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# 1 Installation

## 1.1 Download



DEWESoft® homepage

<http://www.dewesoft.com>

you can download DEWESoft® plugins when you go to: Support – Downloads – Plugins

## 1.2 Compatibility

The plugin is compatible with DEWESoft® X1 and X2.

It has been tested on Windows 7 (32-bit and 64-bit).

## 1.3 Licensing

In DEWESoft® an additional license for the plugin is needed, it can also be written into the Dewesoft® device.

The plugin requires a valid DEWESoft® license.

To test the plugin you can use a *30-days-Evaluation license*.

### 1.3.1 Requesting an Evaluation license

You can request an *Evaluation license* from our homepage: <http://www.dewesoft.com/registration>

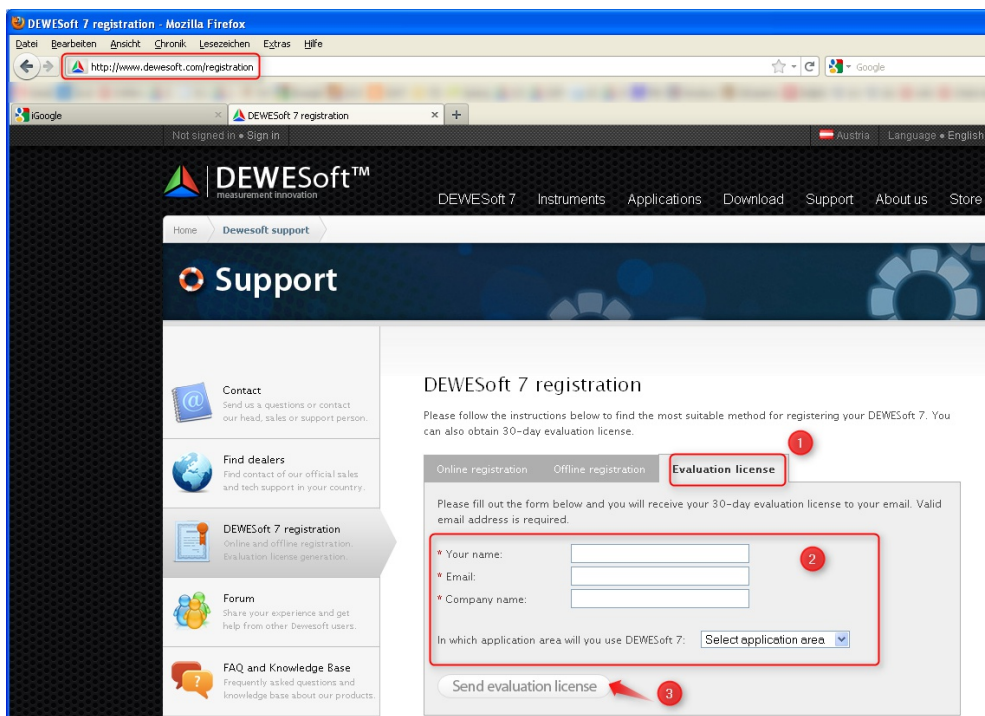


Illustration 1: Request Evaluation License

- (1) Click on Evaluation license
- (2) Fill out all the required fields
- (3) Click the **Send evaluation license** button

### 1.3.2 Activating the Evaluation license

When you have received your trial licence key, open DEWESoft®, go to **Settings - Hardware Setup...**, select the **Registration** tab sheet and enter the license code (if you already have other licenses, you may need to click the **Create** button).

Now enter the license code and click the **Register online** button.

Then your new license key will show up in the list and should have the *Status Valid*.

