

## LICENSE AGREEMENT

By opening the MCPS software seal or using the hardware protection the customer declares his agreement to the terms, warranty and limitations defined on this page. Otherwise the package must be returned unused within 4 weeks after the time of delivery.

Note: All program activities will be stored in the hardware protection module (dongle) and can be monitored.

### 1. Copyrights

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The reproduction or the modification of any or all parts of this Manual is strictly forbidden. Third parties who have made modifications to the hardware or to the software will be prosecuted.

This software is protected by copyright

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MCPS operates without the hardware protection (dongle) in the demonstration mode. For purposes of evaluation of the software, copies of this program may be reproduced and distributed.

### 2. Warranty

**6 month to software and dongle.**

### 3. Liability restrictions

The customer is using this software package at his own risk. The company CAD Computer GmbH & Co. KG will not be liable for any direct, indirect, special or consequential damage, loss of business, interruption of service, loss of profits, inability to use the product or the inability of the product to operate with or in conjunction with other products. Additionally it is not guaranteed, that the software will satisfy the requirements of the customer.

The hardware and software descriptions mentioned in this Instruction Manual are, in the majority of cases, also registered trade marks subjected to the laws and regulations in force.



**Version 7**

for Windows XP / 2003 / 2008 / Vista / 7

**Installation manual MCPS 7**

*January 2012*

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URL: <http://www.mcps.de>

## Attention Password

This password controls the access to certain options, functions or other modules (e.g. the MPE).

You only receive a new password (32 characters), if you want to get new options / drivers. MCPS is always delivered complete (Maximum amount of functions and drivers). The restrictions to the bought options and drivers are only a result of the password. That means: There is no change of the dongle necessary if you want to extend the amount of functions and / or device drivers.

During the installation procedure you will be asked for the password below. It is possible to change the password every time in MCPS, for example, if you receive a new one with additional options.

The password contains only digits and characters from A to F.


A new password is added to MCPS at <Configuration>, <MCPS settings...>, register card <Passwords>. Click button "Password table and add the new password in the first line.

If the software starts in Demo-mode please check the passwords

Please keep this sheet safe.

new password must be entered at the first position in the <Password table>.

### 4.3. Online help and manual

You find further MCPS support in the software itself over the context-sensitive online-help (Key „F1“ or ) , and in the MCPS-manual. The last one is available on the CD in directory "Manuals" and is named „mcps7e.pdf“. This installation manual here is available on the CD too. It is named „7\_Installation manual.pdf“ and is also available in directory Manuals.

## 4. FURTHER INFORMATION

### 4.1. Important installation files on the CD

There are some useful, possibly necessary installation-files in directory "Installation" on the CD:

- IRDemo.exe  
This setup-file installs some demo-sequences of thermographical applications to display the possibilities of MCPS in thermography. After running this file there is a new demo-device available in the device manager (Chapter 3.1) of MCPS. Beside the already known „TESTDRV“ now an additional device named „IRDEMO“ is available and can be used in MCPS project configurations. This device delivers thermographical demo-data.
- mcps7\_ncs\_setup.exe  
This setup-file installs the service NCS. Using this service you can uncouple the handling of the user administration from the MCPS. Please read the MCPS online help (<?> → <Help topics> → <NCS>) or read the manual of MCPS to get further information about the NCS. The manual of MPCPS is available on the CD in directory "Manuals".
- mcps7\_spXX.exe  
Actual MCPS service pack
- mcps7setup.exe  
Actual MCPS installation program (Contains the service pack mcps7\_spXX.exe)
- ysetup.exe  
Installation program for DX- and DARWIN- hardware-configurators (Yokogawa-Software)

### 4.2. Handling of passwords

You have to change the active password for MCPS when you did not enter a password during the installation procedure or when you extend your existing software package with new options or device drivers and you therefore get a new password. Click <Configuration>, <MCPS settings...> and switch to register card <Passwords> to do this. There you can change the password for MCPS every time. The

## Registration sheet

Dear customer,

in case of technical support or later program updates, it's necessary for us to have some information about your application environment and the software, you're using. Therefore we request you to send us this sheet as soon as possible by post or fax. Or use Register.DOC from the Installation-CD and send the registration sheet by E-Mail.

Thank you!

