## **Operating Instructions**

Software for adjustment of communication-capable sensors and controllers

# PACTware/DTM Collection 02/2021

Installation, first steps



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Document ID: 28243







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## 1 About this document

## 1.1 Function

This operating instructions manual provides all the information you need for installation and commissioning. Please read this information before setting up the instrument and keep this manual accessible in the immediate vicinity of the device.

## 1.2 Target group

This operating instructions manual is directed to trained personnel. The contents of this manual must be made available to the qualified personnel and implemented.

## 1.3 Symbols used

### Document ID

This symbol on the front page of this instruction refers to the Document ID. By entering the Document ID on <u>www.vega.com</u> you will reach the document download.

### Information, tip, note

This symbol indicates helpful additional information.

Caution: If this warning is ignored, faults or malfunctions can result.



**Danger:** If this warning is ignored, serious injury to persons and/or destruction of the instrument can result.



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### Ex applications

This symbol indicates special instructions for Ex applications.



### SIL applications

This symbol indicates instructions for functional safety which must be taken into account particularly for safety-relevant applications.

List

The dot set in front indicates a list with no implied sequence.

→ Action

This arrow indicates a single action.

1 Sequence of actions

Numbers set in front indicate successive steps in a procedure.



## 2 For your safety

## 2.1 Authorised personnel

All operations described in this documentation must be carried out only by trained, qualified personnel authorised by the plant operator.

## 2.2 Appropriate use

PACTware (Process Automation Configuration Tool) is a manufacturer and fieldbus-independent software for adjustment of all types of field instruments. The corresponding VEGA instruments can be adjusted with the DTMs (Device Type Manager) supplied by VEGA.

## 2.3 Warning about incorrect use

Inappropriate or incorrect use of an instrument adjusted with PACTware can give rise to application-specific hazards, e.g. vessel overfill or damage to system components through incorrect mounting or adjustment. Thus damage to property, to persons or environmental contamination can be caused.

## 2.4 General safety instructions

Installation and use of the software are carried out at your own risk. We do not accept liability for consequential damage.

## 2.5 Environmental instructions

Protection of the environment is one of our most important duties. That is why we have introduced an environment management system with the goal of continuously improving company environmental protection. The environment management system is certified according to DIN EN ISO 14001.

Help us to meet with these requirements.



## 3 Product description

## 3.1 Configuration

Scope of delivery	<ul> <li>The scope of delivery encompasses:</li> <li>Data medium DTM Collection: <ul> <li>Microsoft .NET Framework 3.5 and 4.6.1</li> <li>The current PACTware version</li> <li>all currently available VEGA DTMs in free-of-charge standard version</li> <li>HART protocol driver from Codewrights GmbH</li> <li>Generic HART-DTM from ICS GmbH</li> <li>Softing Profibus DTM</li> </ul> </li> <li>Operating Instructions Installation, first steps</li> </ul>
	3.2 What is PACTware/FDT/DTM?
PACTware	PACTware (Process Automation Configuration Tool) is manufacturer and fieldbus-independent software for adjustment of all types of field instruments. The DTMs (Device Type Manager) of the respective field device manufacturers are integrated into this open, freely available supporting program via the interface specification FDT 1.21/2.0. To adjust a field device, a DTM corresponding to the instrument type is always required (this DTM is developed and sold by the respective field device manufacturer).
FDT	FDT (Field Device Tool) is a standardised interface description that describes the interaction between DTM and frame application, e.g. PACTware. FDT controls the data exchange between the different DTMs and the supporting program.
DTM	The DTM (Device Type Manager) is the actual adjustment module for sensors and field components. It contains all instrument-specific data and functions of a sensor type and delivers all graphic elements and dialogues for adjustment. A DTM is not a stand-alone, execut- able software but requires a supporting program, like PACTware, from which it can run.
DTM Collection	The VEGA DTM Collection, a software package consisting of PACT- ware with VEGA DTM as well as various standard communication DTMs, is the adjustment software for all currently available, commu- nication-capable VEGA sensors. Also VEGAMET 391, VEGAMET 624/625 controllers, VEGASCAN 693 as well as all instruments of PLICSRADIO and PLICSMOBILE series can be operated completely via the corresponding DTM. For VEGALOG 571 processing systems with DTM CPU (CPU card from version 2.0) there is also complete DTM support.
	A Bluetooth driver enables the wireless communication with bluetooth-capable VEGA instruments such as the display and adjust- ment module PLICSCOM. For this, a VEGA Bluetooth USB adapter is required on the PC side.



