

# Manufacturer Information

for users regarding software updates  
(following the NAMUR recommendation 53)

## 1 Type of device

- Field device / signal processing device  
 Monitoring- / operation system / hand held terminal etc.

Manufacturer : Endress+Hauser

Device : Liquiline

Type : CM44x

Fieldbus / Interface : Fieldbus  
PROFIBUS

Device Type  
0x155D

## 2 Firmware, Hardware I

- Firmware  
 Hardware I

Old firmware version : 1.05.01

New firmware version : 1.05.02

How can the previous Firmware / Hardware I version number be identified:

Standard Fieldbus communication, FieldCare/DTM, Display

Description of the modification in comparison with the predecessor version:

- New language Vietnamese
- Activation of service mode by dip switch for fixed IP address
- Simple SAC zero point correction implemented
- Integration of CLS82D / 4 pole conductivity sensors
- Integration of COS81D / oxygen sensors
- Entry of correction factor for CUS51D calibration
- Integration of new Ethernet board for simultaneous operation with 6 current outputs
- Flash frequency adjustable for nitrate and SAC for clear water applications
- Field Data Manager Software - online connection implemented
- New process value UVT 10 mm for UV disinfection applications
- Sensor input with HOLD multi-select for multiple cleaning programs
- Conductivity concentration tables editable in % or mg/l
- Simultaneous measurement of conductivity and concentration
- New conductivity concentration table NaOH 25% - 50%
- Menu 'System test' and 'Reset' split into two menus

## Manufacturer Information

for users regarding software updates  
(following the NAMUR recommendation 53)

### 3 Compatibility (Firmware, Hardware I)

Is the new Firmware version compatible with the previous version, the installed device drivers, the operating tool compatible / is the new Hardware I version compatible with the previous version?

- Yes  
 No, description:

Is a Firmware / Hardware I update generally recommended?

- Yes, reason:

The update / exchange can be performed by means of ...

- SD card

- No, reason:

Update only necessary, if function enhancements are desired.

### 4 Instruction manual

Is a new instruction manual necessary due to the modification of the software?

- Yes  
 No

Which manual corresponds to the new firmware and/or hardware I:

CM44x	All	BA00444CEN.pdf	Operating instruction Liquiline
		BA01245CEN.pdf	Operating instruction Memosens

The new instruction manuals can be referred in Internet:

<http://www.endress.com> - area „DOWNLOAD“  
- declaration of the device and kind of manual

### 5 Price

Change in price of device in comparison with the predecessor version?

## Manufacturer Information

for users regarding software updates  
(following the NAMUR recommendation 53)

- Yes, new list price and update costs (without installation) are enclosed
- No