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Company:	
Division:	
Name:	
Street:	
ZIP code, city :	
Phone:	
Fax:	
E-Mail:	
Dongle-number:	

MCPS displays the results of the calculation in a window like this:

DEMO-PROJEKT\_02: Statistic

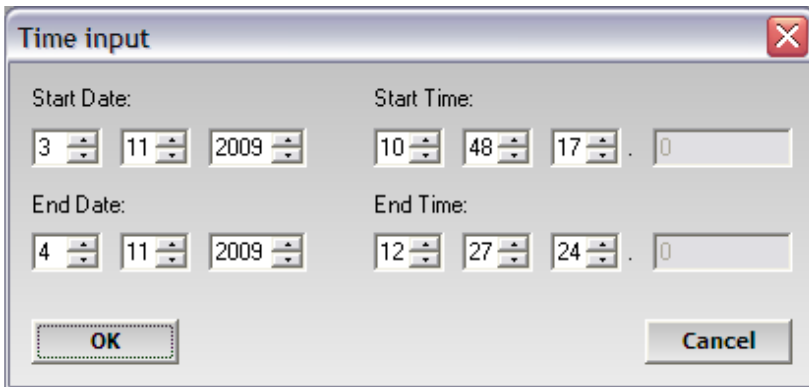
Time range: 03.11.2009 10:48:17 - 04.11.2009 12:27:24; Counts: 27912

#	Tag	Comment	Minimum value / time	Mean value	Maximum value / time	Std deviation	MKT	Unit
001	TD-Tag 1	TD-Com 1	0 03.11.2009 10:52:38	5.0408	10.8000 03.11.2009 11:45:04	2.9779	5.5740	V
002	TD-Tag 2	TD-Com 2	7.0000 03.11.2009 11:35:10	8.0055	9.0000 03.11.2009 12:34:20	0.7073	8.0353	V
003	TD-Tag 3	TD-Com 3	4.0000 03.11.2009 13:03:55	5.0006	6.0000 03.11.2009 12:04:45	0.7069	5.0310	V
004	TD-Tag 4	TD-Com 4	5.0000 03.11.2009 11:58:28	5.9997	7.0000 03.11.2009 10:54:33	0.7073	6.0300	V
005	TD-Tag 5	TD-Com 5	0 03.11.2009 10:48:36	1.9513	3.9970 03.11.2009 11:32:27	1.1537	2.0342	V
006	TD-Tag 6	TD-Com 6	4.0003 03.11.2009 11:56:01	4.5479	5.0922 03.11.2009 11:37:55	0.3165	4.5540	V
007	TD-Tag 7	TD-Com 7	4.0001 03.11.2009 11:54:59	4.5517	5.0921 03.11.2009 11:04:28	0.3116	4.5576	V
008	TD-Tag 8	TD-Com 8	4.0002 03.11.2009 13:12:18	4.5476	5.0921 03.11.2009 13:01:02	0.3166	4.5538	V
009	TD-Tag 9	TD-Com 9	4.0000 03.11.2009 13:12:37	4.5504	5.0922 03.11.2009 14:08:44	0.3167	4.5565	V
010	TD-Tag 10	TD-Com 10	0 03.11.2009 10:48:16	3.1587	4.1106 03.11.2009 11:14:07	0.8670	3.2031	V
011	Ch for Contr. end	KD-Com 1	0 03.11.2009 10:48:17	0	0 03.11.2009 10:48:17	0	0	
012	KD-Tag 2	KD-Com 2	0 03.11.2009 10:48:17	0	0 03.11.2009 10:48:17	0	0	
013	KD-Tag 3	KD-Com 3	0 03.11.2009 10:48:17	0	0 03.11.2009 10:48:17	0	0	
014	KD-Tag 4	KD-Com 4	0 03.11.2009 10:48:17	0	0 03.11.2009 10:48:17	0	0	
015	Measurement time	NIATH - COM 1	1.0000 03.11.2009 10:48:17	3865.5564	9891.0000 03.11.2009 14:12:56	2862.5058	4319.1765	Second

Statistic window

**3.5. Tutorial: Statistical calculation**

You can make statistical calculations with your historical data, if your MCPS-package has one of the two mathematical options. Please load a project which already contains historical data to do this. To simplify matters use the project which was setup during the chapters 3.1, 3.2 and 3.3. Click <Mathemtic>, <Statistic...> and the following dialog window appears:



*Time input window*

Select an interesting time period of statistical information and confirm your settings by clicking the „OK“ button. MCPS calculates the following statistical data of the desired time period:

- o Minimum value of each channel
- o Mean value of each channel
- o Maximum value of each channel
- o Standard deviation of each channel
- o MKT value of each channel
- o Number of counts

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**SCOPE OF SUPPLY**

- 1 Installation- CD
- 1 Installation manual
- 1 hardware protection (dongle) (not delivered in case of update)

