mPower Electronics
Making Powerful Senses

HF Calibrator

For MP100 HF Monitor

PN 006-0003-M01

Quick Start Guide

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Specifications

Concentrations	1-15 ppm
Accuracy	±15% (new)
Operating Life	200 calibrations or 6 months, whichever is first*
Temperature	15-30°C (59-86°F)
Storage Temp.	10-30°C (50-86°F)
Pressure	1±0.1 atm
Humidity	15-90% non-condensing
Weight	220 g
Height	15.7 cm (6.2 in.)
Diameter	11.4 cm (4.5 in.)
Power	3 AAA batteries or 5V/2A charger with USB C fitting
Safety Data & Disposal Info	https://www.mpowerinc.com/materials-safety-data-sheets/

* The unit may be used for bump testing for up to one year, but after 6 months may no longer be accurate enough for calibrations.

Overview

The HF Generator has a reservoir that contains a sorbent material onto which HF is impregnated. It creates a constant HF gas concentration in the 1-15 ppm range, depending on the temperature. It is designed for bump test and calibration of diffusion gas monitors and cannot be used for pumped instruments because there is no flowing gas. The outlet fitting is specifically made to fit mPower UNI gas monitors.

Power Connection

Power the unit with 3 AAA alkaline batteries. These typically last past the 6-month life of the unit. Or use a 5V/2A charger with USB C connector.

Operation

1. Allow the unit at least at least 30 minutes at ambient temperature for the concentration reading to stabilize.
2. Adjust the UNI Cal Set value to match the concentration reading on the calibrator.
3. Perform a zero calibration on the UNI.
4. Place a block or piece of foam about 1 cm (3/8”) thick on the battery compartment.
5. Unscrew the calibrator cap and set aside.
6. Start the UNI calibration timing and quickly place the UNI face down with the sensor head onto the

Operation (continued)

HF gas opening and the display supported by the 1-cm block/foam, and open the valve.

7. Start a stopwatch to measure when the calibration time is complete before removing the UNI. Add one minute if it is desired to see the final span reading, to allow the UNI display to automatically revert to the gas reading. Read immediately, as this value will drop quickly once the UNI is removed from the gas source.
8. Close the valve and screw the cap back on.

CAUTION ⚠ Handle the unit carefully!
DO NOT SHAKE OR TIP UPSIDE DOWN as this may cause damage and will not help speed up the concentration equilibration process.