

OPERA Inc.

60xx Series

Commercial Gas Monitor

A monitoring system that combines the latest technology in gas sensing with advanced digital networking features to simplify installation and reduce costs.

A very intelligent peer-to-peer communication protocol gives users unparalleled flexibility to configure and install a complete ventilation control system with only one monitor or dozens operating in multiple ventilation zones. Building management systems, if used on a project, are easily interfaced with either analogue, binary or BACnet MS/TP outputs.

Backed by Opera's 35+ years of specialization in the field, controlling toxic gases in commercial buildings.



KEY BENEFITS



User friendly set up and commissioning, non-proprietary



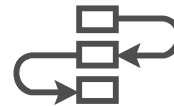
Stand-alone operation plus integration with BMS



Reduced cabling with daisy-chain network



Field replaceable calibrated sensor modules



Simplified field calibration procedure



Rugged construction for harsh commercial use

APPLICATIONS

Parking garages, bus and rail terminals, automobile dealerships, hospital ambulance bays, loading docks, vapors from soil contamination, arenas/stadiums, refrigerant gas leaks, on-demand air for meeting rooms, and warehousing.



SPECIFICATIONS

Mechanical

Mounting Low profile flush on wall
 Entries 2 top, 2 bottom, 1 rear -1/2 inch EMT
 Size 7.7" (19cm) x 4.8" (12cm) x 1.9" 5 (cm)
 Weight 0.93 lb (420g)
 Enclosure Flame resistant polycarbonate ABS
 UL94 V0, 5VB, and 5VA for indoor use

Environmental

Operating temp. -20 °C to 40 °C (-4 °F to 104 °F)
 Installation category II, pollution degree 2
 Altitude 2000m
 Humidity Max 80% rh. 80% to temperatures up to 31°C (88°F) decreasing linearity to 50% rh at 40°C (104°F)

Electrical

Power 24Vac 50/60 Hz (17-28Vac) 210 ma, 5Va
 Fuse Thermal PTC, auto-reset
 Communication 2 conductor twisted shielded 18 to 24 gauge, CAN (32 units max) MS/TP (127 units max)

Inputs/outputs

Binary input External limit switch, confirmation of action
 Analogue outputs Model -A, 2 x 4-20ma or 2-10V
 Relay outputs 2 SPDT model -B, 1 SPDT -A delays on/off, 0-999 seconds
 Relay capacity 125Vac non-inductive
 Digital Networks CAN, BACnet MS/TP

User Interface

Back-lit LCD display Gas concentration, system status
 LED alarm indicators Alarm 1 and 2, red
 Strobe Built-in white strobe for level 3
 Fan-on over-ride 5-60 minutes
 Ventilation-cycle mode Maintains minimum air changes
 Audible alarm 85 db at 1 meter
 4-button key-pad Password controlled menu driven options

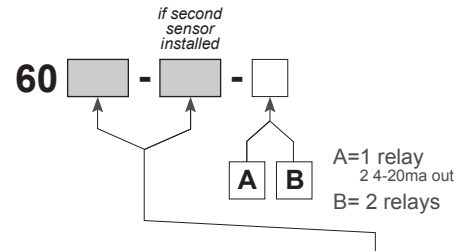
Certifications

Listed CSA C22.2 205-17
 CSA C22.2 61010-1, conforms to UL61010-1
 CO sensor UL-2075 listed component
 BACnet Testing Laboratories listed

Sensing

Sensing principle Diffusion
 Electrochemical for toxics
 Catalytic for combustibles
 Infrared or MOS for refrigerants

Model Number Guide



Gas	Range	Type
CO	0-100 ppm	02
CO	0-250 ppm	02-250
CO _{ni} H ₂	0-250 ppm	02niH2-250
NO ₂	0-10 ppm	14
VOC	0-1000 ppm	01
CO ₂	0-2000 ppm	15
CO ₂	0-5000 ppm	15-5000
CO ₂	0-10,000 ppm	15-10000
HCFC		13
HFC		20
O ₂ leak	0-50%	22
O ₂ loss	0-50%	23
H ₂ O	0-100% RH	25
H ₂	0-50% LEL	08
H ₂ S	0-50 ppm	16
CH ₄	0-50% LEL	05
C ₃ H ₈	0-50% LEL	06
NH ₃	0-250 ppm	04
CL ₂	0-10 ppm	17

