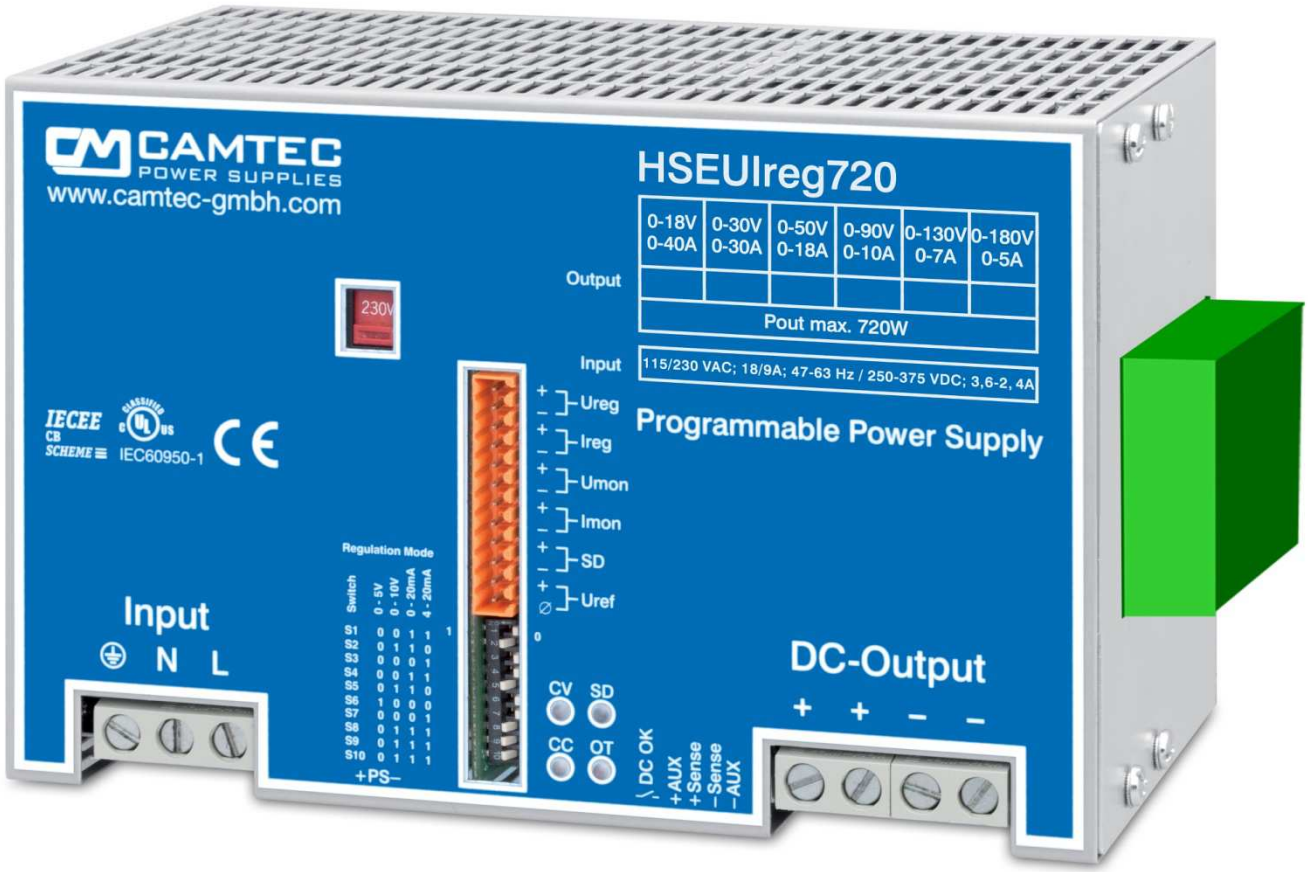
Quick Reference (EN)

UI.Drive USB2.0 Interface



Manual UI.Drive-Software

INHALT

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1 INTRODUCTION

The CAMTEC UI.Drive-Interface is a PC-Interface for the programmable CAMTEC Power Supplies. The connection of a power supply to the PC is effected by the USB2.0 Interface of CAMTEC Power Supplies GmbH. The software controls the values for current and voltage (Ireg, Ureg). The monitoring of the actual values of current and voltage (Imon, Umon) are being recorded. The actual values are being displayed graphically, digitally or analog.

