

# Memograph M RSG45 Advanced Data Manager

## Secure centralized monitoring and maintenance system

- **System-capable**  
Data exchange between field level and control level without any restrictions
- **Communicative**  
Direct use of HART® signals, HART® gateway function; Ethernet based fieldbuses for unlimited integration
- **Versatile**  
Modular construction with various hardware configurations; Application packages for perfect adaption to process requirements
- **Informative**  
Encrypted E-mail notification with limit value infringements and alarms
- **Simple**  
Toolless and quick commissioning with integrated web server
- **Secure**  
Fulfillment of IT security requirements due to FDA 21 part 11 conformity
- **Complete**  
Essential version of the reporting software FDM included free of charge



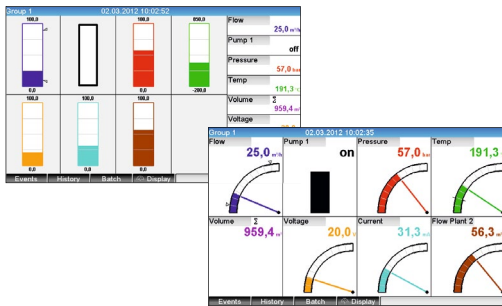
The Advanced Data Manager Memograph M is not only a data manager but a flexible and high-performance system for the organization of process values. With its intuitive operation concept, it can easily and quickly be adjusted to the respective application. The measured process values are clearly indicated on the screen and safely recorded. Furthermore limit values are monitored and analyzed. The measured as well as calculated values can simply be forwarded to superior systems via all common communication protocols. In the same way single plant modules can be connected with each other. Due to various application packages, an optional stainless steel front and Ex approval, applications can be found in a variety of industries like:

- Hygienic applications in the food & beverages and life sciences industry
  - FDA validated applications
  - Monitoring of critical parameters in filtration systems for potable water, in rivers as well as in rain overflow basins of waste water plants
  - Recording of energy, gas and liquid consumption in all industries
  - Storage and monitoring of performance characteristics of turbines, boilers and reactors in power stations
- Wherever recording, visualization, analysis as well as communication of process parameters is required – Memograph M is the right choice!

## Advanced functionality for sophisticated applications

### Large display for flexible indication

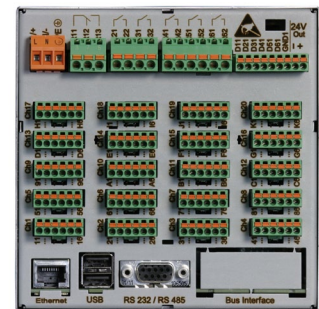
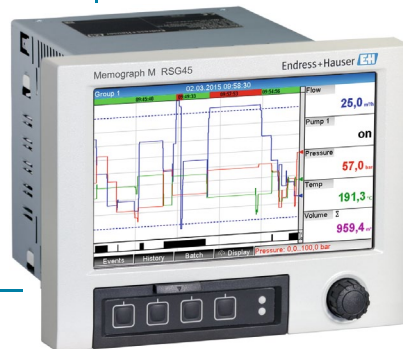
- Brilliant **7" TFT-Display**
- **Touch screen with stainless steel front**
- Measured values display in up to **10 groups with up to 8 channels**
- Variety of display modes: Curve, waterfall, bargraph, digital, instrument display, circular chart



### Versatile application

Variably applicable by processing different input signals:

- Up to **20 universal inputs** or up to **20 HART® inputs**
- **6 (14) digital inputs**
- **6 (12) relays**
- **2 analog outputs**
- Up to **60 limit values**
- **Sensor power supply**



### Simple and secure data storage

- SD card and USB stick up to 32 GB as external memory
- High speed storage cycle of 100 ms
- Easy search of historical data directly at the device
- **Field Data Manager (FDM) Software** for tamper-proof data read out, storage, analysis as well as visualization of historic and live data



### Application packages

- 12 math channels
- Tele alarm
- Batch software
- Waste water and rain overflow basins
- Energy software

### Easy operation and improved usability

- Comfortable operation using the **Navigator** or the **touch screen** on the stainless steel version
- Use of a **USB keyboard/mouse**
- Timesaving set-up, **toolless printing and storage of the parameter settings** using the web server
- **Complete remote access** to the Memograph M

