

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
- Flexible communication
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 adaptation to process requirements
- Informative
Encrypted E-mail notification with limit value infringements and alarms
- Simple
Tool-free 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 be forwarded to control systems via common communication protocols. Due to various application packages, an optional stainless steel front and hazardous area approval, applications can be found in a variety of industries like:

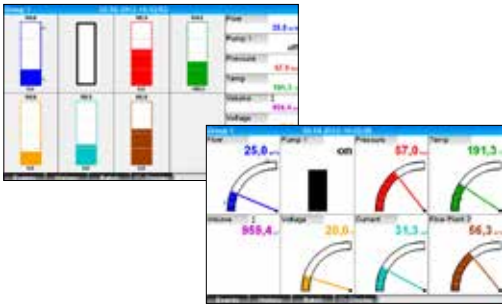
- Hygienic applications in the Food & Beverage and Life Sciences industry
- FDA validated applications
- Monitoring of critical parameters in filtration systems for potable water, in rivers as well as in rain overflow basins of wastewater plants
- Recording of energy, gas and liquid consumption in all 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



Simple and secure data storage

- SD card and USB drive 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
- Wastewater and rain overflow basins
- Energy software

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**



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 setup, **tool-free printing and storage of the parameter settings** using the web server
- **Complete remote access** to Memograph M

Trademarks/Copyrights

HART is a trademark of the HART Communication Foundation, PROFIBUS is a trademark of PROFIBUS and PROFINET International, EtherNet/IP is a trademark of ODVA, Inc. All other trademarks are the properties of their respective owners. All other copyrights are the properties of their respective owners.

Targeted improvements for perfect integration

HART input cards

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

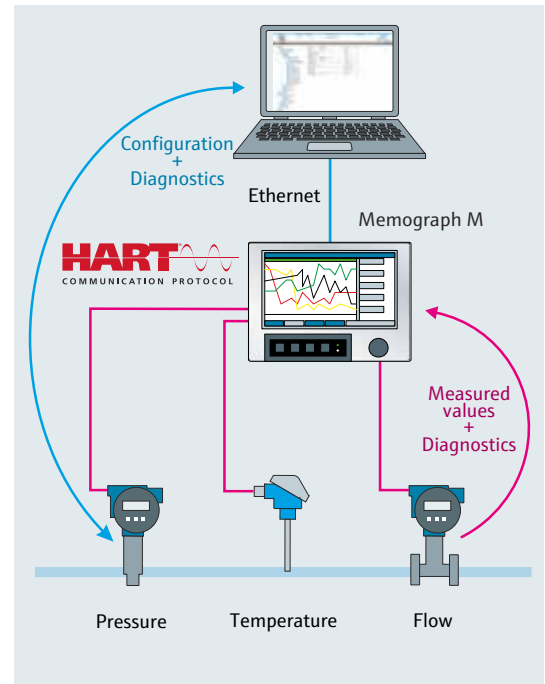
The HART signal is supported by most sensors in the field. With the HART inputs the RSG45 can use the 4 to 20 mA analog signal as well as all four HART values of a connected field device. HART multidrop with up to 5 devices per channel is possible.

In this way the RSG45 helps 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 with ATEX hazardous area approvals

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

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

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



Your advantages:

- Protection against contamination and quick cleaning
- Highly robust and long life span
- Safe data storage also in hazardous area applications



Focus on communication

A 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 (Web Distributed Authoring and Versioning) 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 additional software. Another advantage of WebDAV compared to FTP is, that Port 80 is used, which in general is not blocked by firewalls.

*Check with your local sales representative for more information.



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.

More than a data manager

With the new features and functions of Memograph M RSG45 we have taken the next evolutionary 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
Installation	Near to the process; Short wires between sensor/device; Installation in hazardous areas	In control room; Long wires, big cable trays
Commissioning	Easy and quick setup (navigator, web server); Insert formulas with formula editor	Costly programming hours are needed
Operation	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
Software functionality	Pre-defined software functions (application packages); Flexible combination of device functions	High flexibility due to free programmable logic; Closed loop control and timing functions
Maintenance / troubleshooting	Easy fault detection; Configuration can easily be checked	Programmer needed for function check
Device extension	Easy plug & play extension Inexpensive 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!



✓ 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 additional software
- Safe and reliable data handling



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

USA

Endress+Hauser, Inc.
2350 Endress Place
Greenwood, IN 46143
Tel: 317-535-7138
888-ENDRESS
(888-363-7377)
Fax: 317-535-8498
info@us.endress.com
www.us.endress.com

Canada

Endress+Hauser Canada
1075 Sutton Drive
Burlington, ON L7L 5Z8
Tel: 905-681-9292
800-668-3199
Fax: 905-681-9444
info@ca.endress.com
www.ca.endress.com

Mexico

Endress+Hauser México S.A. de C.V.
Fernando Montes de Oca 21 Edificio A Piso 3
Fracc. Industrial San Nicolás
54030 Tlalnepantla de Baz
Estado de México
México
Tel: +52 55 5321 2080
Fax: +52 55 5321 2099
eh.mexico@mx.endress.com
www.mx.endress.com

Other locations

www.addresses.endress.com