2 Scope of Delivery

- **1x USB2.0 UI.Drive-Interface Hardware**
- **1x UI.Drive-Software License on USB2.0-Stick**
- **1x USB2.0 Cable 5m/16,4 ft. Type A/B (Art.No. 3520225)**
- **1x Interface Link Cable 12p. (Art.No. 306.1066.001)**
- **1x Special Mounting Screw DIN6900-4Z7 Pozidriv-Z M3x8mm (PE Connection!)**

3 System-Requirement

- Operation System (OS) 32bit or 64bit: Windows®2000, Windows®XP, Windows®7
- Microsoft .Net Framework: Version 3.5 or higher
- Hardware: Intel Pentium IV / AMD x64, 1GB DDR RAM, USB2.0 Interface, 10GB free space on hard-disc

4 Installation of the UI.Drive-Hardware

Before connecting the USB-Interface to the PC it is essential to install the UI.Drive-Software. Always connect the Interface to the UIreg power supply before connecting to the PC. The analog USB-Interface I/O works with 0-5V control voltage. For interference free operation chose the 0-5V position of the UIreg DIP-switch for the control input and for the monitoring output. If the 0-10V position is enabled the power supply delivers only 50% of the maximum output voltage.

Plug the clips of the module into the cuttings of the right side-wall of the HSEUIreg. Mount the USB-module with the enclosed special screw. *Attention:* Be aware to use the packed screw M3x8 DIN6900-4Z7with captive washer as it is required to connect the interface to PE.

The **USB2.0 UI.Drive-Interface** hardware provides two connections. Always use the enclosed 12-pole link cable to connect the UI.Drive-Interface to your CAMTEC HSEUIreg power supply. Connect the delivered USB-A/B-cable to the interface and to a free port of your computer. Make sure, that the USB controller will not be overloaded by connecting too many devices (see current consumption technical data table). The UI.Drive-Interface is powered by your PC. Right after installing the software the power-LED of the interface still stays dark. This is no failure. Follow the on-screen installation instructions for the UI.Drive-Software.

5 Installation of the UI.Drive-Software

The installation of the UI.Drive-Software requires up-to-date Microsoft™ Windows® Installations-Manager. Make sure the .NET-Framework 3.5 or higher is installed. Plug the enclosed USB-stick with the UI-Drive-Software into your computer. Call Setup.exe and follow the on-screen instructions. Before installing an update of the UI-Drive-Software it is necessary to deinstall the old version from the system. Use the Microsoft™ Windows® Installations-Manager for the de-installation.

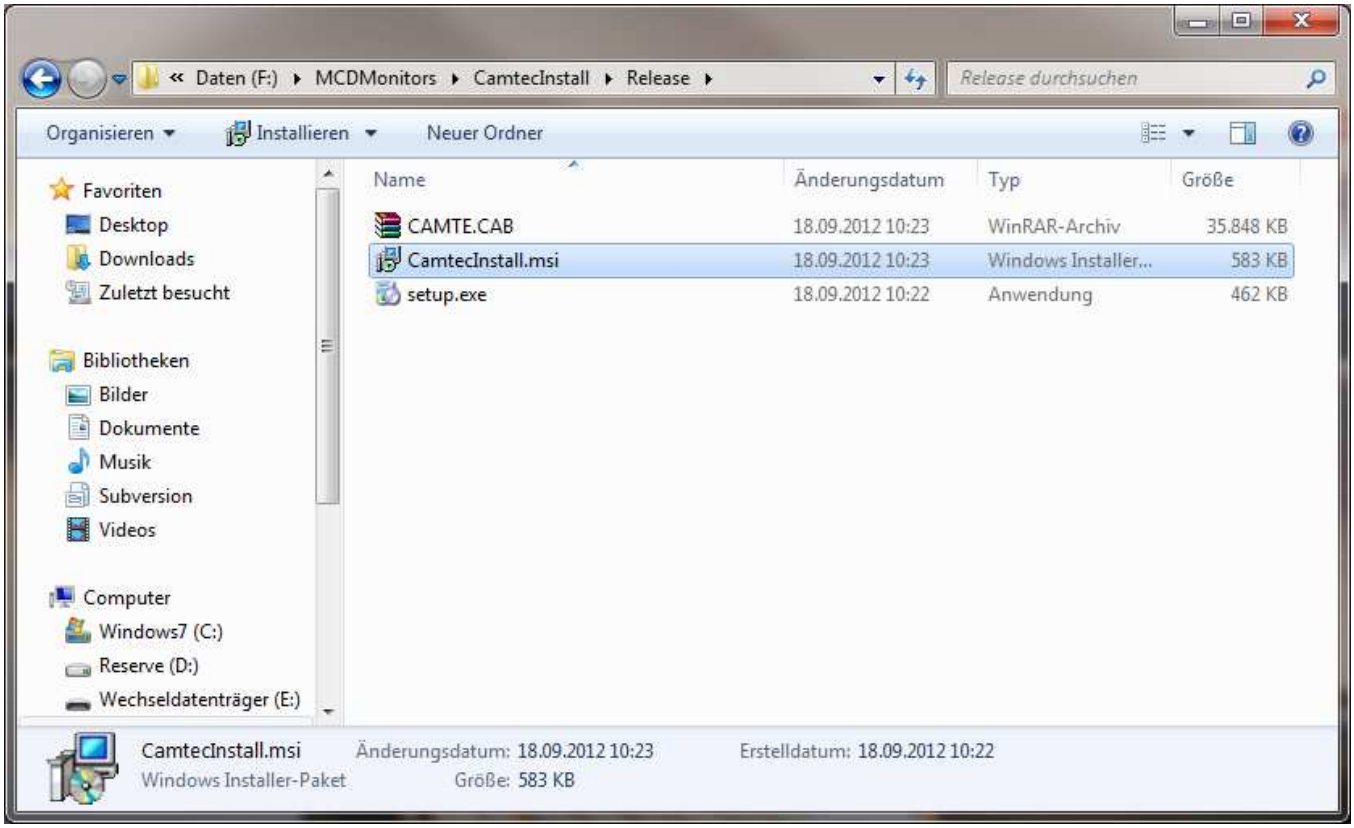
Always click the enclosed installer on the packed USB stick or CD-ROM.

