Operating Instructions

Software for archive, administration and display of DTM data

VEGA DataViewer

Document ID: 51547

Contents

Editing status: 2024-10-17

51547-EN-241021

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 www.vega.com 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.

Warning: If this warning is ignored, injury to persons and/or serious damage to the instrument can result.

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

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 and authorized personnel.

2.2 Appropriate use

VEGA DataViewer is a software for archiving, administration and display of data and documentation of communication-capable instruments.

2.3 Warning about incorrect use

Inappropriate or incorrect use can give rise to application-specific hazards, e.g. vessel overfill or damage to system components through incorrect mounting, adjustment or configuration. Thus damage to property, to persons or environmental contamination can be caused. Also the protective characteristics of the instrument can be influenced.

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 What is VEGA DataViewer?

With this software you get a tool for archiving, administration, display and analysis of DTM data which will be stored in a database. The following data formats or types can be integrated:

- Measured value recordings
- Event files
- Echo curve files
- Service recordings
- Impedance curve recordings
- PACTware project files
- Backups
- Documentation

The stored data can be retrieved via a device list using the serial number or the device TAG for viewing/evaluation. Hence the corresponding data can be retrieved centrally at any time.

4 Software installation

4.1 System requirements

You can find the system requirements in the annex at the end of this manual.

4.2 Install DataViewer

The VEGA DataViewer is a part of the DTM Collection. When installing the DTM Collection or the VEGA DTM package, the DataViewer is automatically installed. Alternatively, the DataViewer can also be downloaded and installed separately.

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5 Adjustment

5.1 Start DataViewer

Start the software via the Windows start menu under "*VEGA DTM Tools*".

The menu language orientates on the adjusted DTM language. As an alternative, it can be switched over temporarily under "*Settings*" - "*Options*".

Information:
To ensure the support of all functions, you should always use the latest software version. The latest DTM Collection can be downloaded free-of-charge from our homepage.

Adjustment system

The DataViewer user interface is divided into three main sections. These sections fulfil the functions described below:

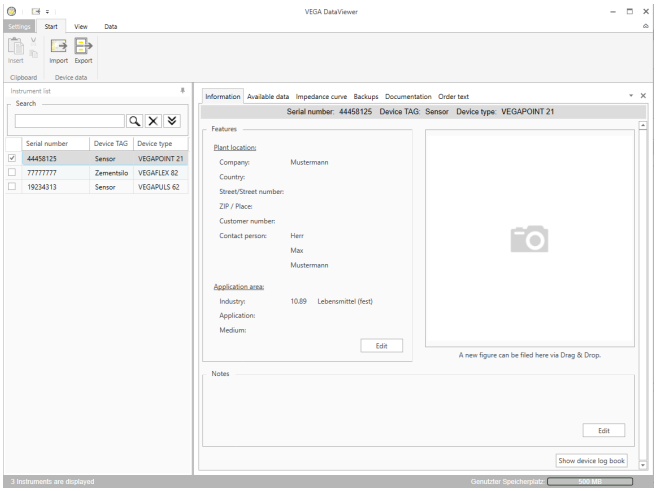

Fig. 1: User surface VEGA DataViewer

1 Menu bar (upper screen section)
2 Device list (left screen section)
3 Device data (right screen section)

- **Menu bar:** Provides the necessary commands and functions
- **Device list:** Is used to select the device which should be analyzed in the device data section
- **Device data:** Here, all information is presented centrally which are stored with the selected device

5.2 Definition of device data/recordings

The VEGA DataViewer can import the following device data and recordings which were created with the respective device DTM.

Measured value recordings

The parameter adjustment of measured value recordings is possible with the new sensor generation so that the sensor is recording measured values automatically. This measured value memory in the instruments can be read out any time with the DTM and composed in the DataViewer to a measured value history. In addition, measured values recordings can be generated with the DTM by recording of measured values through the DTM. The two measured value memories are administrated separately in the DataViewer and are called "*Measured value (DTM)*" and "*Measured value (device)*".

Event files

The new sensor generation has the possibility of storing parameter changes as well as events, such a current failure, with a time stamp and the NAMUR status in the sensor. When reading out of the device, these data will be archived in the DataViewer and composed to a history.

Impedance curve files

With a microwave barrier, impedance curve recordings can be generated with the DTM as the DTM itself records impedance curves. The impedance curves are managed in the DataViewer and are called "*Impedance curve*.

Echo curve files

In the new sensor generation, parameter settings can be made that allow the sensor to record echo curves automatically. The echo curve memory in the instrument can be read out at any time with a DTM and compiled into a history in the DataViewer. On instruments with an echo curve memory, the echo curve of setup is also archived in the DataViewer. Echo curve recordings can also be generated with the DTM, whereby the DTM itself records the echo curves. The two echo curve memories are administrated separately in the DataViewer and are called "*Echo curve (DTM)*" and "*Echo curve (device)*".

PACTware project files

The PACTware project files cannot be administrated because the DataViewer has no file management. If the PACTware files are imported, the DataViewer extracts the contained instrument data and archives the extracted data. This corresponds to the backup file with the device parameters.

Backups

Backups contain an image of all parameters of an instrument. With a backup, it is possible to restore an instrument with the parametrisation saved in the backup at any time.

Documentation

PDF files are created at different places in a DTM. These documentations such as the instrument documentation or the results of a conducted instrument test are managed in the "Documentation" section.