# Targeted improvements for perfect integration

## HART® input cards

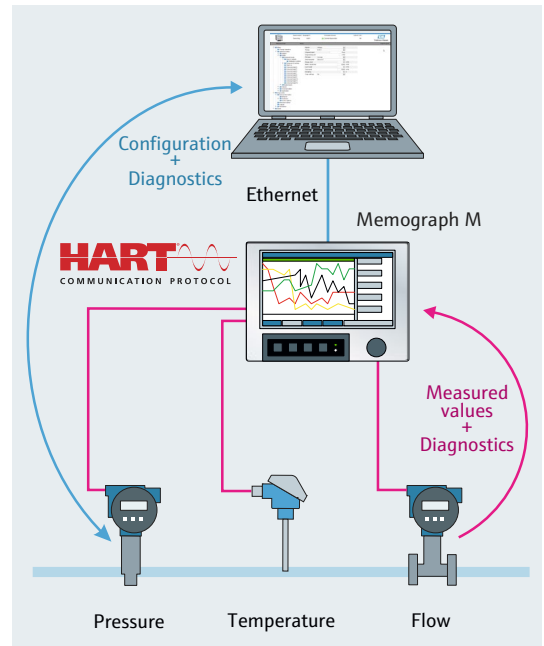
With the integration of inputs for HART® signals the Memograph M RSG45 offers a real USP.

The HART® signal is supported by most sensors in the field. With the HART® inputs the RSG45 can use the 4...20 mA analog signal as well as all four HART® values of a connected field device. HART® multi-drop with up to 5 devices per channel is possible.

In this way the RSG45 helps to get more information from one device. In addition RSG45 offers a HART® gateway function. With this the data manager allows direct access from the PC configuration software to the field device without using an additional HART® modem. Thus a parameterization of field devices from the control room is possible and also the detailed instrument health status is available.

### ✓ Your advantages:

- Improved process insight and safety
- More accurate measurement values help to save costs
- Time savings due to an easy access of the field devices



## Stainless Steel Front and Ex xp

Another highlight of the RSG45 is an optional stainless steel front for critical environmental conditions:

- No edges and corners for easy cleaning
- Local set-up via capacitive touch, also usable with gloves

The combination of this front and mounting in a pressurized enclosure system, makes the device furthermore appropriate for use in potentially explosive atmospheres.

### ✓ Your advantages:

- Protection against contamination and quick cleaning
- High robustness and long lifetime
- Safe data storage also in Ex applications



## Focus on communication

A further new feature of Memograph M is the availability of the new industrial Ethernet based communication protocols EtherNet/IP and PROFINET. Both protocols are becoming more important in the process industry and further increase application flexibility. In addition, WebDAV has been integrated. This is an open standard to provide files on the internet extension of the Hypertext Transfer Protocol. With WebDAV the stored data of the SD card can quickly and, due to encryption also safely, be transferred to a PC without the need of an additional software. Another advantage of WebDAV compared to FTP is, that Port 80 is used, which in general is not blocked by firewalls.

### ✓ Your advantages:

- Easy and cost-effective integration from field level into Ethernet based control level
- Minimized commissioning time
- Increased application flexibility
- Time saving data access and transfer



## Enhanced web server and visualization software

The integrated web server enables access to current and historic process data via conventional standard web browsers at any time and from everywhere. With it the indication of the instantaneous values including the status and the instrument health status as well as a remote access to and control of the device is possible. Besides, the integrated web server shows some great new features like


- the possibility to do a firmware update of the RSG45,
- print-out, saving and import of the device settings.

In addition the free of charge Essential version of the Field Data Manager (FDM) software is included in the RSG45 delivery package. This SQL database based software can be used for tamper-proof data read out, storage and graphic presentation of the recorded data.

An upgrade to the professional version is possible at any time. With this FDM version the online visualization of instantaneous values is possible.

### Your advantages:

- Easy and quick indication of current and historical data via web browser or FDM
- Improved process insight from all over the world
- Time and cost saving commissioning and operation without the need for an additional software
- Safe and reliable data handling

 Order number for the Technical Information:  
[TI01180R](#)

## More than a data manager

With the new features and functions of Memograph M RSG45 we made the next step from a data manager to a secure centralized monitoring and maintenance system that saves time and money due to the ease of integration and direct access to HART® sensors in the field. Of course there are still some differences between the RSG45 and a PLC:

### Differences between Memograph M RSG45 and a PLC

Function	RSG45	PLC
<b>Installation</b>	Near to the process Short wires between sensor/device Installation in Ex area	In control room Long wires, big cable trays
<b>Commissioning</b>	Easy and quick setup (navigator, web server) Insert formulas with formula editor	Costly programming hours are needed
<b>Operation</b>	Local display with plant/process information Status messages locally Backup of the stored values	Costly remote display needed No access to process values and status messages in the field
<b>Software functionality</b>	Pre-defined software functions (application packages) Flexible combination of device functions	High flexibility due to free programmable logic Closed loop control and timing functions
<b>Maintenance / troubleshooting</b>	Easy fault detection Configuration can easily be checked	Programmer needed for function check
<b>Device extension</b>	Easy plug & play extension Cheap extension cards compared to PLC	Easy plug in extension Extension cards more expensive (e.g. HART® inputs)

Especially for small solutions or for applications in which a data storage as well as a visualization on-site is required the Memograph M RSG45 offers many advantages compared to a PLC and is the right system to choose!

[www.addresses.endress.com](http://www.addresses.endress.com)