**1. COMMON INFORMATION**

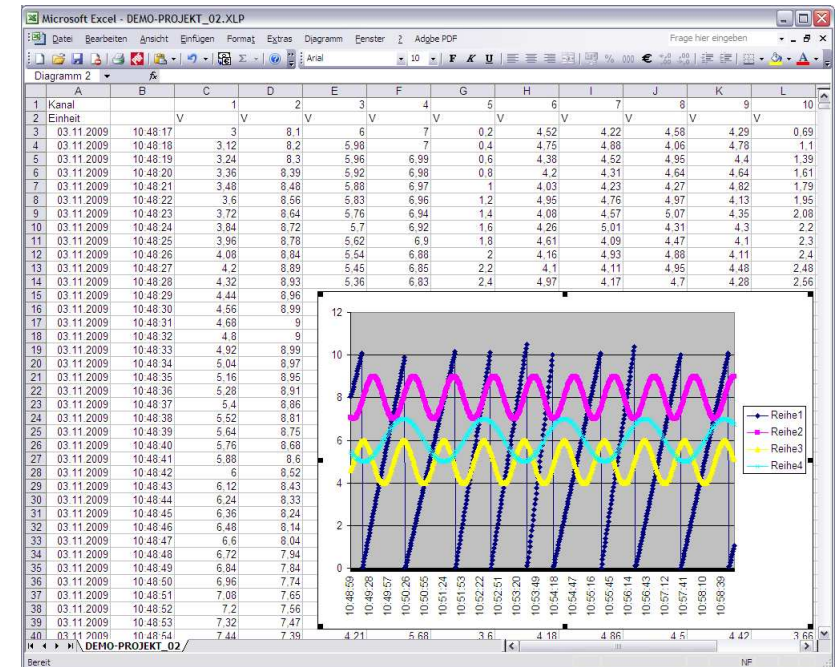
MCPS is a modular and configurable standard software package, which can be used for long term data acquisition of measurement values in different applications.

The software is developed and cared under a quality management system according to the guidelines of ISO 9001:2000 and GAMP4.

With the help of selectable options it is possible to adapt the MCPS software to the most different requirements and task fields.

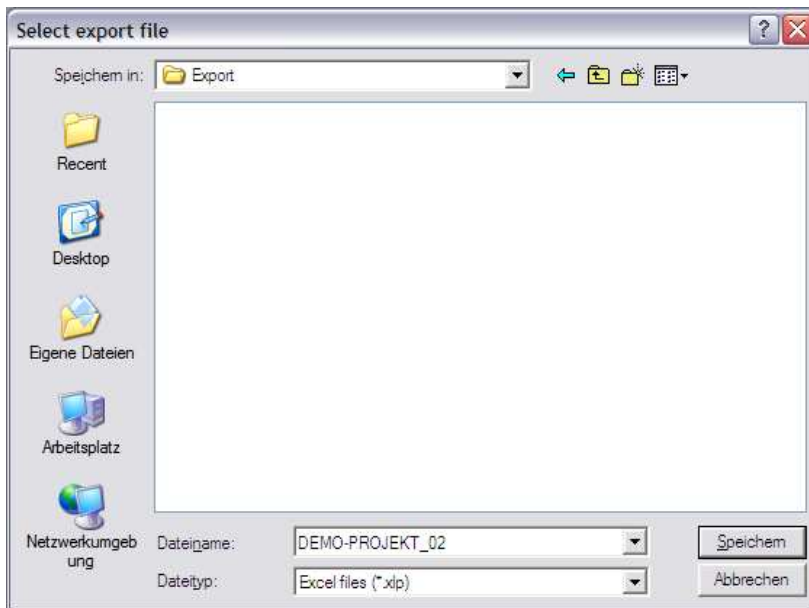
So you can order new options or device-drivers every time, if your application changes or if you want to use new or other devices to measure your process data. You can get a list of available options and functions in the technical specification of MCPS, which is available in directory "Manuals" on the CD.

This file can be opened by Microsoft Excel and the data can be further analyzed using Microsoft Excel functionalities.



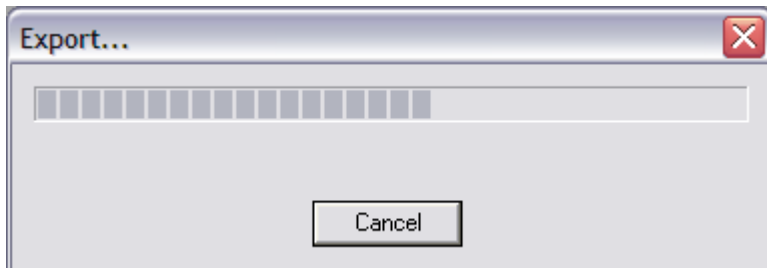
Excel example

Confirm your settings by clicking the “OK” button. A new dialog window opens. Please specify a directory and a file name to store the export data in the following window:



Saving dialog

Confirm your settings by click on the “Save” button. MCPS starts to export the data into the specified Excel-file.



## 2. INSTALLATION

Please read the license agreement carefully, which is displayed during the installation and which is available at the end of this installation manual.

### 2.1. Installation preparation

If you have already a version of MCPS and it is just running, you have to end this version before you can install the new one.