Parameter adjustment of the VEGAMET series 500 and 614 controllers as well as VEGALOG 571 with CPU version < 2.0 is not supported. For parameter adjustment of these instruments, the parameter adjustment software VVO is required. Access to the digital sensors (Profibus PA, VBUS) connected to VEGALOG 571 is possible with the "VEGALOG 571" DTM, independent of the software version.

There is also complete support for parameter adjustment of VEGA sensors with Modbus extensions via a USB connection. For parameter adjustment via Modbus there is also a Modbus-CommDTM included in the package.

## 3.3 VEGA-DTM

All device DTMs are available as a free-of-charge standard version and as a full version that must be purchased. In the standard version, all functions for complete setup are already included. An assistant for simple project configuration simplifies the adjustment considerably. Saving/printing the project as well as import/export functions are also part of the standard version.

In the full version there is also an extended print function for complete project documentation as well as a save function for measured value and echo curves. With plics®plus sensors, the recording functions only through the service recording, but also in the standard version. In addition, a tank calculation program as well as the software " *Da-taViewer*" for display and analysis of the saved measured value and echo curves is available in the full version.

The standard version is available as a free-of-charge download from our homepage. The full version is available on DVD from the agency serving you.

The licence regulations allow you to copy a VEGA DTM any number of times and use it on any number of computers, as long as you are using the standard version. The full version may be copied a number of times and can be installed on several computers, however may not be used by more than one user at a time.

VEGA offers individual DTMs for more than 200 instrument types, all of them are installed via a common setup program.

## 3.4 Storage and transport

Packaging

The packaging consists of easily separable monomaterials. These materials are environment friendly and recyclable. Dispose of the packaging material via specialised recycling companies.

Storage and transport conditions

No special storage and transport conditions are necessary.



## 4 Software installation

### 4.1 System requirements

General information

CPU 1 GHz or higher, 1 GB RAM, 1 GB free memory, Windows 7/8/10 (32/64 Bit), Internet Explorer 6.0 or higher, Microsoft .NET Framework 2.0/3.5 and 4.6.1, graphic resolution 1024 x 768 or higher, Microsoft compatible mouse, RS232/USB/Ethernet interface.

The size of the working memory depends on the operating system and the processor as well as the installed application software and corresponds to an average value. At least 2 GB RAM should be available with 64 Bit systems.



### Note:

To install the software you will need administrator rights. After the installation, a Windows restart is necessary to actually complete the installation. For that reason, the subsequent Windows login must be carried out with the same user name the installation was performed under. For installation under Windows 10, .NET 3.5 must be activated.

## 4.2 Installation of PACTware and DTM

- 1. Before installation, all running programs should be exited.
- Insert the DVD, the installation program will be started automatically. If the DVD does not start automatically, the installation can be started by a double click on the file " *autorun.exe*".

In the opening installation assistant you now select the requested language. This selection can be modified after installation.

In the next window, you select " *Standard*" or " *User-defined*". With the standard installation, only the components required for VEGA instruments are installed. If " *User-defined*" is selected, the available DTM packages can be selected individually in the following window.

Start the actual installation process via the button " Installation".

## Note:

For the installation of PACTware, Microsoft .NET Frameworks 2.0/3.5 and 4.6.1 is a prerequisite. The installation assistant checks automatically if .NET, PACTware and the VEGA plics DTMs are already installed. If that is the case, this will be marked in the respective window and the programs will not be installed again.





