

MICIPS 8

MULTI CHANNEL PROCESS SYSTEM

Qualitäts-Management-System QMS

Changes MCPS7 --> MCPS8

Part of the QMZD

cad computer

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Associated documents	[1] MCPS system requirements (Technical Specification)

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2. INTRODUCTION

MCPS is a modular, configurable standard software that can be used for the long-term acquisition of measurement data in a wide variety of applications.

The software is developed and maintained in accordance with the guidelines of ISO 9001:2015 and GAMP5. With the help of selectable options and various modules, the MCPS software can be adapted to a wide variety of requirements and task areas.

The technical specification and the technical requirements are described in more detail below.

3. SYSTEM REQUIREMENT FOR MCPS 8

3.1 OPERATING SYSTEMS FOR MCPS 8

Watch document technical specification.

3.2 GENERAL HARDWARE REQUIREMENTS FOR MCPS 8

Watch document technical specification.

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4. PURPOSE OF THE DOCUMENT

This document describes all changes made during the development of the MCPS 8 version compared to MCPS 7 version.

These are changes to existing functions as well as the introduction of completely new functions and drivers.

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5. CHANGES:

5.1 NEW / CHANGED FUNCTIONS:

5.1.1 DESIGN CHANGES

Expansion	Optical adjustment in several areas. Blue background. Flat buttons and frame. Line highlighting in numeric windows.
Side effect: 2	

5.1.2 STANDARD ALARM COMMENTS

Expansion	Definition of default comments, which can be selected during alarm confirmation by a list switch.
Side effect: 1	

5.1.3 REMOTE ACCESS FOR CLIENTS

New Function	Start, stop, create and configure projects via Clients. Configure, start and stop batches.
Side effect: 1	

5.1.4 FAST SWITCHING TO NUMERIC WINDOW

New Function	Graphic window, right mouse button Numeric window. The historical data is displayed in text form from the moment the mouse is in the graphics window.
Side effect: 1	

5.1.5 PRINT LAYOUT FUNCTIONS

New Function	Line, circle and rectangle. Shadow, fill color, round frame Printouts with different output types: Master frame + e.g. Alarms, Events, AuditTrail, etc.
Side effect: 1	

5.1.6 PROJECT CONFIGURATION

Expansion	Right mouse button on header switch opens directly the column management with selected column, except column #. Here an existing channel selection is canceled. Tabs and Enter select all text in text boxes for direct editing. The size and position of the window will be reused the next time it is opened.
Side effect: 1	

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5.1.7 MANUAL GAPFILLING

Expansion

Side effect: 2

All data can now be overwritten, including normal measurement data. If there are data errors or **** in MCPS data, but not in the device data.
Multi-GapFilling: Populate multiple projects with data from multiple devices in one step.

5.1.8 HARDWARE DONGLE

Expansion

Side effect: 1

At dongle loss: Shutdown depending on runtime with display of the shutdown time. The longer MCPS active, the later it will shut down.

5.1.9 USER MANAGEMENT

Expansion

Side effect: 2

Print out only the user.
Admin / user settings also possible for normal users due to IT / OT. User can create users.

5.1.10 VISUALISATION OF ALARM LIMITS

New Function

Side effect: 2

Display alarm limits of the channels in the graphic. Setting under channel alarms and in the trend window / right mouse button / view / alarm limits.

5.1.11 HARDWARE RECONNECT

New Function

Side effect: 2

Automatic reconnect on devices that have been suspended by MCPS when starting the measurement.

5.1.12 BATCH DATABASE

New Function

Side effect: 1

Creation of a batch file from normal project or even import project.
Batch filter with full-text search, signature status and release
Display of completely signed batches by special icon
Multiple signing of batches in one step
Fast database change by dropdown list
Permanent filter: Search results are saved and always available.

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5.1.13 ALARM HISTORY

Expansion

Side effect: 3

Time range selection to restrict the display.
Month alarm files.
Display of limit value and channel comment.
Confirm alarms after measurement.

5.1.14 OFFLINE GRAPHICS

New Function

Side effect: 1

Mouse zoom directly possible without toolbar. The ALT key executes x-zoom directly without a dialog box.

5.1.15 MCPS-PASSWORD CHANGE

Expansion

Side effect: 2

New password will be accepted without restart.
Exception ERES and SCRIPT.

5.1.16 MATHEMATICS

Expansion

Side effect: 1

Mathematical formula GE. GreaterEqual > =

5.1.17 TIME RANGE SELECTION

Expansion

Side effect: 2

Time entries with calendar and direct areas such as Today, Yesterday, This week, Last week, etc.

5.1.18 LDAP

Expansion

Side effect: 2

Use logged-in Windows names for LDAP login.

5.1.19 ZOOM FUNCTIONS: UNDO/REDO

New Function

Side effect: 2

Last / Next Zoom (Undo / Redo) with several steps in the offline graphics.