The Installer and further information are provided on the web-link:

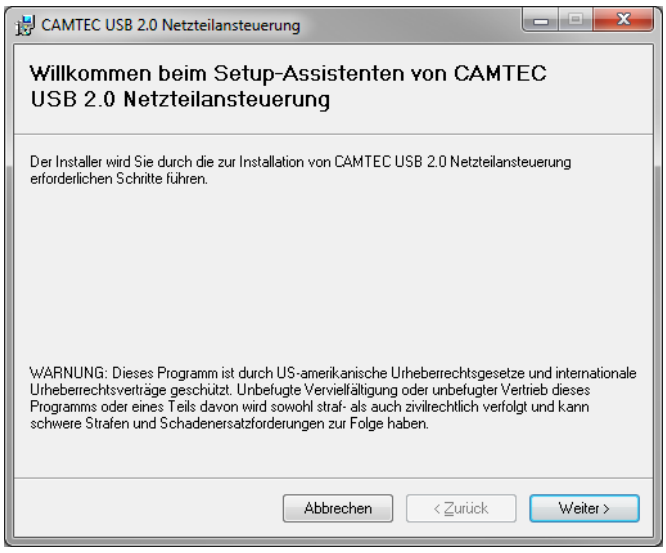
http://www.mcd-elektronik.com Rubric Software

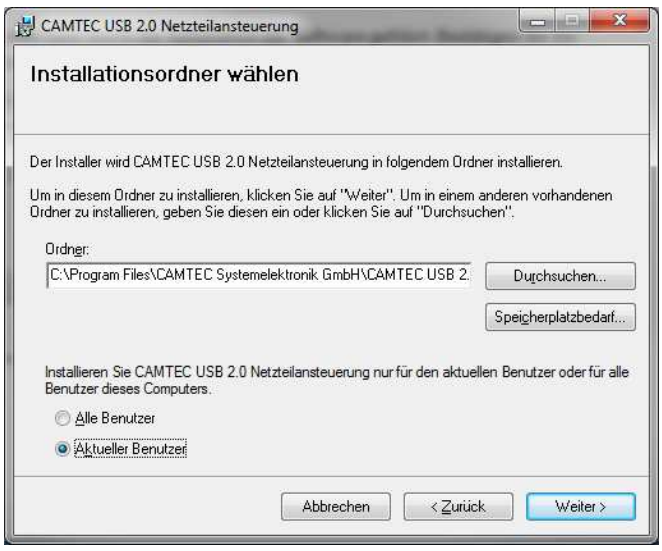
Instruction: Always install the software before first connecting the hardware to the computer (see chapter 4 “Installation of the UI.Drive-Hardware”).

