

# e2v

## EC4-20-NO2

### Nitrogen Dioxide Electrochemical Sensor

#### PERFORMANCE

Range ..... 0 - 20 ppm  
 Maximum overload..... 250 ppm  
 Sensitivity (see note)..... 450 - 750 nA/ppm NO2  
 Zero in air at 20 °C..... <0.9 ppm NO2  
 Resolution.....0.1 ppm NO2  
 Linearity .....linear across range  
 Response time, t90 ..... <35 s  
 Long-term output drift.....<2% signal/month  
 Warranty ..... 2 years

**Note:** This output current is negative. This is because the sensor reaction is a reduction of the target gas.

#### OPERATING CONDITIONS

Temperature range ..... -20 to +50 °C  
 Operating humidity ..... 15 - 90% RH (non-condensing)  
 Pressure range ..... 90 - 110 kPa (nominal)  
 Operating circuit..... see Electrochemical Toxic Sensor Application Note  
 Applied potential ..... 0 V  
 Storage life..... 6 months in original packaging (0 - 25 °C)

#### PHYSICAL CHARACTERISTICS

Label colour .....silver  
 Weight..... 5 g approx.  
 Dimensions .....see outline

This device is designed to be RoHS compliant.

#### CROSS-SENSITIVITY DATA

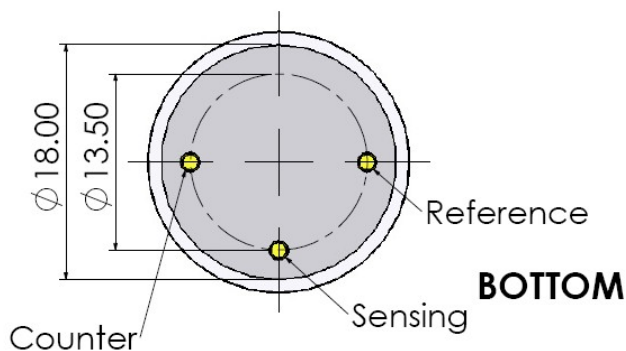
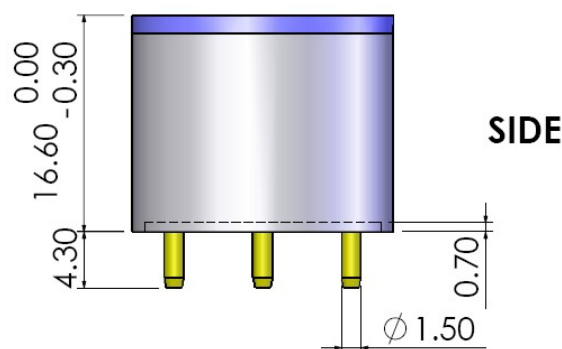
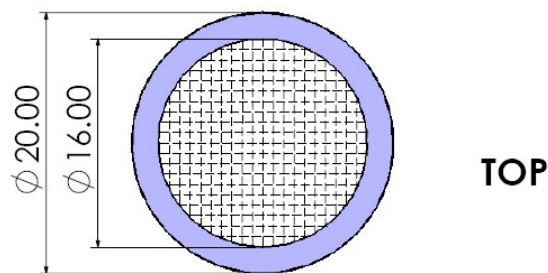
GAS	Concentration (ppm)	Sensor Response (As ppm NO2)
Carbon Monoxide	300	0
Hydrogen Sulfide	15	-1.2
Sulfur Dioxide	5	-5
Nitric Oxide	35	0
Chlorine	1	-1

#### Important Note

Do not solder to the connector pins as this may damage the sensor and thereby invalidate the warranty.

Details on recommended connector pins can be found in the Frequently Asked Questions within the Gas Sensor section of the e2v website.

#### OUTLINE



All dimensions in mm.  
 All tolerances  $\pm 0.15$ mm unless otherwise stated.

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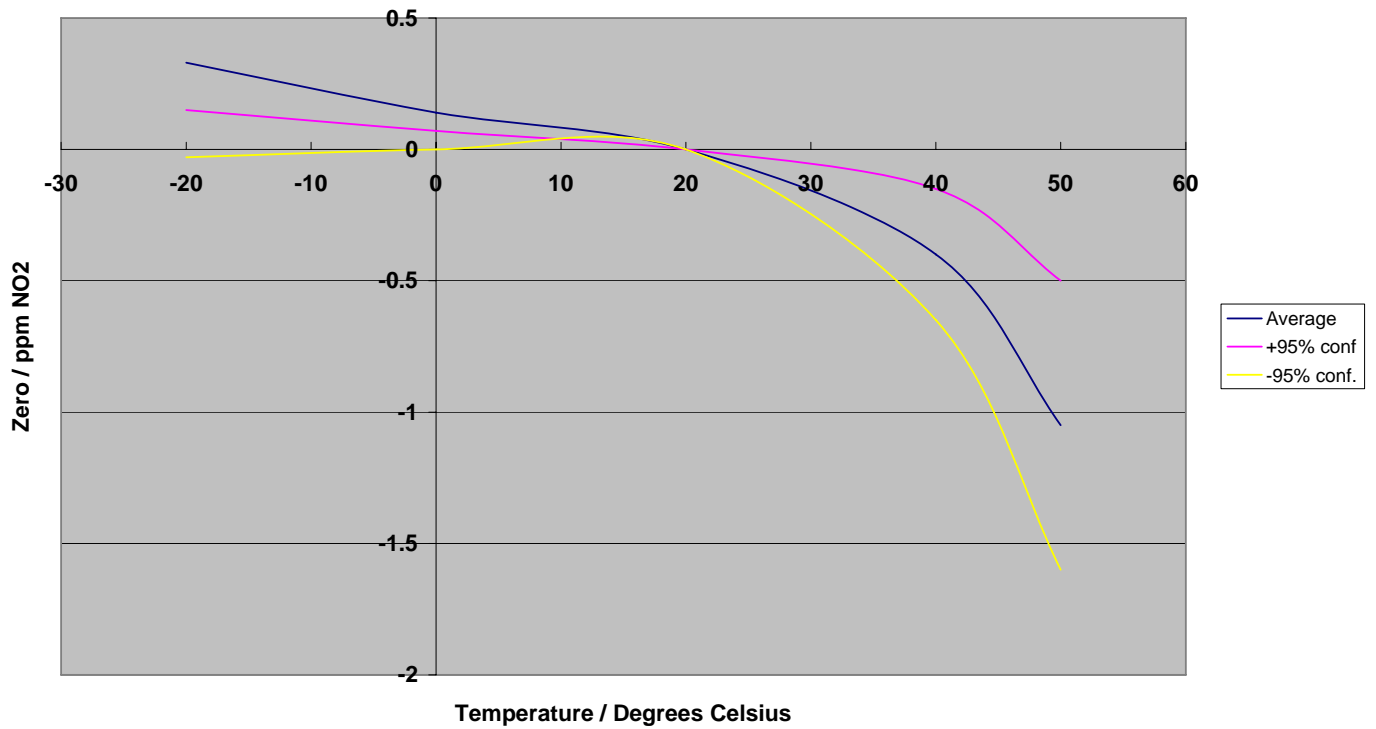
Template: DF764388A-2

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## TEMPERATURE DEPENDENCE

EC4-20-NO2 Graph of Zero vs Temperature



EC4-20-NO2 Graph of Sensitivity vs Temperature