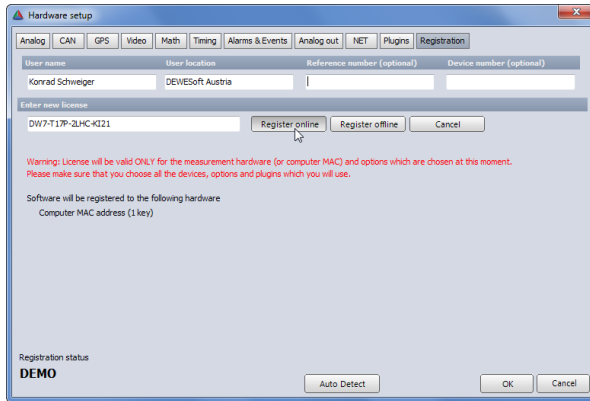


Illustration 2: Enter license key

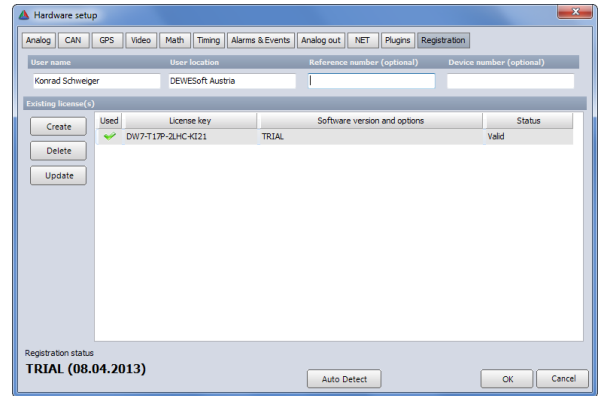


Illustration 3: Valid trial license

### 1.4 Plug-in Installation

Please copy the file `mobusrtu.dll` into the `Addons` folder of your DEWESoft® installation. (e.g. `D:\DEWESoft7\Bin\X1\Addons\`), then start DEWESoft®.

Go to **Settings → Hardware Setup → Plugins** and set the plugin to **Used**.

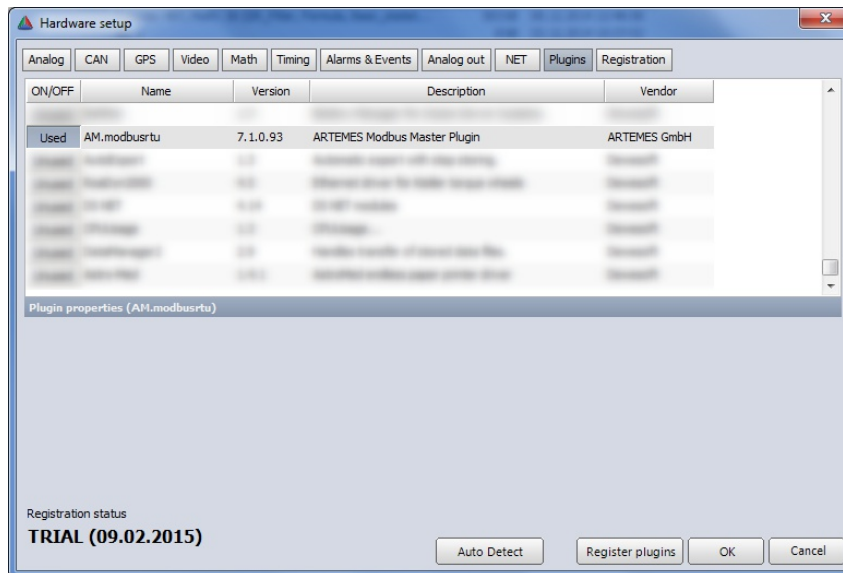


Illustration 4: Plugin in Hardware setup

#### HINT



When you are using Windows® 7, then you must click the **Register plugins** button (at the bottom of the Hardware setup dialogue) once and restart DEWESoft® before the plugin shows up in the list of available plugins.

## 2 Introduction

The Modbusrtu is a plugin to read out data of measurement devices over the MODBUS protocol.





### 2.1 General information

The plugin plays the role of the Modbus Master.




Modbus RTU Protocol over serial COM port is supported. ASCII Protocol is not supported.

You can choose the register type for every channel separately.

There are 4 types:

-  READ\_OUTPUT\_REGISTERS 3
-  READ\_INPUT\_REGISTERS 4
-  READ\_OUTPUT\_STATUS 1
-  READ\_INPUT\_STATUS 2

Possible data formats are:

-  INT16 (16 bit integer)
-  INT32 (32 bit integer)
-  FLOAT32 (IEEE 32 Bit floating point)

Data is read asynchronous. That means every COM port uses its own thread for reading data from the measurement device. If a measurement error occurs, you can define an error value. The channel will then get this value.

Default is -32767.

The plugin channels are mounted as asynchronous DEWESoft channels.

If you are using a large setup, it can sometimes take a while until all the channels are read. If you then want to use the Modbus channels combined with other channels in the mathematic section, it will at least take one readcycle until the math channel is calculated. To avoid this you can define if with every DEWESoft cycle (33ms by default) the last read-out value is written to the DEWESoft buffer. This results in a higher amount of data but the maximum delay of the maths is exactly one DEWESoft cycle.

### 3 Configuration

If the plug-in is installed and activated as described above, its setup-frame will appear as big icons on top of the Setup-screen in Acquisition-mode.

