Subject: Release of v8.02/v6.82 Software for the Series 1000 and 2000 Transmitters

### Overview

This bulletin documents the release of new software for the series 1000 and 2000 transmitters v8.02/v6.82 (W&M v1.3). Please note that with the release of the v8.02/v6.82 software the revision format has changed from the HART-5/HART-7 (e.g. v6.7/v7.3) to the HART-7/HART-5 format.

### **Products Affected**

This bulletin applies only to the following products:

- Model 1700 Analog
- Model 2700 Analog
- Model 1700 IS
- Model 2700 IS
- Model 2700 Configurable I/O
- Model 1500
- Model 2500

# **NAMUR NE 53 RatingIs**

This release is rated at NAMUR NE 53 Level 2 with a NAMUR NE 53 version of 01.08.00.

# **Symptoms**

The following symptoms may appear with the specified transmitters:

- Some sensors were incorrectly identified as straight tube sensors.
- The milliamp output fixed alert was not being set when the milliamp was fixed because of a non-zero HART address.
- The Factory Configuration Invalid status bit was being set when connected to a 700 core processor. The 700 core processor does not support saving and restoring the factory configuration.
- Enabling a new feature on a flow-only device reset the output configuration to factory defaults.
- Polled variables were not converted to the transmitter units before being used.



- HART Primary, Secondary, and Tertiary Variables could not be changed using HART when the transmitter was configured for Gas Standard Volume.
- Petroleum Measurement variables were not removed from the display when Petroleum Measurement was disabled.
- The milliamp output could not be fixed when assigned to a Concentration Measurement, Petroleum Measurement, or Gas Standard Volume variable when the transmitter was not connected to a core processor.
- The units for concentration curve data were not correctly converted when the data was entered using HART.
- Meter Verification failed and Meter Verification aborted alerts were not reflected in the HART More Status flag.
- The HART Squawk command did not work when HART write protect was enabled.
- Locking or unlocking the transmitter or changing write protection set the HART Configuration Changed flag.
- When connected to a 700 core processor with software version 3.1 or earlier, attempting to set volume flow units to beer barrels per time unit caused a core processor write failed alert.
- After running a zero calibration and saving the factory configuration, the factory zero value was not updated from the core processor until a power cycle was performed.
- Upgrading firmware to a more recent version without clearing non-volatile memory sometimes caused an EEPROM Failure alert.
- The status bit for the undefined A141 alert (Device Data Capture Triggered) was present in the Modbus status register.
- When using the HART 475 or AMS the 'More Status Available' was always set when the status light was green (HART command 48 was replying with all 0's).

The following symptoms may appear when using AMS with specified transmitters:

- Changing the output configuration for milliamp 1 or 2 or for the frequency output changed the configuration of the other three outputs.
- When the milliamp configuration method was cancelled, the configuration change was done anyway.
- Density and temperature units were not displayed on the concentration measurement configuration page.
- A "Field Device did not respond" message was displayed when configuring the concentration offset even though the value was changed.
- When the volume flow type was changed the new setting was not updated from the transmitter until the device was rescanned.



## Resolution

- The above issues have been corrected with the release of v8.02/v6.82.
- No known safety issues remain open.
- For firmware updates to a unit in the field that is experiencing any of these issues, please contact Micro Motion service in your area.
- The checksum for this firmware is 0x201465F9.

### **Additional Features**

The following features were added:

- Basic Smart Meter Verification.
- HART 7 is now the default HART version.
- Production Volume Reconciliation—Requires an 800 Enhanced Core Processor with version 4.42 or greater software and HART 7.
- Transient Mist Remediation—Requires an 800 Enhanced Core Processor with version 4.42 or greater software and HART 7.
- Transient Bubble Remediation—Requires an 800 Enhanced Core Processor with version 4.42 or greater software and HART 7.
- Piecewise Linearization for Gas—Requires an 800 Enhanced Core Processor with version 4.42 or greater software.
- Fuel Consumption—requires HART 7.
- Polling an external device for base density for Gas Standard Volume
- Support for Micro Load.
- The NE53 version has been added to the display and access using Modbus and HART.
- Improved the update rate of the data for Advanced Zero Check using ProLink.
- Byte order configuration for double totals.
- Modbus Function 43 basic objects for FDI identification.
- Fast access to Live Zero in 100 Hz mode.
- The ability to use the display to configure user access to the Smart Meter Verification menu on the display. This feature can only be used to disable access. Once disabled, access can only be enable using ProLink or a HART device.



# **Host Compatibility**

- ProLink III v4.0 or later contains support for the applicable additional features noted above. If you have ProLink III v3.0 installed, go to the ProLink Product page
   (<a href="http://www.emerson.com/catalog/en-us/micro-motion-prolink-flow">http://www.emerson.com/catalog/en-us/micro-motion-prolink-flow</a>) under Documents & Drawings/Software Downloads & Drivers for an update.
- 1000/2000 HART DDs and AMS install kits for device revision 8 contain support for the applicable additional features noted above and are available for download at <a href="http://www2.emersonprocess.com/en-US/documentation/deviceinstallkits/Pages/deviceinstallkitsearch.aspx">http://www2.emersonprocess.com/en-US/documentation/deviceinstallkits/Pages/deviceinstallkitsearch.aspx</a>.
- 1000/2000 HART DTMs for device revision 8 contain support for the applicable additional features noted above, but they are currently in development. They will be posted for download, when ready, at <a href="http://www2.emersonprocess.com/en-US/documentation/deviceinstallkits/Pages/deviceinstallkitsearch.aspx">http://www2.emersonprocess.com/en-US/documentation/deviceinstallkits/Pages/deviceinstallkitsearch.aspx</a>
- 1000/2000 device revision 8 files are available for the Trex Device Communicator using Upgrade Studio and for the 475/375 Field Communicators using the Easy Upgrade Utility.



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#### **Contact Information**

Product information is available on the internet at: www.emerson.com.

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