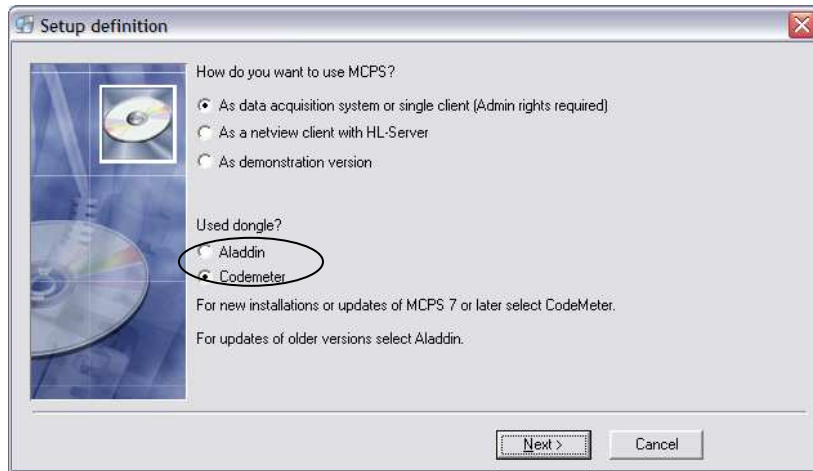
If you want to remove this older version, you have to do that BEFORE the installation of the new version.

Users should take care, that they have *ADMINISTRATOR* rights on their computer after the login. This is necessary to install drivers for the hardware protection module. Otherwise the setup program will report an error, and the software can only be started in Demo-mode. There are two exceptions: The installation of a NetView-Client-package and the installation of a demo-version can be done without *ADMINISTRATOR* rights, if this kind of setup is selected during the installation procedure.

### 2.2. Installation

Start the program START.EXE from the CD, if it does not started automatically when you insert the installation-CD into your disk-drive. Select a language, follow the instructions and make sure, that during step 3 of the installation procedure in this window

- option “**Codemeter**” is enabled, if you received MCPS 7 as a new package (No update), and therefore you use a hardware protection module from **WIBU-SYSTEMS AG**.
- option “**Aladdin**” is enabled, if you received MCPS 7 as an update, and therefore you use an existing hardware protection module from **Aladdin Knowledge Systems Ltd.**



Installation – Step 3

Follow the instructions on the screen until you will be asked for the password. Enter the 32 character password that is available on the second page of this manual. This password will make the options you orders accessible. If you have not a password, you can go on and enter it at a later time in MCPS. The program is then started in demo mode.

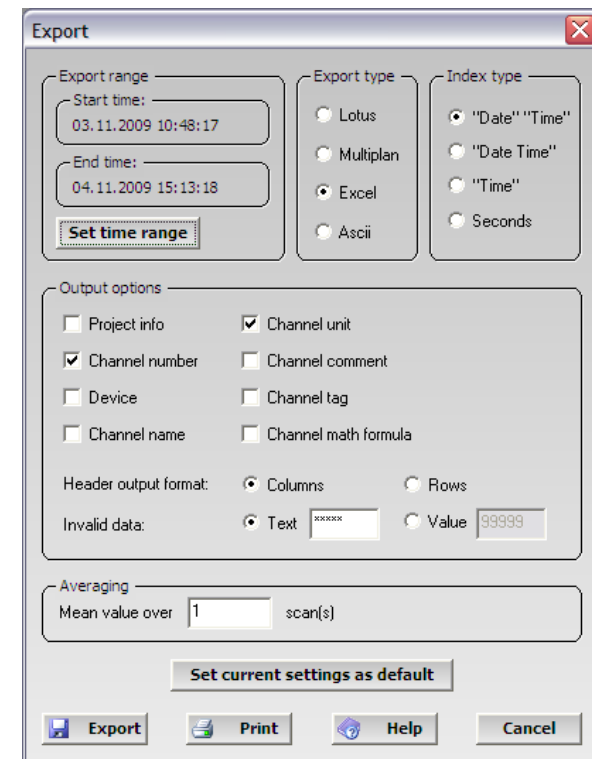
Start MCPS and click <Configuration>, <MCPS settings...>, register card <Passwords> to enter the password later. Add the password to the password table.

After the installation you will find MCPS in the START menu or as an icon on the desktop.

### 3.4. Tutorial: Data export

There are a lot of possibilities to analyze the acquired data in MCPS. One of these possibilities is the data export into different formats. It is now exemplary displayed how to export the historical data to Microsoft Excel.

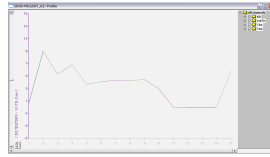
Please load a project which already contains historical data to do this. To simplify matters use the project which was setup during the chapters 3.1, 3.2 and 3.3. Click <Project>, <Export>, <Channel data>. The following screen appears:



Export- configuration window



Select "Excel" as desired format in frame "Export type".





or profile display  
are available in MCPS at <Data acquisition>.

Also available are at once runnable and ready configured Demo-projects. To have a look to these projects click <Project>, <Open...> and select one of the available Demo-projects.

Please click „New text window“  or „New graphic window“  to display already saved, historical data. Further windows with offline data (Historical data) are available under <Display>, <Text> or <Display >, <Graphic> or < Display >, <Profile>.