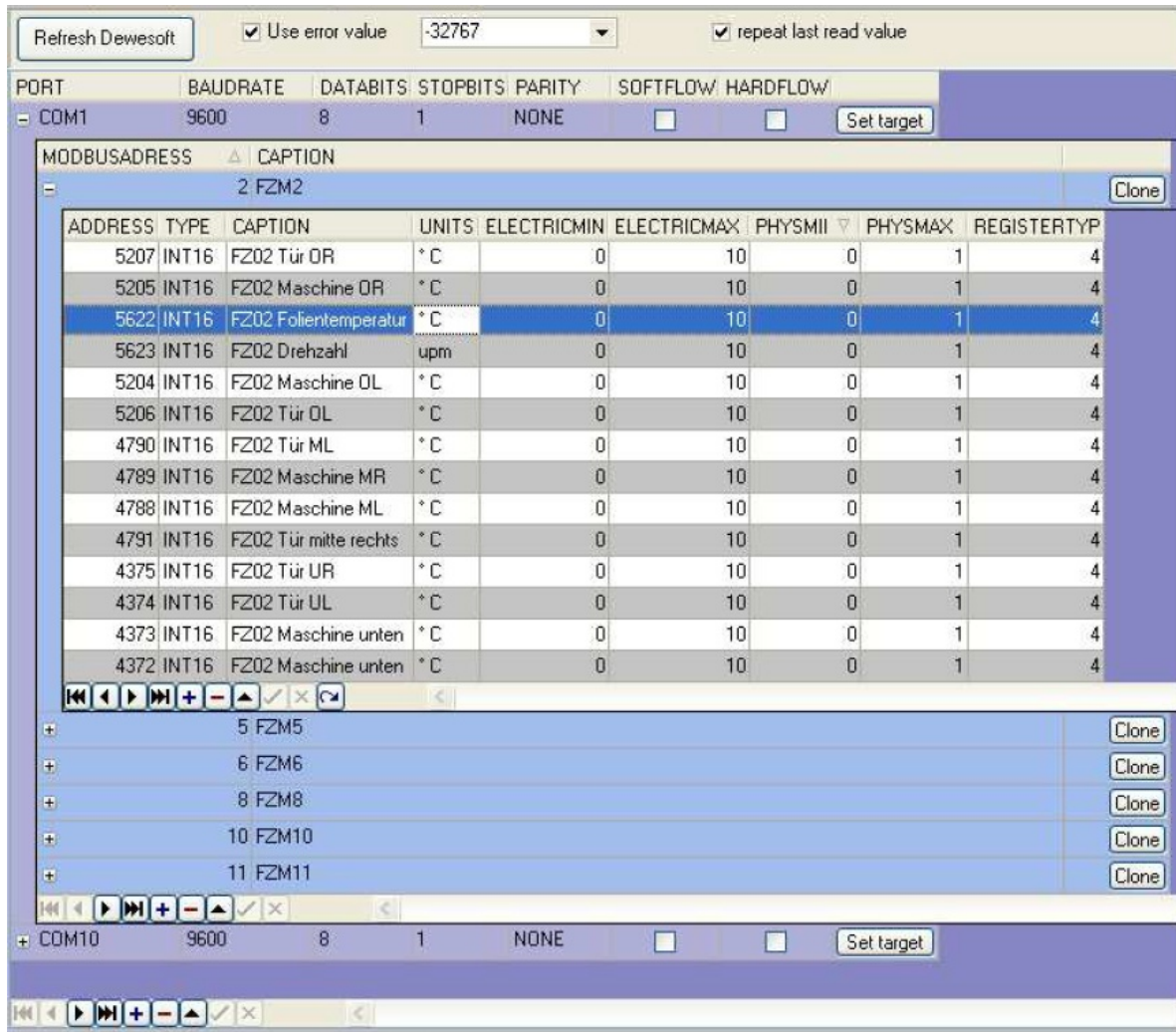


Illustration 5: Plugin configuration setup screen

On top of the setup window you see the general settings of the protocol.

**"Refresh Dewesoft"** results in storing and re-loading the actual setup. All the modbus channels are then mounted again from the start.

**Use error value:** defines, if the error value will be transferred from the plugin to DEWESoft.

**repeat last read value:** defines, if the last read value will be transferred each DEWESoft cycle to DEWESoft or not.

Below there is the list of the COM ports.

Every port includes the measurement devices of the shown address. Every measurement unit includes the channels to read.

This is the structure:



**Electricmin / Electricmax and Physmin / Physmax** is the scaling of the channel according to the "Scaling by two points" in Dewesoft Setup.

**Registertype** shows the Modbustype of the channel.



... add line (COM port, instrument or channel)



... delete element



... edit element



... save element



... cancel (undo changes)

## 4 FAQ

This section should help to find quick solutions for known problems.



## 5 Version History

### 5.1 Plugin Version

Plugin-Version	Date [dd.mm.yyyy]	Notes
7.1.0.93	19.12.13	

### 5.2 Documentation Version

Revision number: 61

Last modified: Wed 21 Jan 2015, 18:19

Doc-Version	Date [dd.mm.yyyy]	Notes
1.0	21.01.15	initial revision for plugin version 7.1.0.93