Fig. 1: Installation assistant

GA-DTM Collection 12/201	2 Full version	VEEA
	NET Framework 2.0 PACTware 4.1 SP2	Viet our homepage www.vdcs.co
plics	VEGADIM	
	Rack Tostal	ation Finish

Fig. 2: Installation assistant (exemplary)



## 5 Adjustment

## 5.1 Start PACTware

Start PACTware via the Windows start menu. In the standard setting, it is not necessary to enter a user name and a password. If user name/ password is requested, you can assign various users with different rights and assign a password under the PACTware menu item " *Extras* - *User administration*".

## Information: To ensure that

To ensure that all instrument functions are supported, you should always use the latest DTM Collection. Furthermore, not all of the described functions are always included in older firmware versions. For many instruments, the latest instrument software can be downloaded from our homepage. The transfer of the instrument software is carried out via PACTware. A description of the update procedure is also available in the Internet.

## 5.2 Create a project

Starting point for the adjustment of all types of field devices is the partial or complete imaging of the device network in a PACTware project. This device network can be created automatically or manually and is displayed in the project window.

### With simple device structures

For simple device structures, for example, a direct connection of the PC via a VEGACONNECT 4 with a VEGA sensor, it is not necessary to create the device network, but as an alternative you can directly click the desktop link "VEGA-USB-Scan". If PACTware is opened via this link, the connected sensor is automatically identified and the suitable DTM appears in the PACTware window in online mode. All PACTware adjustment elements are faded out so that only the information of the DTM relevant for the actual parameter adjustment are visible.

### With complex device structures

With complex device structures, the connection is carried out via the VEGA project assistant. The VEGA project assistant is a manufacturer-specific extension module for PACTware. It is part of each VEGA DTM installation package and is installed automatically. By means of the VEGA project assistant, the connected instruments are identified automatically and integrated into the PACTware project. For this, only an online connection to the respective instruments is necessary.

The VEGA project assistant is opened from the PACTware menu bar under " *Project - VEGA project assistant*". The window " *VEGA project assistant*" opens and you only have to select the requested interface for automatic generation of the project. If only one instrument is connected to the selected interface, the DTM parameter adjustment window will be opened automatically and the device data loaded.

You can find further information on how to use the VEGA project assistant in the corresponding online help. The online help can be opened directly from the window " VEGA project assistant".

Create a project automatically



0 🗃 🖬 🔿 🚳		「「「「「」」を発見	
Project # ×	VEGA project assistant	6	4 ⊳ <b>x</b>
Device tag	O R5232 ⊙ TCP/IP O USB O Bluetooth	Create new project Coad device data automatically Cumit network search Close window automatically	Ø

Fig. 3: Project assistant

**Create a project manually** Even when instruments that are to be parameterised are not yet available or connected, the project can be created manually (offline operation). All DTMs installed on the PC are displayed in the device catalogue. The DTMs usually have the same names as the instruments that can be adjusted with them. For a better overview, the device catalogue is divided into different subgroups. On the upper level, the manufacturers of the respective DTMs appear first. Below, the DTMs are divided into different function categories such as " *Driver*", " *Gateway*" and " *Device*".

To create a project in the project window, paste in the DTMs from the instrument catalogue - one DTM for each actually used instrument. The entry HOST-PC is the starting point for pasting in the DTMs. The requested DTM can be brought over from the instrument catalogue to the project window with a double click or Drag and Drop. In the project window you can change the names of the selected instruments for better differentiation. If the project window or the instrument catalogue are not visible, they can be activated in the menu bar under "*View*".

## 5.3 Project examples

### Project creation for a VEGA sensor

**Connection of sensor via** VEGACONNECT The following example shows a typical project containing a sensor connected e.g. to a PLC. We recommend using the "*VEGA project assistant*" as this considerably facilitates project creation and helps avoid errors. All necessary components are found automatically and integrated in the project.