### 2.3. Hardware protection module (Dongle)

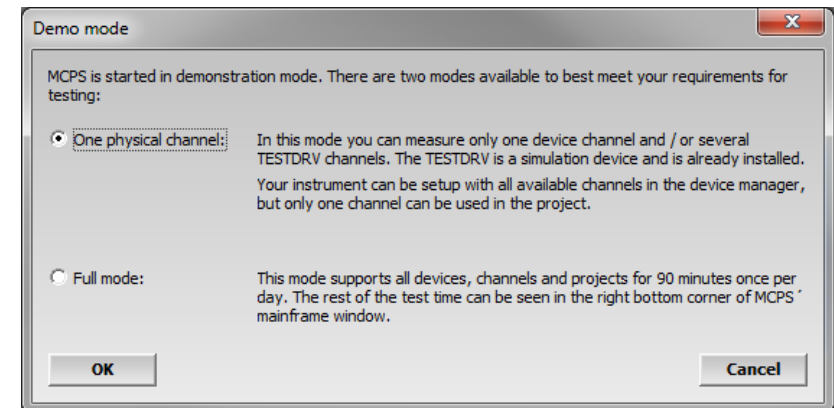
The software supports hardware protection modules from two different manufacturers since version 7: On the one hand the dongles of the company Aladdin Knowledge Systems Ltd., and on the other hand, new since version 7, the dongles of the company WIBU-SYSTEMS AG.

Please read the MCPS online help (<?> → <Help topics> → <Dongle>) or read the manual of MCPS to get information about appropriate actions if there occur any problems with the hardware protection module during the start of MCPS. The manual of MPCPS is available on the CD in directory “Manuals”

MCPS is only with an appendant dongle complete executable. The dongle is NOT necessary for the installation procedure!

#### Demo-Version

MCPS starts automatically in Demo-mode if there is no dongle available. You get the following menu when you start MCPS without a dongle:

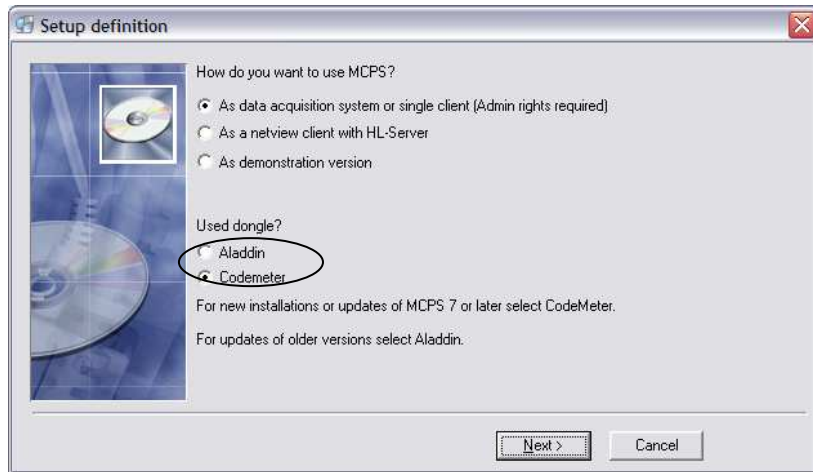


In Demo-mode 1) „One physical channel“ the software is runnable without a time limit, but it is only possible to measure ONE “real” channel of a “real” device. All other functions must be tested with the test-device “TESTDRV” or “IRDEMO”.

In Demo-mode 2) „Full mode“ the software is time limited to 90 minutes per day and can only be started once per day. There are NO limitations concerning the number of channels or the number of “real” devices used during this time period.

**Full version – New package / Update package**

You receive a hardware protection module of the company WIBU-SYSTEMS AG if you receive this MCPS package as a new package. You have to make sure, that during step 3 of the installation procedure in this window option “Codemeter” is selected.



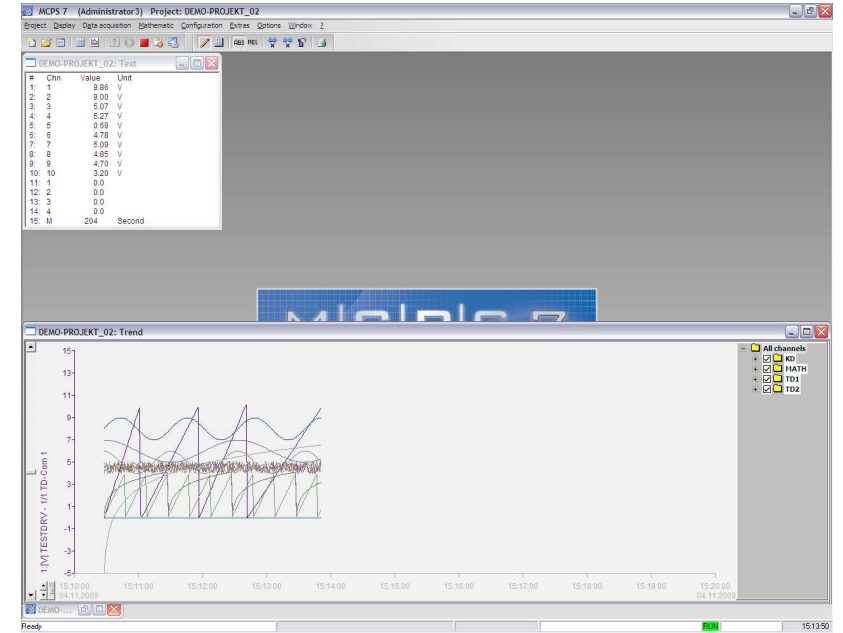
Installation – Step 3

You have a hardware protection module of the company Aladdin Knowledge Systems Ltd. if you are already owner of a MCPS-version. Then you have to select “Aladdin” during step 3 of the installation in the above-mentioned window.