Open the Windows®-Explorer and click the Installer „CamtecInstall.msi“



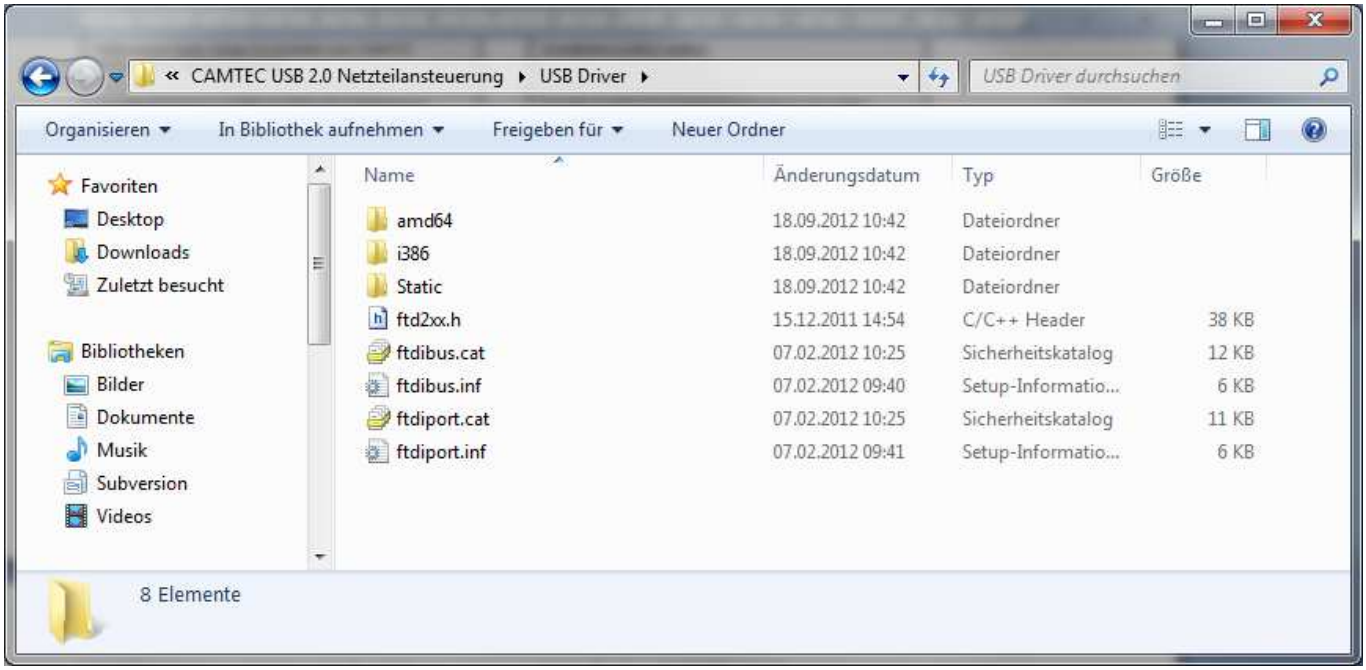
Follow the on-screen instructions. Acknowledge the dialogues and personalize the installation folder if necessary.





Once the software is installed connect the USB2.0 module to a free USB-port. The installed driver „ftdibus.inf“ can also be found under:

Program Files%\CAMTEC Systemelektronik GmbH\CAMTEC USB 2.0 Netzteilansteuerung\USB Driver



Deinstallation:

To deinstall the software use the Microsoft™ Windows® Installations-Manager: Windows-> System-> Software

6 Software Licensing

The UI.Drive-Software can be used as a free download together with USB2.0 UI.Drive hardware. The download link can be found in chapter 5 of this manual. The software is registered to MCD Elektronik GmbH.

7 Getting Started

Once the driver is installed the software can be accessed from the start menu. For further information about using the UI.Drive-Software go to the „Help“ menu.

