

## 1 Purpose

This document describes the differences between the new software version **MagIC Net 3.0** and its predecessor **MagIC Net 2.4**.

## 2 New features

### **New instruments**

- **930 Compact IC Flex**
  - 20 versions that can be individually configured
- **940 Professional IC Vario**
  - 28 versions that can be individually configured
- **941 Eluent Production Module**
- **942 Extension Module Vario**
  - 942.0040 Extension Module Vario HPG
  - 942.1060 Extension Module Vario ONE/Deg
  - 942.0020 Extension Module Vario Prep 2
  - 942.0070 Extension Module Vario LQH
  - 942.0300 Extension Module Vario ChS/PP
  - 942.0500 Extension Module Vario SeS/PP
- **943 Professional Thermostat / Reactor Vario**
  - 943.0110 Professional Reactor Vario
  - 943.0210 Professional Thermostat Vario
- **944 Professional UV/VIS Detector Vario**
- **945 Professional Detector Vario**
  - 945.0010 Professional Detector Vario Conductometry
  - 945.0020 Professional Detector Vario Amperometry
  - 945.0030 Professional Detector Vario - Conductometry & Amperometry
- **LPG/GSS**

### New instrument firmware

| Firmware version | Instruments                                                                                                                                                 | Comment                                                                         |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| T0712121312      | Combustion Module                                                                                                                                           | After the firmware update, a software update to MagIC Net 3.0 is also required. |
| 58580012         | 858 Professional Sample Processor<br>919 IC Autosampler plus                                                                                                | USB 3.0                                                                         |
| 58140025         | 814 USB Sample Processor                                                                                                                                    | USB 3.0                                                                         |
| 58150026         | 815 Robotic USB Sample Processor XL                                                                                                                         | USB 3.0                                                                         |
| 58460022         | 941 Eluent Production Module<br>846 Dosing Interface                                                                                                        | USB 3.0                                                                         |
| 58870013         | 944 Professional UV/VIS Detector Vario<br>887 Professional UV/VIS Detector                                                                                  | USB 3.0                                                                         |
| 58500112         | 896 Professional Detector<br>886 Professional Thermostat / Reactor<br>883 Basic IC plus<br>882 Compact IC plus<br>881 Compact IC pro<br>850 Professional IC | USB 3.0                                                                         |
| 59400100         | 945 Professional Detector Vario<br>943 Professional Thermostat / Reactor Vario<br>940 Professional IC Vario<br>930 Compact IC Flex                          | USB 3.0                                                                         |

### Operating systems

Starting with version 3.0, MagIC Net also runs on Windows 8 operating system.

### New columns

For cation analysis:

1. Metrosep C 6 - 100/4.0
2. Metrosep C 6 - 150/4.0
3. Metrosep C 6 - 250/4.0

### Configuration program part

- **Rotors** subwindow with a rotor table created by the user. In the **Devices** subwindow in the method, the rotors defined in the rotor table can be assigned to the module MSM.

### Method program part

- For instruments of the new generation (930, 940 and 942) identical modules that are present several times in an instrument are numbered.  
**Exception:** High-pressure gradient pumps are labeled with 'A' and 'B'.
- Regeneration of the suppressor with a Dosino for 930, 940, 942 (Extension Module Vario ChS/PP and Extension Module Vario SeS/PP) as well as the instruments 850, 872 (Extension Module Suppression and Extension Module Suppression - MCS), 881 and 882.
- The **Combust** time program command combusts gaseous samples.
- The **Combust** time program command contains a new subprogram: **Subprogram after the combustion**.
- When liquid samples are combusted, the post-cooling time runs simultaneously with the **Subprogram after the combustion**. The post-cooling time itself is controlled by the combustion oven.
- New method templates for cation analysis:
  - **Metrosep C 6 - 100/4.0**  
Standard conditions Metrosep C 6 - 100/4.0 6 cations (Li, Na, NH<sub>4</sub>, K, Ca, Mg)
  - **Metrosep C 6 - 150/4.0**  
Standard conditions Metrosep C 6 - 150/4.0 6 cations (Li, Na, NH<sub>4</sub>, K, Ca, Mg)
  - **Metrosep C 6 - 150/4.0**  
Standard conditions Metrosep C 6 - 250/4.0 6 cations (Li, Na, NH<sub>4</sub>, K, Ca, Mg)
- New time program command, **On/Off**, for the 850.9110 IC Amperometric Detector.

## 3 Improvements

### Configuration program part

#### ▪ Configuration ► Tools ► Options... ► Error handling

The **Emergency shut-down at hardware errors** check box is activated by default and the default option for **Shut-down hardware if messages are not acknowledged:** is **immediately**. These default settings only apply for an initial installation of MagIC Net 3.0 on a PC. After **uninstalling/installing** or an update, these two settings must be made manually, if required.

### Method program part

- Standard value of the peristaltic pump changed:
  - **+1** for 942, 940, 930, 883, 882, 881, 872, 863 and 850
  - **+3** for 919 and 858

### Workplace program part

The improvements in the Workplace program part concern the Combustion Module.

- When solid samples are combusted in a determination series, the Autosampler (MMS 5000) does no longer move back to the basic position after each individual determination. It only moves back to the basic position after the entire sample table has been processed.
- The water infeed is finished at the same time as the post-combustion. The quartz boat then moves back into the sample port.
- For single determinations, the Auto Boat Driver and the Autosampler (MMS 5000) are initialized before each determination.  
For determination series, the Auto Boat Driver and the Autosampler (MMS 5000) are initialized before the first line of the sample table is processed.

## 4 Fixed bugs and problems

### Workplace program part

- If the rack of the 814 USB Sample Processor, 815 Robotic USB Sample Processor XL, 858 Professional Sample Processor or 919 IC Autosampler plus jams in the **Move** time program command, then all instruments are switched off immediately. The **immediately** option has to be enabled in the configuration under **Tools ▶ Options... ▶ Error handling ▶ Emergency shut-down at hardware errors**.

### Configuration program part

- Conductivity detectors were recognized and displayed as amperometric detectors in some cases.
- The **No editing of workplaces in 'BUSY' status** option can be activated again in the security settings (for users who were not logged in at the start of the determination).

### Method program part

- The times were not adopted when HP, LP, Dosino and flow gradients were copied from one time program into another.

## 5 Compliance

The current software version does not contain any modifications that affect conformity of **MagIC Net** regarding 21 CFR Part 11 and GAMP.

Herisau, May 31, 2013

---

P. Hunziker

U. Kunz

**Herisau, May 31, 2013**

---

P. Hunziker

Vice President,  
Head of Development

U. Kürsteiner

Head of Quality Management