This setting can always be done and changed later in MCPS itself. Start the MCPS and click <Configuration>, <MCPS settings...>, register card <Passwords>, button <Password table> to do this.

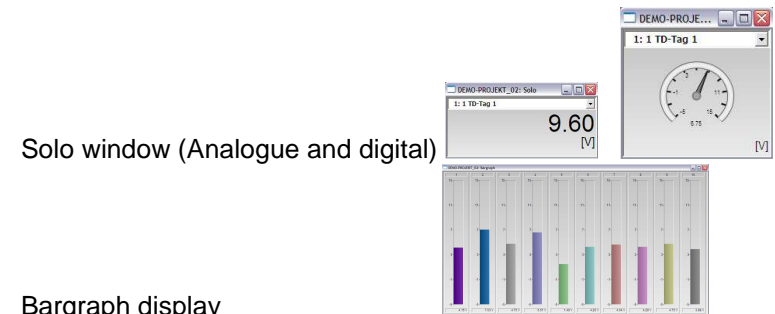
If MCPS is added to the autostart folder of Windows, it could happen that MCPS starts in demo-mode because MCPS is started before windows starts the dongle-driver. This is a known windows problem. Do the following setting to avoid this problem:

MCPS starts the data acquisition and opens the following display windows, depending on the number of and the kind of channels in the project configuration:



MCPS – screen: Data acquisition


These (Numeric window and trend window) and other kinds of display as

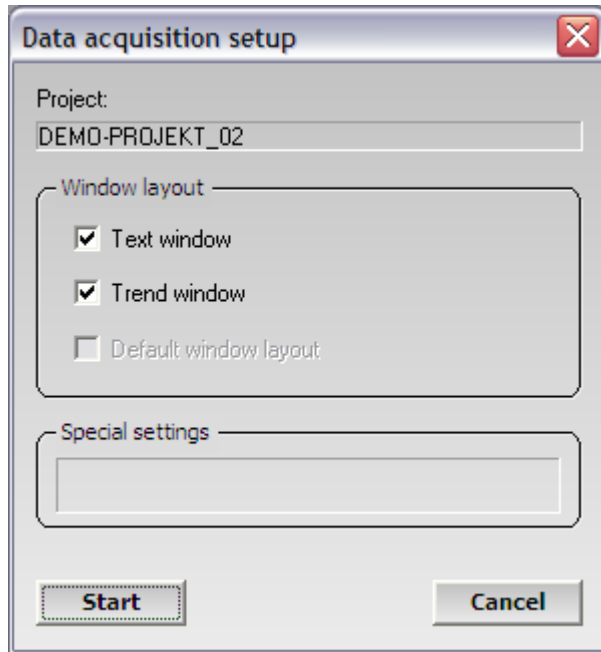


Solo window (Analogue and digital)

Bargraph display

### 3.3. Tutorial: First measurement

Please click button „Start data acquisition“  to start your first measurement, the following dialog window appears:



*Data acquisition setup*

Leave all settings as default for your first measurement and confirm with a click on the “Start” button.

Start MCPS and click <Configuration>, <MCPS settings...>, switch to register card <General>. Enable checkbox “Wait for dongle driver” in frame “Startup”. This causes that MCPS waits until the dongle driver is started by the windows operating system.

## 2.4. Advices concerning Firewalls and NetView-Clients

### Firewall settings

There are some interventions in the operating system and / or the settings of the firewall-software of the MCPS-PC(s) necessary, if your MCPS-software is installed on a PC which is protected by a firewall-software.

Read the MCPS online help (<?> → <Help topics> → <Firewall>) or read the manual of MCPS to get information about appropriate actions if there occur any problems with firewalls. The manual of MPCS is available on the CD in directory “Manuals”

### Dynamic license server for NetView-Clients

The acquired licenses of a MCPS-NetView-Client-Package are not controlled by a specific hardware protection module on each PC, but they are controlled by one central netview-dongle. This dongle is normally installed on the server-PC, but this is not necessarily.

Then it is possible to start as much MCPS as licenses are provided by the password.