1. Start the Software from the Windows Button in the folder CAMTEC: „CAMTEC USB 2.0 Netzteilansteuerung“ (Figure 1).

Figure 1 CAMTEC Start Menu after installation

2. After starting the Software please chose „Default“-Preset (Project ->Presets), if not already enabled (Figure 2)

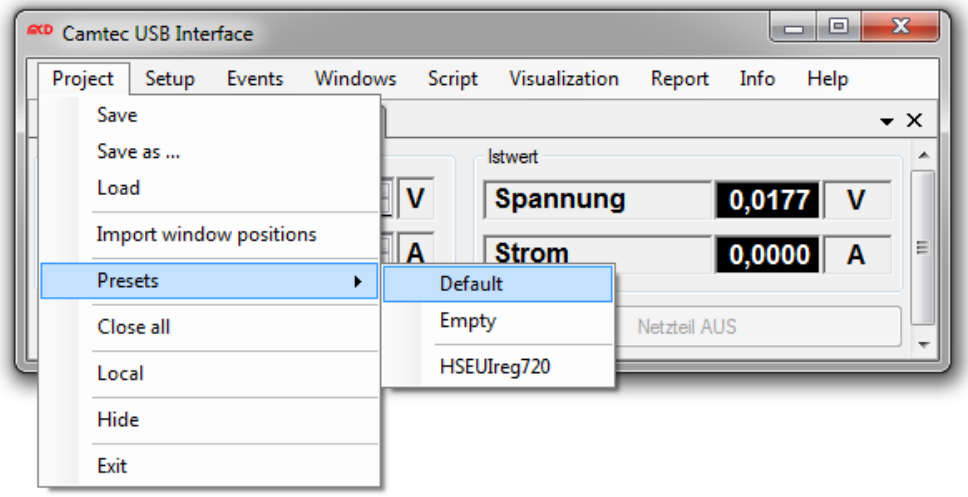


Figure 2 Chose the Default-Preset for the first step

3. If you have connected only one UI.Drive-Interface please delete a pre-set serial number accessing Setup -> Options -> Power Supply 1. If you have connected several UI.Drive-interfaces, please choose the Device A (Figure 3).

