# PRODUCT SPEC SHEET NES SERIES 400 Dual Gas Monitor

## 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 Sensor

Splash Guard

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

| Configuration | Example | Explanation |
|---|---|---|
| Local Sensor | NO2 | Gas sensor inside NES 400 enclosure |
| Remote Sensor | NO2R | Gas sensor installed remotely |

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

| Option | Code |
|---|---|
| Splash Guard | GM-SPL |

# PRODUCT SPEC SHEET NES SERIES 400 Dual Gas Monitor

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### 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 |