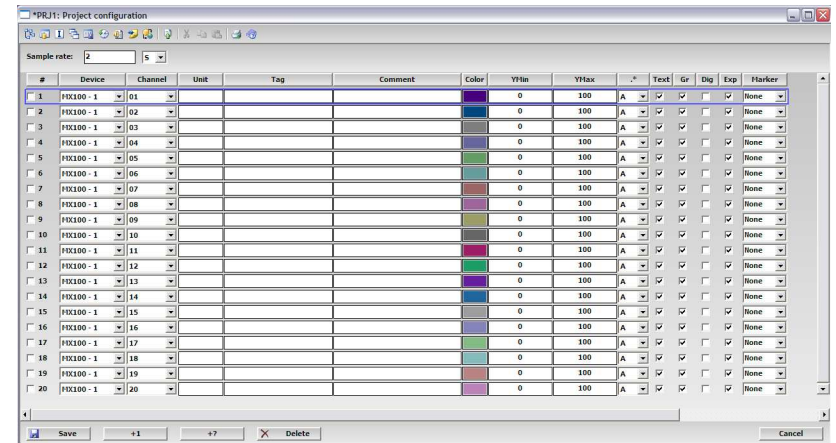
Read the MCPS online help (<?> → <Help topics> → <NetViewClients>) or read the manual of MCPS to get information about appropriate actions if there occur any problems with the network dongle of a NetView-Client-package. The manual of MPCS is available on the CD in directory “Manuals”

## MSERV-connection for NetView-Clients

There are two different possibilities of communication available to visualize and analyze (online) data from a MCPS-Measurement-PC on a MCPS-NetView-Client-PC: On the one hand the connection using Microsoft-**DCOM** and on the other hand the direct connection using **TCP/IP**.

There are some interventions in the operating system of the MCPS-PC(s) necessary to make the connection possible.

Read the MCPS online help (<?> → <Help topics> → <MSERV>) or read the manual of MCPS to get information about appropriate actions if there occur any problems with online connection between MCPS-PCs. The manual of MCPS is available on the CD in directory "Manuals".



Project configuration with MX 100 channels

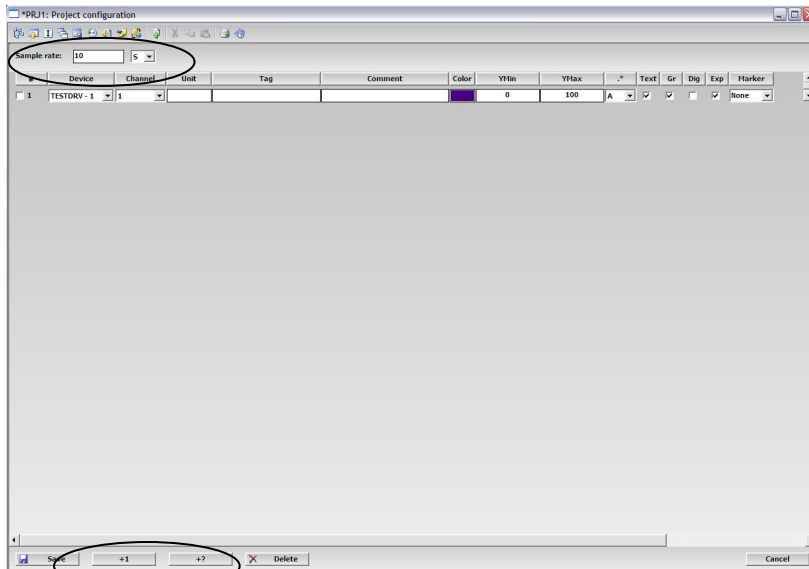
Please save the project configuration using the button "Save" at the bottom of the screen after you added all desired and necessary channels.

Assign a name to the project and select a location to save. MCPS offers the project directory to save the project.

With this last step your first project configuration is done and you can start to acquire measurement data.

### 3.2. Tutorial: Setup a project

The basis of a measurement in MCPS is a „Project“. Click <Project>, <New> to open an empty, new project configuration:



Project configuration

This is a tabular scheme of the used measurement channels. You can add further measurement channels by pressing the two buttons „+1“ or „+?“ at the bottom of the screen.

At the top of the screen you can setup the desired sample rate using numbers and the three different units **S** (Second), **M** (Minute), **H** (Hour).

You can select a measurement device in column “Device” using the DropDown-Menu. In this DropDown-Menu all devices are available which were added to the device manager as it is described in chapter 3.1.

You can select a specific channel of the selected device in column “Channel”. MCPS will display and save the measurement values of the selected channel in this project channel.

## 3. FIRST STEPS

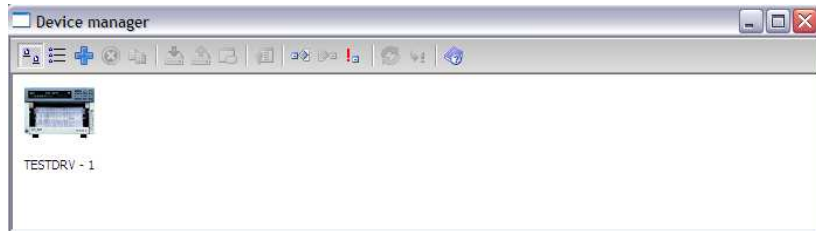
### 3.1. Tutorial: Device setup

The following MCPS-screen appears, when you start MCPS over the program-menu or over the desktop-shortcut.