- Select in the device catalogue first of all the "VEGACONNECT 4" DTM from the category "Driver" and transfer it, for example by double clicking, to the project window.
- 2. Select the requested sensor DTM from the category " *Device*" and transfer it to the project window. You are asked for " *HART*" or " *I2C*" depending on the connection. If VEGACONNECT is con-



nected directly to the sensor, select type " *I2C*". When connecting via the 4 ... 20 mA cable, type " *HART*" must be selected.

 Now open the DTM by double clicking on the sensor in the project window and carry out the desired settings, see chapter " Parameter adjustment".



Fig. 4: Project with VEGAPULS

### Project creation, VEGAMET 391 with sensor

#### Connection VEGAMET 391 via USB

The following example shows a typical project containing a sensor connected to a VEGAMET 391. Communication with VEGAMET 391 is carried out in this example via USB. We recommend using the " VEGA project assistant" as this considerably facilitates project creation and helps avoid errors. All participating components are found automatically and integrated into the project.

- In the device catalogue, first select the "VEGA USB" DTM from the category "Driver" and transfer it, e.g. by double clicking, to the project window.
- Select the VEGAMET 391 DTM from the category " Gateways" and transfer it into the project window.
- 3. Select the requested sensor DTM from the category " *Device*" and transfer it to the project window.
- Now open the DTM by double clicking on the sensor in the project window and carry out the desired settings, see chapter " Parameter adjustment".



PACTware		X-
File Edit View	Project Device Extras Window	Help
Project # ×	Device catalog	<b>å</b> ×
Device tag	- 르 All Devices	All Devices\VEGA Grieshaber KG\Gateway
HOST PC	🖃 🔂 VEGA Grieshaber KG	Device A Protocol
🕀 🖞 USB	Device	The solitrac 31 hart sil hart; VVO Protocol; P
🖃 🔜 Device Name		SOLITRAC 31 Profibus PROFIBUS DP/V1; VVO
🦾 🦿 Sensor	(in outerray	P VEGA CONNECT (HART) VVO Protocol - VVO Pr
		Pl VEGA CONNECT (I2C) VVO Protocol - VVO Pr
		P VEGA CONNECT (VBUS) VVO Protocol - VVO Pr
		CEGADIS 82 VVO Protocol - HART
		VEGALOG 571 VVO Protocol - VVO Pr
		VEGALOG 571 EP VVO Protocol - PROFIB
	Vendor Group Type Protocol	VEGALOG 571 EV VVO Protocol - VVO Pr
		VEGAMET 391 VVO Protocol; VVO USI
	Show unselected devices too	۰ III ا
<	1. Update dev	rice catalog Info Add
1> 0 * 40	NONAME> Administrator	

Fig. 5: Project with VEGAPULS

### Project creation, VEGAMET 624 with sensor

**Connection, VEGAMET** 624 via Ethernet The following example shows a typical project containing a sensor connected to a VEGAMET 624. Communication with VEGAMET 624 is carried out in this example via network and Ethernet. We recommend using the "*VEGA project assistant*" as this considerably facilitates project creation and helps avoid errors. All participating components are found automatically and integrated into the project.

- In the device catalogue, first select the "VEGA Ethernet" DTM from the category "Driver" and transfer it, e.g. by double clicking, to the project window.
- Select the VEGAMET 624 DTM from the category " Gateways" and transfer it to the project window.
- 3. Select the requested sensor DTM from the category " *Device*" and transfer it to the project window.
- 4. Select the "VEGA-Ethernet" DTM in the project tree and select via the right mouse key the menu item "Additional functions -Change DTM addresses". Enter in the field "New address" the IP address or the Host name the VEGAMET should get later on in real operation.
- 5. Now open the VEGAMET DTM and sensor DTM by double clicking and carry out the desired settings, see chapter " *Parameter adjustment*".



