

## Combined Dual Gas Monitor With Bacnet MS/TP & Modbus RTU Manufactured by American Gas Safety



### Key Features:

- NFC app configuration
- Single or dual gas monitoring
- Replaceable, plug-and-play smart sensor modules
- Non-intrusive calibration
- Splash guard accessories for improved IP rating
- Modbus RTU or BACnet MS/TP (field selectable)
- 0-10V or 4-20mA output (field selectable)
- Relay output
- 24V AC/DC power supply
- Display screen and RGB LED status indication
- Gas Performance UL2075 (CO & NO2)
- Supplied calibrated
- Strong anti-interference circuit boards and RoHS compliant
- Corrosion-resistant enclosure with optional accessories
- Indoor & outdoor use (with additional weatherproof sensor covers)

### Product Overview:

The NES Series 400 is a single or dual 24V detector with RS485 BACnet MS/TP or Modbus RTU communications, offering exceptional reliability and precision. Customizable on-site, engineers can tailor its settings to fit project needs, reducing hardware and simplifying controls work to achieve the sequence of operation. It features two alarm levels, signal relay, configurable delays, and a selectable audible alarm. The LCD displays power, alarm status, gas type, concentration, address, and faults.

### Part Codes

NES400 – [S1 Gas][ Remote Option] – [S2 Gas][Remote Option]

**Gas Selection:** Select one (1) for each Gas 1 and Gas 2

Gas Type	Code
No Sensor	Leave Blank
Carbon Monoxide (CO)	CO
Nitrogen Dioxide (NO2)	NO2
Natural Gas (NG)	NG
Hydrogen (H2)	H2
Butane / Propane (LPG)	LPG
Oxygen (O2)	O2

### RS-485 Adjustable Settings

- Alarm 1 & 2 Thresholds (Low/High)
- Relay Alarm Activation
- Audible Buzzer (On/Off)
- Service/Calibration LED Indication



**Remote Options:** Add "R" to end of Gas Code **Example** NES400-H2R

Configuration	Example	Explanation
Local Sensor	NO2	Gas sensor inside GM100 enclosure
Remote Sensor	NO2R	Gas sensor installed remotely

**Splash Guard Option:** Order GM-SPL

Option	Code
Splash Guard	GM-SPL

## Combined Dual Gas Monitor With Bacnet MS/TP & Modbus RTU

### Mechanical

Material	ABS Polycarbonate 'FR' Flame Retardant - Rated IP65 with Splash Guard
Length	5.95"
Width	4.37"
Depth	1.97"
Weight	Approx 0.15lbs

### Electrical

Power – Low Voltage	Nominal 24V AC/DC
Internal Fuse	N/A
Wiring (RS485)	127 Units

### IO

Digital Output	BACnet MS/TP or Modbus RTU RS485
SPST Signal Relay Output	70mA 30V

### Environmental

Operating Temperature	-4° to 122°F
Storage Temperature	32° to 86°F
Humidity	15 to 90% RH (continuous) 0-99% (intermittent) non-condensing.
Atmospheric Pressure	2000ft
Installation Category	III 24V (UL/CSA/IEC/EN/BS 61010-1)
Pollution Degree	2 (UL/CSA/IEC/EN/BS 61010-1)

### User Interface

LCD Display	RGB 16 Character – 2 Lines (32)
LED Indications	OK / Alarm 1 / Alarm 2 / Fault / Calibration
Audible Alarm	Internal >85dB
Button(s)	Silence / Acknowledge Alarm & Reset / Relay Switch / Settings Navigation

### Certification/Conformance

Safety	UL/CSA/IEC/EN/BS 61010-1
Electromagnetic Compatibility	Directive 2014/30/EU / Regulation 2016 / BS 50270
FCC	This device complies with part 15 of the FCC Rules, Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Gas Performance	UL 2075

### Default Alarm

Gas	AL1	AL1 Type	AL2	AL2 Type	Range
Carbon Monoxide (CO)	25ppm	Rising	100ppm	Rising	10 - 250ppm
Nitrogen Dioxide (NO2)	0.5ppm	Rising	2ppm	Rising	0.5 - 10ppm
Natural Gas (NG)	8% LEL	Rising	10% LEL	Rising	3.0 - 90% LEL
Hydrogen (H2)	8% LEL	Rising	10% LEL	Rising	3.0 - 90% LEL
Butane / Propane (LPG)	8% LEL	Rising	10% LEL	Rising	3.0 - 90% LEL
Oxygen (O2)	19.5% v/v	Falling	18.5% / 23% v/v	Falling/Rising	0 - 25% v/v