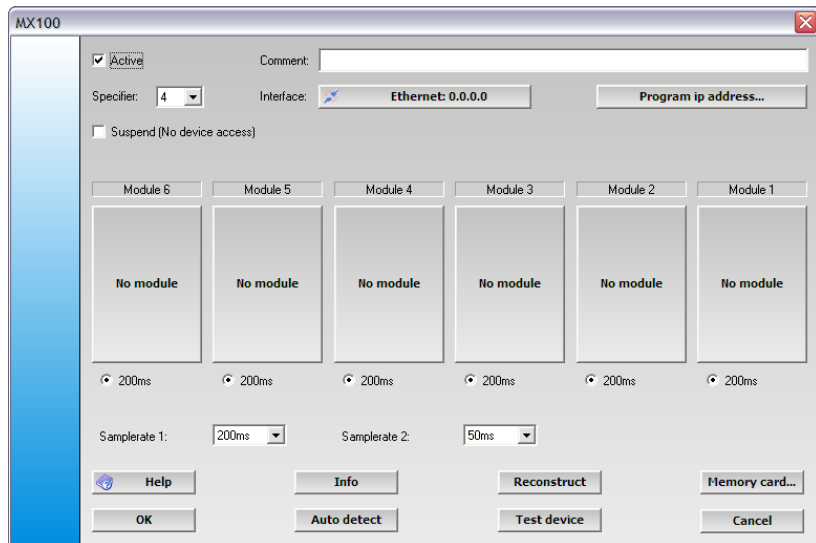
MCPS – screen

First of all the measurement devices, which should be used for data acquisition in MCPS must be made known by MCPS. The device administration is done in the device manager of MCPS. Click <Configuration>, <Device configuration...> to call the device manager.



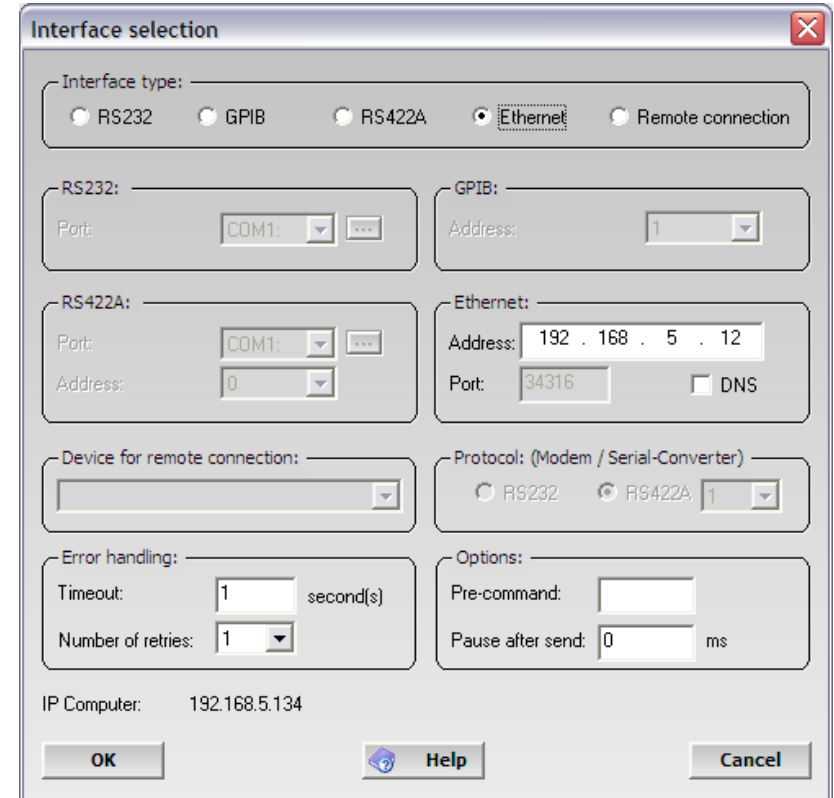
Device manager

After a click on „Add device“  a new selection window opens. Please select the available device in this window. After this selection the corresponding setup window of this device opens. Depending on the used device this window can be different but always similar. In this tutorial here the configuration window of a MX 100 device is explained:



MX 100 – device configuration window

Click on button „Interface“ to open the interface configuration of the connected device. In this tutorial here the interface configuration of an Ethernet-connection to the MX 100 is explained:



Interface configuration

Confirm your settings by clicking “OK” and you’ll get back to the device configuration window. Click on button “Test device” to test the connection and the availability of the device. Some devices offer the possibility to read out their actual configuration. Click on button “Auto detect” if your device offers this possibility to import the device settings in MCPS. Confirm your settings by clicking “OK” – Now the device is available in MCPS and can be used for measurements.