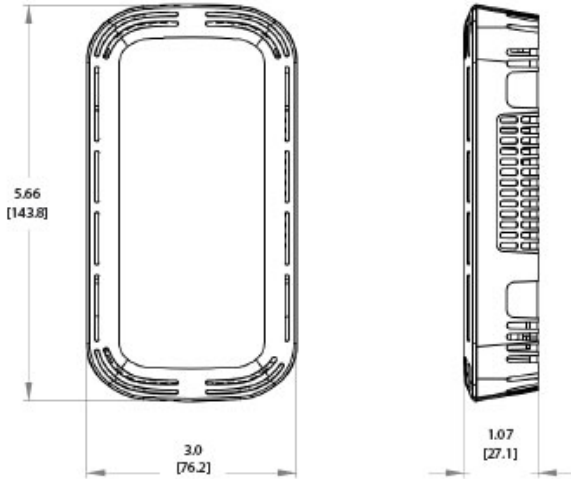
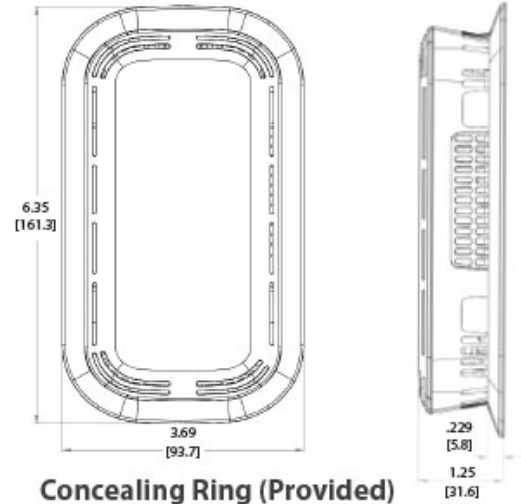




## DIMENSIONS



**Standard Surface Mount**



**Concealing Ring (Provided)**

- Conceal oversized drywall cutouts or European junction boxes

**Warning:** The datasheet is designed for reference only. Refer to installation instructions that accompany the product and heed all safety instructions. Product improvement is a continuing process at Senva. Changes may occur to products without prior notice.

## SPECIFICATIONS

Power Supply	Non-Display	16-30VDC/24VAC(1), 3.5W nominal, 4W max.
	Display or LED Ring	24-30VDC/24VAC(1), 4.3W nominal, 5W max.
Interface	OLED (optional)	1.5" Organic LED Display, 128x128, color
	Air Quality Ring	Color changing (red/yellow/green) LED Air Quality Ring
Analog Outputs (Analog or Dual version only)	Quantity	Up to 3 outputs
	Source	CO <sub>2</sub> , RH%, Temp, Temp slider, TVOC (selectable)
	Scale	0-5V, 0-10V, 4-20mA (switch selectable, programmable per output)
Protocol Output (Comms or Dual version only)	Protocol	BACnet MS/TP or Modbus RTU
	Connection	3-wire RS-485, with isolated ground
	Data Rate	9600, 19200, 38400, 57600, 76800, 115200 (switch selectable)
	Address Range	0-127
Relay (Standard except for PM models)	Type	Solid-state output, 1A @ 30VAC/DC, N.O.
	Polarity	NO/NC (selectable)
	Source	CO <sub>2</sub> setpoint, RH setpoint, Temp setpoint, TVOC setpoint, PIR motion detection, Air Quality, off (selectable)
CO <sub>2</sub> (Optional)	Type	Non-dispersive Infrared (NDIR)
	Accuracy	±(30ppm + 3% of reading) (400-2,000ppm), -10-50°C, 0-85%RH
		±(50ppm + 5% of reading) (2,000-5,000ppm), -10-50°C, 0-85%RH
		>5,000ppm consult factory
	Resolution	1 ppm
	Range	0-2,000 PPM (Default) (Programmable up to 10,000ppm)
	Response time	90 seconds to 90% reading
Sample rate	1s	
Temp and Pressure Compensation	Yes, barometric pressure readable over comms	
Relative Humidity (Optional)	Type	Digital CMOS
	Accuracy(2)	2% models, +/-2% over 0 to 80%RH range
	Resolution	0.05%RH

	Response time (3)	30s
	Sample rate	3s
	Operating range	0 to 100%RH (non-condensing)
	Operating conditions (4)	-4 to 140oF (-20 to 60° C) @ RH>90%; -4 to 176oF @ RH=50%
Temperature Transmitter (Optional)	Type	Silicon Band-gap
	Nominal Accuracy	±0.3° C (operating range)
	Maximum Accuracy (2)	±0.5° C (at 25° C), ±1.0° C
	Resolution	0.1° C
	Response time	30s
	Sample rate	3s
TVOC (Optional)	Type	MOS
	Gas	Total VOC
	Formaldehyde CH2O Sensitivity	Responsive to Formaldehyde concentrations 50-1000 ppb
	Range	0-32,000 µg/m3 (Display may be programmed to show PPB)
	Response Time	<10s
	Accuracy (5)	±20 µg/m3 + 15% at 1 to 500 µg/m3 (typical)
	Output	0-2,000 µg/m3 (default) programmable up to 32,000 µg/m3
PMx (Optional)	Type	Optical
CLASS 1 LASER PRODUCT	Size Range	PM1.0, PM2.5, PM4.0, PM10.0
	Scale	0-1,000 µg/m3
	Lower detection limit	0.3 µm
	Precision	±10 µg/m3 (0-100µg/m3); ±10% (100-1,000 µg/m3)
	Long-Term Drift	±1.25 µg/m3 / year
Carbon Monoxide	Type	Electrochemical
	Detection Range	0-200 ppm
	Accuracy	5% of reading
	Resolution	1 ppm
	Response Time	60 seconds
Ozone	Type	PMOS
	Ozone Detection Range	20-500 ppb
	Accuracy	±15% of FS @ 20° C
PIR (Optional)	Type	Passive Infrared
	Axis X field of view	140o, 15 ft (4.5m)
	Axis Y field of view	76o, 15 ft (4.5m)
Ambient Light	Type	Phototransistor
	Scale	0-100 fc (lm/ft2), readable over comms
Operating Environment	Temperature	32 to 122oF (0 to 50oC)
	Humidity	0-95% non-condensing
Enclosure	Material	ABS Plastic
	Dimensions	5.67”h x 3.00”w x 1.07”d (With concealing ring: 6.35”h x 3.69”w x 1.25”d)
Compliance	Agency	CE, RoHS

(1) One side of transformer, secondary is connected to signal common. Dedicated transformer is recommended.

(2) Models with PM sensor included achieve ±5% accuracy over 0 to 80%RH range and an additional temperature shift of up +0.5° C.

(3) Time for reaching 63% of reading at 25° C and 1 m/s airflow.

(4) Long term exposures to conditions outside normal range at high humidity may temporarily offset the RH reading (+3%RH after 60 hours).

(5) Wiring with silicone or other high VOC insulation will affect TVOC readings.

*\* Product improvement is a continual process at Senva and product features and specification may change without prior notice. Refer to instructions that accompany the product for installation and wiring.*