Building Automation System (BAS)
» Easy Plug & Play Smart Sensor replacement at end of life
» Pre-calibrated replacement sensors
» Bright LCD display
» Option -RLY*: One SPDT dry contact relay, rated 30 volts, 2 amps max
» Option -RHT*: Relative Humidity & Temperature sensor
» Internal PM2.5 particulate sensor available
» Low profile to reduce noticeability in public spaces
» USB port for configuration changes and firmware upgrades
» RoHS compliant circuit board

APPLICATIONS

» Hotels
» Office Buildings
» Hospitals
» Apartment Buildings
» Retirement Homes
» Theaters / Auditoriums
» Schools / Universities, Dormitories
» ... and many more

TECHNICAL DRAWING

TECHNICAL SPECIFICATIONS

MECHANICAL

Enclosure	White ABS / Polycarbonate, low profile with mounting plate
Weight	400 g / 14 oz
Size	127.7 x 119 x 40 mm / 5.0 x 4.7 x 1.6 inches
Dongle Cable Length	9m / 29.5ft (only available with the CGAS-AP-RD and CGAS-DP-RD models)

USER INTERFACE

Display	2-line by 16 character graphic LCD
Push Buttons	Initiate calibration and menu options with internal UP, DOWN and ENTER push buttons
USB Port	Internal port for USB memory stick for field configuration updated / firmware upgrades
Audible Alarm	none

INPUT / OUTPUT

Digital Output (CGAS-DP models)	BACnet MS/TP (version 1 rev 14) RS-485 or Modbus RTU (version 1.1b3) RS-485 (user configurable in the field)
Analog Output (CGAS-AP models)	One 4-20 mA output used for gas reading
Relay (Option -RLY*)	One SPDT dry contact, rated 30 volts, 2 amps max
RH and Temperature (Option -RHT*)	User selectable DegC or DegF (analog models current output is for gas reading)