	bject Device Extras window	Help	
Project 🗛 🗙	Device catalog		<b>Q</b> :
Device tag	All Devices	All Devices\VEGA Grieshabe	ar KG\Driver
HOST PC	VEGA Grieshaber KG	Device	Protocol V
🖓 🐺 LAN 🔤 🔤 Device		Stress VEGA Bluetooth	VVO BLE Protocol V
🖃 📃 Device Name	Univer	🙀 VEGA Ethernet	VVO Protocol V
Sensor		VEGA MODBUS Serial	MODBUS over serial lin V
		VEGA RS232	VVO Protocol V
		VEGA USB	VVO USB Protocol V
		Legaconnect 4	VVO Protocol; HART V
	Vendor Group Type Protocol		
-	Show unselected devices too	4 [	

Fig. 6: Project VEGAMET with VEGAPULS

### Project generation, sensor via Bluetooth communication

 Sensor via PLICSCOM/
 The following example shows a typical project of a sensor connected through the display and adjustment module PLICSCOM via Bluetooth.

For communication with the display and adjustment module, a VEGA Bluetooth USB adapter (Art. no. PLICSACADAPT.B) is required on the PC side. The Bluetooth function which is probably already integrated in your notebook cannot be used.

We recommend, using the "*VEGA project assistant*", this facilitates the project generation considerably and mistakes can be avoided. All involved components will be found automatically and integrated in the project.

- In the device catalogue, first select the "VEGA Bluetooth" DTM from the category "Driver" and transfer it, e.g. by double clicking, to the project window.
- 2. Select the PLICSCOM DTM from the category " *Gateways*" and transfer it to the project window.
- 3. Select the requested sensor DTM from the category " *Device*" and transfer it to the project window.
- 4. Now open the sensor DTM by double clicking and carry out the desired settings, see chapter " *Parameter adjustment*".

Connection via VEGA-

COM 558/Ethernet





Fig. 7: Project, sensor via Bluetooth

### Project creation VEGALOG and Profibus PA sensor

The following example shows a typical VEGALOG project with EP card and Profibus sensors. We recommend using the "*VEGA project assistant*", this facilitates the creation of projects considerably and errors during addressing of the VEGALOG module cards and sensors are avoided. All existing cards are found automatically and added to the project. All connected Profibus sensors are also taken over automatically into the project.

In case the planning is nevertheless carried out manually, e.g. when creating an offline project, the following DTMs must be added to the project tree:

 First of all a driver must be selected by which the communication via the PC can be carried out. Select the "VEGA Ethernet" DTM from the instrument catalogue. With this driver, the connection to VEGACOM 558 in the VEGALOG 571 processing system is established.

When the "*VEGA Ethernet*" DTM in the project tree is selected, you can later adjust the IP address for the VEGACOM 558 module card in the PACTware menu under "*Device data - Add'l functions - Change DTM addresses*". The implementation of this setting is only possible if a suitable DTM (e.g. VEGACOM 558) has already been added to the project tree.

 Finally the DTM " VEGALOG 571" must be added. This DTM represents the VEGALOG 571 processing system. In this DTM, measurement loops are created and processed later on.

When the "*VEGALOG 571*" DTM in the project tree is selected, you can later adjust the card addresses for the VEGALOG module cards in the PACTware menu under "*Device data - Add'I functions - Change DTM addresses*". The implementation of this setting is only possible if a corresponding DTM (e.g. VEGACOM 558) has already been added to the project tree.



- 3. Then the DTMs for the individual VEGALOG module cards must be added to the project tree. These are in this example: VEGA-LOG CPU, VEGACOM 558, VEGALOG 571 EP.
- 4. The two DTM types " VEGALOG 571 EP" and " VEGALOG 571 EV" are VEGALOG module cards for connection of digitally communicating VEGA sensors. This means appropriate sensor DTMs can be added to these cards. Select the suitable sensor DTM from the device catalogue and transfer it into the project window.

If the sensor is already connected, it is possible to search for it with PACTware. In this case, the VEGALOG 571 DTM must be in online mode (right mouse key - " *Connect*"). Then the automatic search function can be started via the right mouse key - " *Add'I functions - Instrument search*".



