

E³Point SPECIFICATIONS

Toxic and Combustible Gas Detector Standalone Platform (Single or Dual-Gas Monitoring)



General Specifications

Uses	Wall or duct-mounted gas detector for monitoring carbon monoxide (CO), nitrogen dioxide (NO ₂), oxygen (O ₂), methane (CH ₄), hydrogen (H ₂), hydrogen sulphide (H ₂ S), and propane (C ₃ H ₈), installed as a standalone device with single-gas or dual-gas monitoring. (Note: E³Point standalone version replaces Vulcain models VA201T, VA201M and VA301M)
Size	20.56 x 14.90 x 6.72cm (8.09 x 5.87 x 2.65") (H x W x D); Remote Sensor: 3.5 x 4.5 x 6.5 cm (1.36 x 1.75 x 2.56")
Power Requirement	24 Vac nominal (17-27Vac), 50/60 Hz, 0.4A; 24Vdc nominal (20-38Vdc); with remote sensor: 7 W max.
Optional Main AC Input	120Vac nominal, +/- 10% (with on-board transformer)
Relay Output	2 DPDT relays, 5A @ 250Vac; 5A @ 30Vdc
Communications	4-20mA
Operating Environment	Commercial, Indoor, Extreme Temperature Environments
Operating Temperature	H ₂ S, NO ₂ , O ₂ , CH ₄ , H ₂ , C ₃ H ₈ : -40 to 50°C (-40 to 122°F) CO: -20 to 50°C (-4 to 122°F); future available CO version: -40 to 50°C (-40 to 122°F)
Sensor Type	Electrochemical cell (CO, NO ₂ , H ₂ S, O ₂); catalytic (CH ₄ , H ₂ , C ₃ H ₈)
Display	8 character, 2 line backlit LCD
Visual Indicators	Green LED: Power Amber LED 1: Alarm/Fault Amber LED 2: Alarm/Fault
Audible Alarm	85 dBA at 3 m (10 ft)
Accuracy	+/- 3% of full scale @ 25 C

Detection Ranges and Alarm Levels

Gas	Resolution	Range	Alarm A	Alarm B	Alarm C
CO (Carbon monoxide)	1 ppm	0-250 ppm	25 ppm	200 ppm	225 ppm
H₂S (Hydrogen sulfide)	0.1 ppm	0-50 ppm	10 ppm	15 ppm	20 ppm
NO₂ (Nitrogen dioxide)	0.1 ppm	0-16 ppm	0.7 ppm	2 ppm	9 ppm
O₂ (Oxygen)	0.1% vol.	0-25% vol.	19.5% vol.	22% vol.	22.5% vol.
H₂ (Hydrogen)	0.5% LEL	0-100% LEL	25% LEL	50% LEL	90% LEL
CH₄ (Methane)	0.5% LEL	0-100% LEL	25% LEL	50% LEL	90% LEL
C₃H₈ (Propane)	0.5% LEL	0-100% LEL	25% LEL	50% LEL	90% LEL

Enclosure

Polycarbonate

Certification

 CSA C22.2 No. 61010-1,
  UL 61010-1; FCC part 15; ICES-003 issue 4

ORDERING INFORMATION

Single-Gas Configuration: Base Unit, Surface-Mount

*** Base unit and sensor cartridge sold together ** Base unit only; sensor cartridge sold separately**

Part Number	Description
E3SASCO*	E ³ Point, CO sensor cartridge, Surface-mount, 24Vac/dc, -20 to 50°C (-4 to 122°F)
E3SA**	E ³ Point, Surface-mount, 4-20mA, 24Vac/dc, -40 to 50°C (-40 to 122°F)
E3SAHSCO*	E ³ Point, CO sensor cartridge, Surface-mount, 120Vac, -20 to 50°C (-4 to 122°F)
E3SAH**	E ³ Point, Surface-mount, 4-20mA, 120Vac, -40 to 50°C (-40 to 122°F)

Dual-Gas Configuration: Base Unit w/Remote Sensor Capability, Surface-Mount

Part Number	Description
E3SARSCO*	E ³ Point, CO sensor cartridge, Surface-mount, 24Vac/dc, Dual-mode, -20 to 50°C (-4 to 122°F)
E3SAR**	E ³ Point, Surface-mount, 4-20mA, 24Vac/dc, Dual-mode, -40 to 50°C (-40 to 122°F)
E3SARHSCO*	E ³ Point, CO sensor cartridge, Surface-mount, 120Vac, Dual-mode, -20 to 50°C (-4 to 122°F)
E3SARH**	E ³ Point, Surface-mount, 4-20mA, 120Vac, Dual-mode, -40 to 50°C (-40 to 122°F)

Remote Sensors (always sold with sensor cartridge included)

Part Number	Description
E3SRMCO	E ³ Point, Remote Sensor, -20 to 50°C (-4 to 122°F), Carbon Monoxide
E3SRMN02	E ³ Point, Remote Sensor, -20 to 50°C (-4 to 122°F), Nitrogen Dioxide
E3SRMH2S	E ³ Point, Remote Sensor, -20 to 50°C (-4 to 122°F), Hydrogen Sulfide
E3SRMH2	E ³ Point, Remote Sensor, -20 to 50°C (-4 to 122°F), Hydrogen
E3SRM02	E ³ Point, Remote Sensor, -20 to 50°C (-4 to 122°F), Oxygen
E3SRMM	E ³ Point, Remote Sensor, -20 to 50°C (-4 to 122°F), Methane
E3SRMP	E ³ Point, Remote Sensor, -20 to 50°C (-4 to 122°F), Propane

Stand-Alone Platform, Duct-Mount

Part Number	Description
E3DASCO*	E ³ Point, CO, Duct-mount, 24Vac/dc, -20 to 50°C (-4 to 122°F)
E3DA**	E ³ Point, Duct-mount, 4-20mA, 24Vac/dc, -40 to 50°C (-40 to 122°F)

Sensor Cartridges

Part Number	Description
E3SCO	CO Cartridge -20 to 50°C (-4 to 122°F), Carbon Monoxide
E3NO2	NO ₂ Cartridge -40 to 50°C (-40 to 122°F), Nitrogen Dioxide
E3H2S	H ₂ S Cartridge -40 to 50°C (-40 to 122°F), Hydrogen Sulfide
E3H2	H ₂ Cartridge -40 to 50°C (-40 to 122°F), Hydrogen
E3O2	O ₂ Cartridge -40 to 50°C (-40 to 122°F), Oxygen
E3M	CH ₄ Cartridge -40 to 50°C (-40 to 122°F), Methane
E3P	C ₃ H ₈ Cartridge -40 to 50°C (-40 to 122°F), Propane

EXAMPLES OF HOW TO ORDER

To order a stand-alone version, surface-mount, analog, CO detector, -20 to 50°C (-4 to 122°F): Order E3SASCO

To order a stand-alone version, surface-mount, analog, dual-gas CO + NO₂, -20 to 50°C (-4 to 122°F): Order E3SARSCO + E3SRMN02

To order a stand-alone version, duct-mount, analog, propane detector, -40 to 50°C (-40 to 122°F): Order E3DA + E3P

To order a stand-alone version, surface-mount, analog, dual-gas CO + C₃H₈, 120Vac, -20 to 50°C (-4 to 122°F): Order E3SARHSCO + E3SRMP