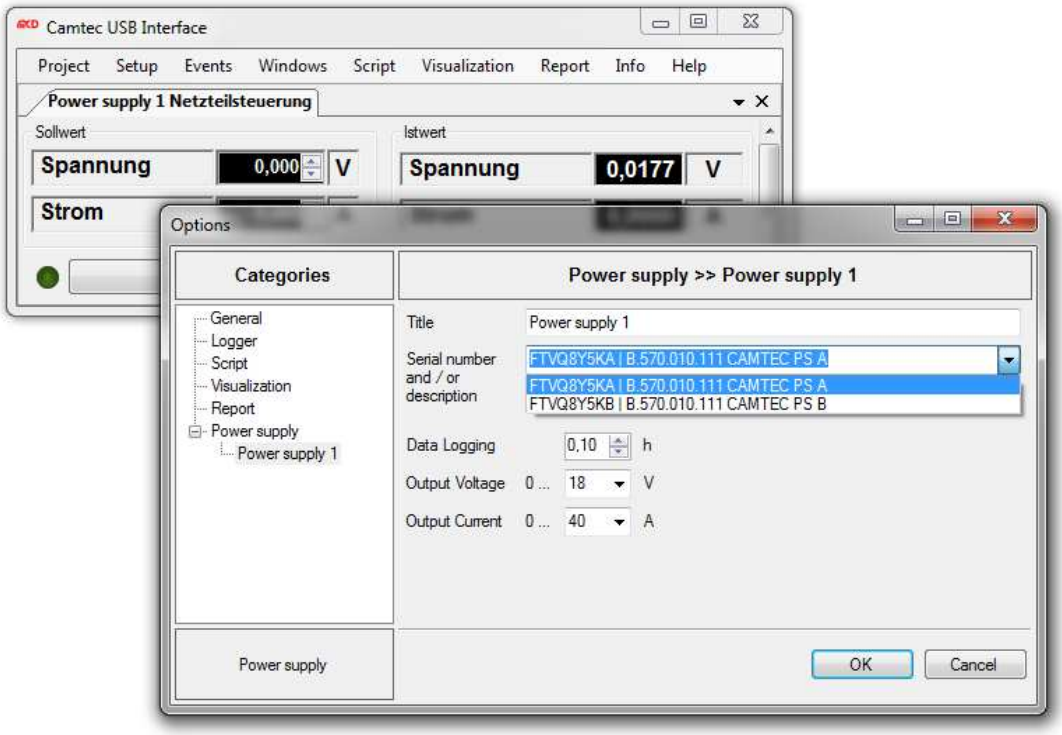


Figure 3 Setup -> Options, Ser.No. & data input of the power supply

4. Set the voltage and current value to the maximum of the connected UIreg power supply type (Figure 3).

5. Confirm your input with the OK-button.

6. Input the desired voltage value and the maximum current with the up/down buttons of the computer keyboard (Figure 4).

7. Switch on the power supply using the on-screen button „Power Supply On“ (Figure 4).

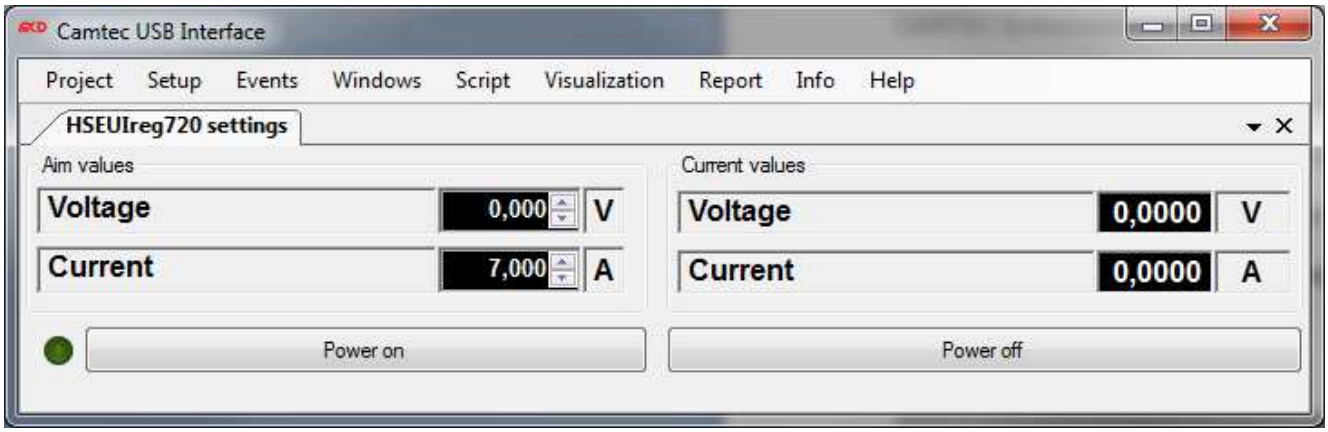


Figure 4 Voltage & current programming / confirm power supply ON

8. The UI.Drive-Software offers a lot of further functions. Please access the Help-Folder from the CAMTEC-Start-Menu or use the **F1**-key from the UI.Drive-Software.

