

GENie Ammonia Calibration Gas System



The GENie-NH3 is a portable, hand-held, accurate gas calibration instrument for calibrating ammonia gas sensors. It uses a small, cylindrical sealed glass ampule that when broken and placed in the device, emits a small quantity of gas that is user adjustable allowing for the calibration of almost any ammonia detector on the market.

The instrument requires a base unit (which provides a micro-processor based user interface and control system), an Ammonia (NH₃) generating module and Ammonia gas source. The LCD display is capable of showing the menu structure in English, French, German and Spanish. It is powered by 4 heavy duty AA alkaline batteries that provide approximately 6 hours of continuous operation (at 0.5 LPM). It comes with 12 gas vials that do not have a shelf life and are non-hazardous to transport. Each vial will provide up to 8 hours of continuous calibration gas before the empty vial is discarded. The delivery hose comes standard with the unit offering a 1.5 m long x 4.76 mm OD (5 ft long x 3/16 in OD) Teflon lined hose for delivering the gas to the sensor or calibration adaptor. It also comes with a nylon carrying case for convenience and protection. The front of the carrying case is clear plastic, allowing the unit to be operated while within the case.

The GENie-NH3 should be sent back to the factory after 100 hours of use or annually for calibration to ensure proper operation of the ultraviolet light source, the flow meter and to replace the internal charcoal filter to promote optimum performance.

KEY FEATURES

- » Hand held, rugged design
- » 96 hours of use / 1,000 ppm hours of gas
- » User adjustable gas concentration outputs
- » Disposable gas vials do not expire and are non-hazardous for transport
- » Simple to use
- » Traceable to NIST standards



TECHNICAL SPECIFICATIONS

GAS TYPE

| | |
|----------------------------|---------------------------------|
| Ammonia (NH ₃) | Calibration range 10 to 500 ppm |
| Source Life | 8 hours per QCV vial |
| Accuracy | ±10% |
| Repeatability | ±5% |

MECHANICAL

| | |
|-----------------------------------|-----------------------------------------------------------------------------------|
| Weight | 907 g (2 lb) |
| Size | 127 mm W x 98.55 mm H x 79.5 mm D (5.0" W x 3.88" H x 3.13" D) |
| Tubing (supplied) | 1.5 m long x 4.76 mm OD (5 ft long x 3/16 in OD) Teflon lined hose |
| Flow Rate | Range 0.2 to 1.0 LPM |
| Ultraviolet Light Source Lifespan | 500 hours of operation (should be factory calibrated every 100 hours or annually) |

ELECTRICAL

| | |
|--------------|----------------------------|
| Power Source | 4 alkaline AA batteries |
| Battery Life | approximately 5 to 6 hours |
| Warm-up Time | < 30 seconds |

USER INTERFACE

| | |
|----------------|--------------------------------------------|
| Display | LCD display |
| Push Buttons | SELECT and POWER push button type switches |
| Menu Languages | English, French, German, Spanish |

ENVIRONMENTAL

| | |
|-----------------------|--------------------------------|
| Operating Temperature | 0°C to 50°C (32°F to 122°F) |
| Humidity | 0 - 100% RH (intermittent use) |

CERTIFICATIONS

Conforms to: EC Directive 89/336/EEC in accordance with the provisions of Statutory Instrument 2372
 Conforms to: EN 50081-1 and EN 50082-1

PRODUCT CODES

| | |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GENIE-BASE | Base Unit for all GENIE Calibration Systems (required if not purchasing the GENIE-NH3-KIT) |
| GENIE-NH3 | Electrochemical module with one pack of 12 Ammonia (NH ₃) vials, includes a 1.5 m long x 4.76 mm OD (5 ft x 3/16 in OD) Teflon lined hose, nylon carrying case, magnetic screwdriver, batteries and manual. <i>Does not include Base unit.</i> |
| QCV-NH3 | Replacement 12 pack Ammonia (NH ₃) gas source vials |
| GENIE-NH3-KIT | Complete System - Includes base unit, QC-1 module and one 12 pack of Ammonia vials, a 1.5 m long x 4.76 mm OD (5 ft x 3/16 in OD) Teflon lined hose, nylon carrying case, magnetic screwdriver, batteries and manual |