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5.1.20 NUMERIK WINDOW

Expansion

Side effect: 2

Numeric window with key control for line up / down, page up / down, beginning and end.

5.1.21 ALIGN THE WINDOW TO THE GRID

New Function

Side effect: 2

Align window to grid, dock left and top.

5.1.22 SOLO WINDOW

Expansion

Side effect: 2

Solo window visually upgraded.
Freely selectable character size or decimal places.
Copy window.
Matrix version for displaying many measured values in a window.

5.1.23 SELECT FILE FOLDER

Expansion

Side effect: 2

Select directory with new GUI and create folder.

5.1.24 AUTOFILES FUNCTIONAL EXPANSION

Expansion

Side effect: 3

Autofiles with weekly size depending on the calendar week.

5.1.25 DEVICE TEST

Expansion

Side effect: 2

Shift + Ctrl + Alt stops the device test at the start of the project.

5.1.26 SEARCH EXPANSION

Expansion

Side effect: 2

Additional search paths for multi-project and general window layouts of the server for clients. Clients can thus also access these window layouts.

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5.1.27 LOGFILE

Expansion	Admin log file via NCS. Is thus available to every computer.
Side effect: 2	

5.1.28 DLL IMPORT/EXPORT

Expansion	Export / Import DLL Tab.
Side effect: 2	

5.1.29 DEVICE MANAGER

Expansion	Remember the Device Manager Settings window. Display of additional information such as serial number.
Side effect: 1	

5.1.30 MULTIPLE STATISTIC WINDOWS

Expansion	Several statistic windows possible.
Side effect: 2	

5.1.31 AUDIT TRAIL COMMENTARY

Expansion	When the project configuration is saved, a comment is requested, which is added to the AuditTrail entries.
Side effect: 2	

5.1.32 PMON

New Function	Switch with picture. Switch Actions: Statistics, Resource Analysis, Save Event. Undo / Redo function. Lock element and secure against accidental movement. Copy items to internal clipboard. In trend, group can be selected. Use the CTRL key to highlight and summarize elements.
Side effect: 2	

5.1.33 ALARM SIMULATION

New Function	Simulate alarm with next scan.
Side effect: 2	

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5.1.34 SET ALARMS

Expansion

Side effect: 2

More block operations for alarms (on / off, value, color, delay, ...).

5.1.35 TEST-E-MAIL

New Function

Side effect: 1

Send test e-mail to directly check the SMTP server.

5.1.36 ALARM MESSAGES

New Function

Side effect: 1

When the measurement is stopped, a message about unacknowledged alarms appears.

5.1.37 AUDIT TRAIL

Expansion

Side effect: 2

Print in 2-line mode.

5.1.38 ALARM OPTION

Expansion

Side effect: 2

Inactive alert also sends email.

5.1.39 IMPORT/EXPORT

Expansion

Side effect: 2

Channel selection for export.

5.1.40 GRAPHIC

New Function

Side effect: 2

Line weight per channel.

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5.1.41 ALARM PRINT OUT

Expansion	Alarm print at the end of the measurement or AutoFile.
Side effect: 2	

5.1.42 ENERGY MONITORING

New Function	Resource analysis: bar graph for consumption. Resource reporter: tabular display of consumptions over any period.
Side effect: 2	

5.1.43 FILTER FUNCTIONS

New Function	Text filter for delimiting the display for alarm history and message window.
Side effect: 2	

5.1.44 SCRIPT COMMANDS

New Function	LoginCheck GetChannelDataMode GetProjectOrigin UpdateBatchFile
Side effect: 1	

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5.2 DEVICE DRIVERS

5.2.1 S7

- Expansion
- Side effect: 1

Device driver for the connection of Siemens S7-1500.

5.2.2 SMARTDAC

- New Function
- Side effect: 1

Setup Editor:
Set input types, ranges, scaling, alarms, comments, math formulas, constants, etc. also for devices with / AS option.

5.2.3 W750

- Expansion
- Side effect: 2

More extensive representation of the backup settings on the device.
FTP upload test.
MCON setup settings for Modbus devices (RTU / TCPIP). The controller can independently query these devices and store the measured values in flags.

5.2.4 OPCUA

- New Function
- Side effect: 1

OPCUA client for reading from and writing to an OPCUA server.

5.2.5 M300

- New Function
- Side effect: 2

Device driver for Rigol M300.

5.2.6 EASYBUS

- Expansion
- Side effect: 2

Driver for the connection of devices from Greisinger with Easybus interface e.g. EasyLog80.

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5.2.7 UMB

Expansion

Side effect: 2

Driver for the connection of devices from the company LUFFT with UMB protocol like e.g. Weather stations of the WS series.

5.3 LEGEND:

Assessment of the effects (side effect) on functions of version 8:

1 = Low

2 = Medium

3 = High

Classification according of CAD-Computer QMS – QMC Quality Management Change

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