9. The pre-installed preset example „HSEUIreg720“, offers a quick overview over the main functions of the software.

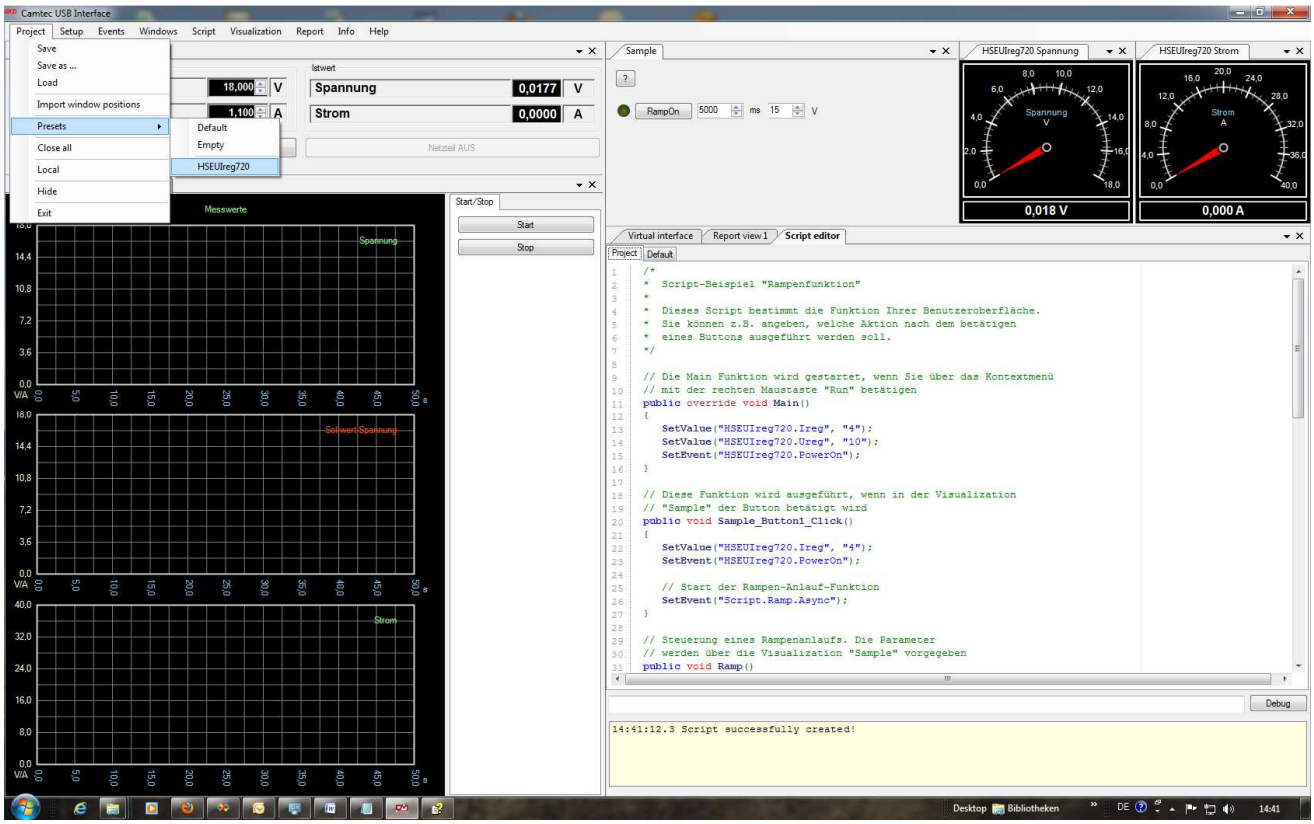
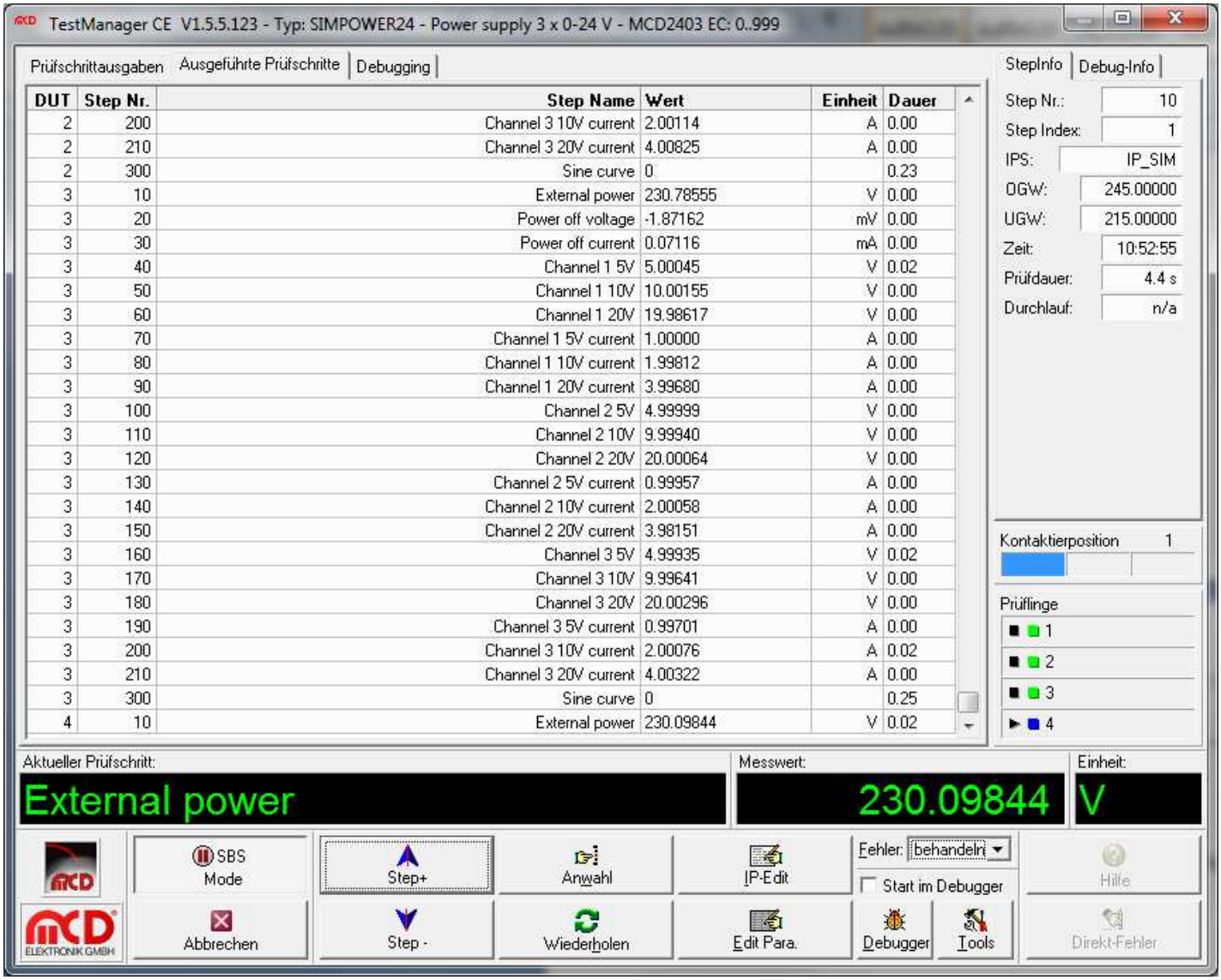


Figure 5 Window of the software

MCD TestManager CE

The installation contains a demo-version of the MCD TestManager CE. The programme can be accessed from the CAMTEC start menu. Pushing the Start-Button starts a simulated test procedure.

