# Release Notes: F-900

## Version 4.7.0.7

Release Date: August 9, 2017

Firmware compatible with hardware version 6 and higher only (F-900-006-XXXXX)

**Additions**

- Compatibility with G.A.S Software. Visit https://felixinstruments.com/support/F-900/software/ to download. Known issue: CO2 and O2 labels are swapped on the software interface
- Allows set-zero with Chamber In ON (liquids chamber). To turn this feature on, goto SETUP>CALIBRATION>C2H4>OFFSET CORRECTION>USE CH_IN
- Raw data output on by default (on csv data files)

## Version 4.7.0.4

Release Date: April 4, 2017

Firmware compatible with hardware version 6 only (F-900-006-XXXXX)

**Changes**

- Flowrate block algorithm (relaxed to prevent false positives)

**Fixed**

- Fixed bug where some users got flow blocked when entering graph mode

## Version 4.7.0.2

Release Date: February 3, 2017

Firmware compatible with hardware version 6 only (F-900-006-XXXXX)

**Changes**

- Flowrate is 80 mL/min (improved battery life at this flowrate)
- On-device calibration for all sensors (no PC needed)
- GC emulation only for C2H4
- Offset correction routine is now adjustable (for C2H4)
- Switching threshold between ppb C2H4 sensor and ppm C2H4 sensor is 4.0 ppm

**Removed**

- Cell hydration
- C2H4 PPB saturation parameters
- View SDCard menu item

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## Version 4.6.6

Release Date: November 3, 2015

**Changes**

- Internal calibration procedure for CO2 sensor to improve accuracy
- The threshold that switches between C2H4 ppb and ppm sensor has been changed to 2 ppm and 3 ppm. If the concentration of C2H4 rises above 3 ppm, the C2H4 ppm sensor will be used for measurements. If it falls below 2 ppm, the C2H4 ppb sensor is used.

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## Version 4.6.1

Release Date: August 21, 2015

**Changes**

- The connection menu has been removed from setup menu. It is no longer necessary.
- The Temperature and RH parameters are automatically populated during C2H4 ppb sensor span.

**Fixes**

- Cleaning signal is ignored during offset correction
- CO2 GC emulation is improved by flushing between samples prompted by software. This is for the % CO2 sensor.

- % CO2 sensor calibration/parameters fix for concentrations greater than 20%

**Additions**
- C2H4 ppb sensor manual calibration routine added using demand flow regulator. To access this routine, navigate to: Setup > Calibration > C2H4 > PPB > Re-calibration

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# Version: 4.5.26

Release Date: July 2, 2015

**Additions**
- Terminal Block: pin 6 alerts the user of low battery, flow blocked, or measurement out of range
- Set zero (settings menu while in monitor mode): A stability check is added to this feature by checking that the signal does not change more than 40 ppb for a period of 10 minutes. The user is also asked to confirm whether KMnO4 is present in the solids chamber before beginning the "Set Zero" routine.

**Fixes**
- Improved accuracy of $CO_2$ and $O_2$ measurements in GC Emulation mode

**Changes**
- Terminal Block: pin 5 is changed from "fan" to "measure ready"

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# Version 4.5.18

Release Date: June 11, 2015

**Fixes**
- Improves the accuracy of the $CO_2$ sensor "Monitor" mode

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# Version 4.5.2

Release Date: February 26, 2015

**Additions**

- **Enable USB connection in HID mode**

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# Version 4.5.0

Release Date: January 23, 2015

**Fixes**

- Firmware bug where the gas valve and fan were turning on and off at the same time regardless of the threshold set on the setup menu; this is when using the terminal block

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