

# MIDAS S2 NITROGEN TRIFLUORIDE (NF<sub>3</sub>)

## Sensor Cartridge Specifications

Selectable gases	Nitrogen Trifluoride (NF <sub>3</sub> )
Cartridge Part Number	MIDAS S2-I-NF3 2-year extended warranty
Sensor Technology	Infrared sensor
Measuring Range	NF <sub>3</sub> 0 - 50ppm
Default Alarm 1	NF <sub>3</sub> 10ppm
Default Alarm 2	NF <sub>3</sub> 20ppm
LDL	NF <sub>3</sub> 6ppm
LAL	NF <sub>3</sub> 10ppm
Resolution	NF <sub>3</sub> 1ppm
Accuracy	± 20% of measured value
Response Time t <sub>62-5</sub>	Typical 20 seconds
Sensor Cartridge Life Expectancy (Expiration Period)	5 years
Operating Temperature	15°C to +35°C (32°F to 104°F)
Effect of Temperature Sensitivity	± 20% of measured value
Operating Humidity	0 to 90% non-condensing
Operating Pressure	90 – 110kPa
Calibration Gas	NF <sub>3</sub> 25ppm
Warm Up Time	< 10 minutes
Storage Temperature	+5°C to +25°C (+41°F to +77°F)

The sensor data listed is based on the test data with NF<sub>3</sub> gas under normal Lab test conditions (20-25 C, 0 - 60%RH, normal atmosphere pressure); observed performance may vary based on the actual monitoring system and the sampling conditions employed.

Make sure to use this Module after 'Zero Calibration'.



## Midas 2 Nitrogen Trifluoride (NF<sub>3</sub>) Sensor Cartridge Specifications

### CROSS SENSITIVITIES

Each Midas S2 sensor is potentially cross sensitive to other gases and this may cause a gas reading when exposed to other gases than those originally designated. The table below presents typical readings that will be observed when a new sensor cartridge is exposed to the cross sensitive gas (or a mixture of gases containing the cross sensitive species).

Gas Measured	Concentration Applied(ppm)	Reading (ppm NF <sub>3</sub> )
C <sub>3</sub> H <sub>8</sub>	10000ppm	0
AsH <sub>3</sub>	10ppm	0
CO	500ppm	0
Cl <sub>2</sub>	1ppm	0
B <sub>2</sub> H <sub>6</sub>	2ppm	0
H <sub>2</sub>	20000ppm	0
HCl	100ppm	0
HF	20ppm	0
H <sub>2</sub> S	100ppm	0
CH <sub>3</sub> OH	20000ppm	0
NO <sub>2</sub>	50ppm	0
PH <sub>3</sub>	0.6ppm	0
SO <sub>2</sub>	70ppm	0
FC3283	500ppm	0

Interference differs from cartridge to cartridge and over cell life. It is not recommended to calibrate with cross sensitivity factors. The target gas should be used for calibration.

**For more information**

[automation.honeywell.com](http://automation.honeywell.com)

**Honeywell Process  
Measurement and Control**

2101 CityWest Blvd  
Houston, TX 77042  
[www.honeywell.com](http://www.honeywell.com)

Midas 2 is a trademark of Honeywell International Inc.  
in the United States and other countries.

MIDAS S2-I-NF3 | Rev 1 | 7/24  
© 2024 Honeywell International Inc.

**Honeywell**