Fig. 8: Project VEGALOG 571 with Profibus PA sensors

## 5.4 Parameter adjustment (synchronized operation)

With the parameter adjustment in synchronized operation, the DTM tries to keep the instance data, this means the data stored in the DTM are always consistent to the device data. To achieve this, always the complete data set of the device is read out during connection and copied to the instance data of the DTM. This mode corresponds to the standard behaviour of the VEGA DTMs.

After the project is created, the parameter adjustment of the instrument can be started. This is done via double click to the requested DTM in the project window or via the right mouse key by selecting " *Parameter*".

In the following procedure, a difference is made between offline and online mode.

### Offline mode

In offline mode, the project can be prepared, created and stored without connected instruments. Later on, in online mode these data can be transmitted to the instruments ready for operation.



Sensor Parametrierung		()
Device name. Description: Measurement loop name:	VEGAPULS 62 MART Radar sensor with 4 _ 20 mA/HART interface for conti Sensor	inuous level measurement of figuids
🖂 * 🚔 🌯 * 🔜 * 🛛 *	Min /max adjustment	es for level encoentaries)
Application - Mins/mas. adjustment - Damping	1	Sensor reference plane
- Current output Display Disgnostics	Max adjustment 😅	Distance A
ai Additional settings ai Info	Min adjustment	Distance B
	Max. adjustment in percent	100.00 %
Software version	Distance A (max. adjustment)	0,000 m
Senial number	Min. adjustment in percent	0,00 %
	Distance 8 (min. adjustment)	25,000 m
OFFLINE		
		OK Cancel Apply
4b Disconnected 🚺 Data set	Administrator	
KIR * () KNONAME>	Administrator	

Fig. 9: DTM view VEGAPULS 62 offline operation (synchronized)

### Online mode

In online mode, the instruments on which the parameter adjustment is to be carried out must be connected and ready for operation. By selecting the appropriate DTM with the right mouse key and the command " *Connect*", the online mode is set up for operation. After double clicking to the DTM, connection is initiated which simultaneously checks the communication, the sensor type and additional parameters. If necessary, all parameters of the instrument will be transferred automatically. Via the PACTware menu item " *Read data from device*", all parameters of the instruments can be loaded anytime. All modifications which are carried out will be stored automatically in the instruments after pushing the *OK* or *Accept* button.



😏 Sensor # Online Parametrierur	g		40×4
Device name: Description: Measurement loop name	VEGAPULS 62 Redar sensor with 4 _ 20 mA/MART interface ret Sensor	for continuous level measurement of lig_ V	EGA
Setup N Application - Minimum adjustment	lin /max. adjustment (Set distan	ces for level percentages) Sensor reference plane	
Current output     Cock adjustment     Display     Display	Max aquatment ⇔	Distance A	
<ul> <li>Additional settings</li> <li>Info</li> <li>Measured values</li> </ul>	Min adjustment 😅	Distance 6	
	Max. adjustment in percent	100,00 %	
Software version 4.0.1	Distance A (max. adjustment)	0,000 m	
Senal number 18163470	Min. adjustment in percent	0,00 %	
Device status OK	Distance B (min. adjustment)	35,000 m	
32,977 m	Distance	2,022 m	
		OK Cancel	Apply
Connected 🔂 🚱 Device and	i data set 🥁 Administrator		
Ø₽ ¥ 0 <noname></noname>	Administrator		

Fig. 10: DTM view VEGAPULS 62 online operation (synchronized)

By selecting the respective DTM with the right mouse key and the command " *Separate connection*", the DTM can be switched again to offline operation.

## Information: Detailed explain

Detailed explanations on parameter adjustment and project creation are available in the online help of PACTware and the DTMs. Also consult the operating instructions manual of the corresponding instrument for setup and correct parameter adjustment.

## 5.5 Parameter adjustment (non-synchronized operation)

With the parameter adjustment in non-synchronized mode, the instance data, this means the data stored in the DTM, and the device data are kept separately. An automatic adjustment is not carried out. For this reason, the contents of the DTM window in offline mode can be different to that in online mode. Furthermore only data of the parameter page are loaded during connection which is actually opened in the DTM.