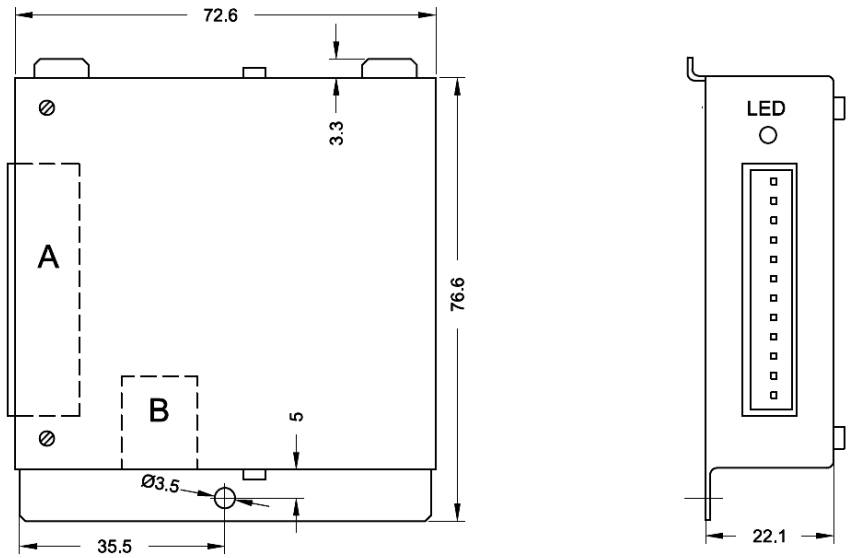
Using the programme preset „CAMTEC“ can be used to control the UI.Drive—Interface via **MCD TestManager CE**.



DUT	Step Nr.	Step Name	Wert	Einheit	Dauer
2	200	Channel 3 10V current	2.00114	A	0.00
2	210	Channel 3 20V current	4.00825	A	0.00
2	300	Sine curve	0		0.23
3	10	External power	230.78555	V	0.00
3	20	Power off voltage	-1.87162	mV	0.00
3	30	Power off current	0.07116	mA	0.00
3	40	Channel 1 5V	5.00045	V	0.02
3	50	Channel 1 10V	10.00155	V	0.00
3	60	Channel 1 20V	19.98617	V	0.00
3	70	Channel 1 5V current	1.00000	A	0.00
3	80	Channel 1 10V current	1.99812	A	0.00
3	90	Channel 1 20V current	3.99680	A	0.00
3	100	Channel 2 5V	4.99999	V	0.00
3	110	Channel 2 10V	9.99940	V	0.00
3	120	Channel 2 20V	20.00064	V	0.00
3	130	Channel 2 5V current	0.99957	A	0.00
3	140	Channel 2 10V current	2.00058	A	0.00
3	150	Channel 2 20V current	3.98151	A	0.00
3	160	Channel 3 5V	4.99935	V	0.02
3	170	Channel 3 10V	9.99641	V	0.00
3	180	Channel 3 20V	20.00296	V	0.00
3	190	Channel 3 5V current	0.99701	A	0.00
3	200	Channel 3 10V current	2.00076	A	0.02
3	210	Channel 3 20V current	4.00322	A	0.00
3	300	Sine curve	0		0.25
4	10	External power	230.09844	V	0.02

USB2.0 UI.Drive-Interface Technical Data

Supply Voltage	+5V from the USB Port of the connected Computer
Current consumption	115mA typical
Isolation USB-Interface to the Power Supply DC-Output	3000Vac / 4300Vdc
Isolation USB-Interface to PE	500Vdc
Isolation PS-DC-Output to PE	2000Vac / 2900Vdc
Resolution AD/DA Converter	12 Bit
Accuracy AD Converter	± 0,05% 15ppm/°C
Accuracy Monitor Output	± 0,5% max.
Accuracy Control-Input	± 0,8% max.
Daten-Flow/Control/Monitor	400ms Interval, Remote ON/OF forced directly
LED Signal	light = Power ON ——— blink = send/receive data - - - - -
Mounting Space	22,1 mm (width installed)



THIS DEVICE COMPLIES WITH THE FCC RULES

CE **REACH 2001/65/EU**

ROHS 1907/2006

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Ordering-Information

Model	Part Number
USB2.0 UI.Drive Interface Hardware incl. UI.Drive-Software	304.1093.001

Spare Part	Part Number
USB2.0 5 A/B Data Cable 5m / 16,4 feet	3520225
Interface Link Cable 12pole to connect to the UIreg Power Supply	306.1066.001