This mode is a version which is particularly designed for slow bus systems (e.g. Wireless HART). For activation of this mode, you have to use the VEGA DTM Configurator, file card "*Synchronization*".



VEGA-DTM Configurator			loire
plact the basic settings for the	VEGA DTMa		
	Basic adjustments synchronisation (interoperability)		
-	Treatment of device data and DTM instance data	Not synchronized	•
-	Updating interval for measured values and diagnosis.	Minimal	•
plics			
Service logn		OK	Dancel

Fig. 11: DTM Configurator: Configuration of the data synchronization

This can be found in the Windows program group VEGA – VEGA-DTM Tools. Here, you can also set the updating interval for online values (diagnosis and measured values). Settings in the file card " Synchronization" influence all VEGA DTMs for operation of plics®plus sensors. Please close PACTware before you change settings. When the DTMs work in non-synchronized mode, then a respective information appears in the tool bar.

After the project is created, the parameter adjustment of the instrument can be started. This is done via double click to the requested DTM in the project window or via the right mouse key by selecting "Parameter". In the following process, a difference is made between offline and online mode.

### Offline mode (represents the instance data)

In offline mode, the project can be prepared, created and stored without connected instruments. Later on, these DTM instance data can be transferred to the ready devices by means of the PACTware menu " *Write into device*". However, in advance, connection must be provided by selecting the respective DTM with the right mouse key and the command " *Connect*".



Sensor Parametrierung				
Device name: Description: Measurement loop	VEGAPULS 62 MART Reder sensor with 4 _ 20 mA(HART inte meme: Sensor	face for continuous I	evel measurement of liquids	VEGA
🖬 • 🖕 • 🔤 • 😰	•		Mode	not synchronized
Strup Application Application Application Durging Connect output Display Display Additional settings Info	Min /max, adjustment Set di Max, adjustment c: Min, adjustment c:	stances for level per	centages) Sensor reference plane	
	Max. adjustment in percent	7	100.00 %	
Software version	Distance A (max. adjustment)	?	0,000 m	
Serial number	Min. adjustment in percent	?	0,00 %	
	Distance 8 (mini-adjustment)	?	35,000 m	
		(	OK Cano	el Apply
Disconnected Data :	et 🔛 Administrat	oc.		

Fig. 12: DTM view VEGAPULS 62 offline operation (not synchronized)

### Online mode (represents the device data)

In online mode, the instruments on which the parameter adjustment is to be carried out must be connected and ready for operation. By selecting the appropriate DTM with the right mouse key and the command "*Connect*", the online mode is set up for operation. After double clicking to the DTM, connection is initiated which simultaneously checks the communication, the sensor type and additional parameters. Furthermore the parameters of the opened DTM parameter page are transmitted from the device. Only when moving to another parameter page, the data of the selected parameter page are loaded. Via the PACTware menu item "*Read data from device*", all parameters of the instruments can be loaded anytime. All modifications which are carried out will be stored automatically in the instruments after pushing the *OK* or *Accept* button. The DTM instance data will not be changed.





Sensor # Online Parametrie	rrung	4.1.
Device name: Description: Measurement loop	VEGAPULS 62 Radar sensor with 4 _ 20 mAHART interface name: Sensor	for continuous level measurement of liquids VEGA
□• ≥  <b>● •</b> •   <b>■</b> •	2 -	Mode: not synchronized
Stup Application  Application  Amping  Correct output  Correct  C	Min /max, adjustment Set datawa Max, adjustment 😅	os for fevel percentagos) Sensor reference plane Ustance A Distance B
- Measured values	Max. adjustment in percent	100.00 %
Senal number 18163470	Lastance A (max. adjustment)	0,000 m
Device status OK	Distance 8 (min. adjustment)	35,000 m
	Distance	2,022 m
		OK Cencel Apply
Connected 🔂 🗕 Device	Administrator	
A + NONAME	Administrator	

Fig. 13: DTM view VEGAPULS 62 online operation (not synchronized)

By selecting the respective DTM with the right mouse key and the command " *Separate connection*", the contents of the DTM parameter window disappears and the information " *Online connection required*" appears.



Fig. 14: DTM view VEGAPULS 62 online operation separated connection (not synchronized)

### Information:

Detailed explanations on parameter adjustment and project creation are available in the online help of PACTware and the DTMs. Also consult the operating instructions manual of the corresponding instrument for setup and correct parameter adjustment.



## 6 Maintenance and fault rectification

## 6.1 Maintenance/Update

PACTware and VEGA DTMs are maintenance free. For the purpose of error removal or integration of new functions, software updates will be available in certain cases. When new sensor types become available, the suitable DTMs will be included in the current DTM Collection which can be downloaded from the Internet. Information on our homepage: <u>www.vega.com</u>.

## 6.2 Rectify faults

If glitches occur, PACTware and VEGA DTM generate their own fault messages with corresponding explanations.

Fault messages generated in the sensor and sent to the DTM are described in the corresponding sensor operating instructions manual or in the online help of the DTM.



## 7 Deinstallation of PACTware/VEGA DTMs

## 7.1 Deinstallation procedure

If you want to deinstall PACTware or the DTM Collection on your PC, proceed as follows:

- 1. Select item " Software" in the Control Panel (can be reached via " Start - Settings - Control Panel").
- 2. Select the entry " PACTware" or " VEGA-DTM" from the list and push the button " Modify/Remove".
- 3. Carry out the deinstallation in the way suggested by the assistant and complete the procedure with a Windows restart.

## 7.2 Disposal

Please dispose of the data carriers and the packaging material via specialised recycling companies.



## 8 Supplement

### 8.1 System requirements

### Hardware

• *		
Interfaces	RS232/USB/Ethernet	
Resolution of the graphic	at least 1024 x 768	
Mouse	Microsoft-compatible	
Hard disk	At least 1 GB free memory	
Memory	At least 1 GB RAM or higher	
Processor	Intel Pentium/AMD 1 GHz or higher	

Software
----------

Operating system	Windows 7/8/10 (32 and 64 Bit)
Additional software	Microsoft .NET Framework 3.5 and 4.6.1

## 8.2 License agreements

## 8.2 License agreement for VEGA DTM Collection

The DTM Collection consists of the actual software and - depending on the scope of delivery - the accompanying storage media as well as the corresponding documentation, such as online help, etc.

This end user licence agreement is a contract between the user (either as a natural person or a legal entity) and VEGA Grieshaber KG, Schiltach (VEGA) for the software product.

### VEGA DTM Collection.

The **VEGA DTM Collection** is available as "Standard version" or "Full version". In the "Standard version", all standard functions are available. In the "Full version", the storing and printing of data recorded in the sensor, such as measured values, events or echo curves is also possible. The "Full version" also contains the programs "DataViewer" as well as "Tank Calculation".

When the user installs, copies or otherwise uses the **VEGA DTM Collection**, he accepts the following regulations and declares that he has read and understood all requirements and regulations.

## 8.2 Agreement

VEGA makes the **DTM Collection** available as free-of-charge "Standard version" including Online help via the Internet. The DTM Collection is also available as "Standard version" on DVD. The DTM Collection as "Full version" is only available on DVD.

The **DTM Collection** as "Standard version" is available for free-of-charge use. For the DTM Collection as "Full version" a one-time license fee must be paid. The content of the license agreement for both versions depends on the regulations of this agreement.

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gence.

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## 8.2 Miscellaneous

As far as no other regulations are mentioned elsewhere in this document, the general terms of sale, delivery and payment of VEGA (<u>www.vega.com/agb</u>) apply – these are an inseparable component of the user agreement and the user must agree to abide by them. German law applies here under exclusion of international civil law. Place of jurisdiction is Mannheim.





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Printing date:



All statements concerning scope of delivery, application, practical use and operating conditions of the sensors and processing systems correspond to the information available at the time of printing.

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