Service recordings

With a service recording, the following recordings of an instrument are automatically recorded and archived at the end of the service recording in the DataViewer.

- Measured value recording with DTM
- Echo curve recording with DTM
- Event list from device
- Backup file with device parameters

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Fig. 2: Starting a service recording

Information:
No archiving takes place in the DataViewer during a service recording. The data is transfered only after the service record is finished.

Fig. 3: Terminating a service recording

5.3 Import/Export of device data

Import

When recording data, creating backups or documentations, the data are automatically stored and automatically imported into the DataViewer. With all other data formats, the import must be carried out manually via the button "*Import from file*". After selecting the appropriate file during a manual import, a window is displayed in which additional information on the device, location, contact person, … can be entered.

After import, each device can be selected via the serial number or device TAG.

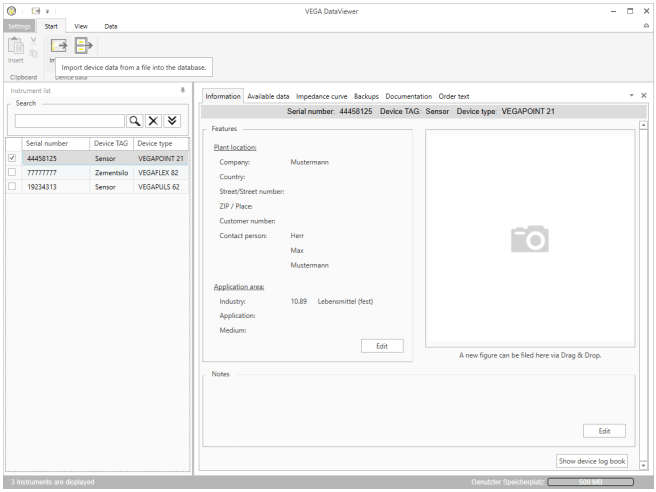

Fig. 4: Import of device data

Export

To export the stored data of a device, mark the device in the device list and push the button "*Export*". Then you can select the desired storage location for the file. The generated VDS file contains all stored information concerning the selected device.

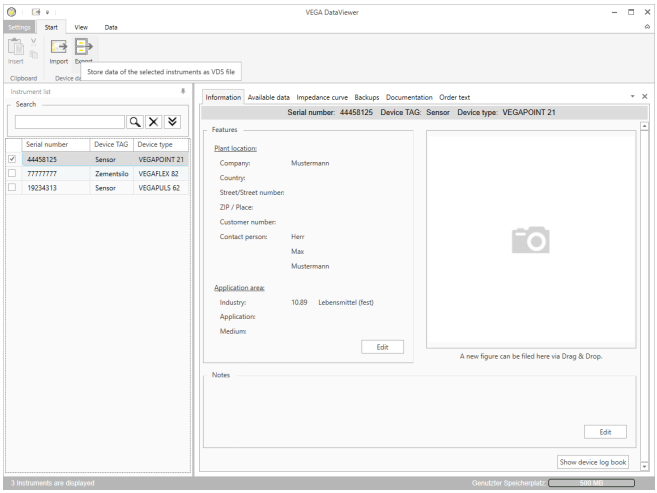

Fig. 5: Export of device data

5.4 Display of device information

Instrument selection

Each listed device is identified and archived by its serial number. All stored devices are listed in the device list on the left-hand side of the screen. The desired device is selected by clicking with the left mouse button on the serial number or the device TAG. In the case of extensive device lists, the quick search function can also be used in the upper section of the device list. All characteristic fields of the information field are searched.

After an instrument is selected, all information recorded by an instrument is downloaded automatically into the device data section. To ensure clear, well-structured content, this section is subdivided as follows and can be reached via tabs.

- Information
- Available data
- Echo curve (DTM)
- Measured value (DTM)
- Events
- Backups
- Impedance curve
- Documentation

Note:
The four pages "*Information*", "*Available data*", "*Appendices*", "*Order texts*" always exist in conjunction with every archived device. Additional pages appear if additional data corresponding to a device have been stored.

Information

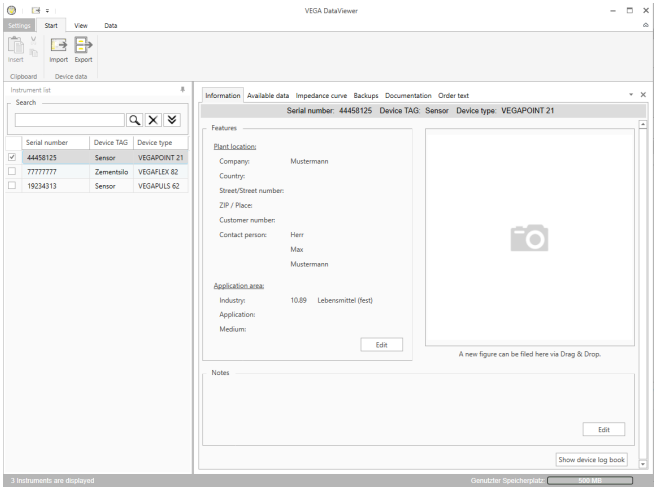

Fig. 6: Device data - Information

In the information window, you can store information on plant location, contact person and measurement loop as well as comments. All information in this section can be found via the quick search in the device list.

Available data

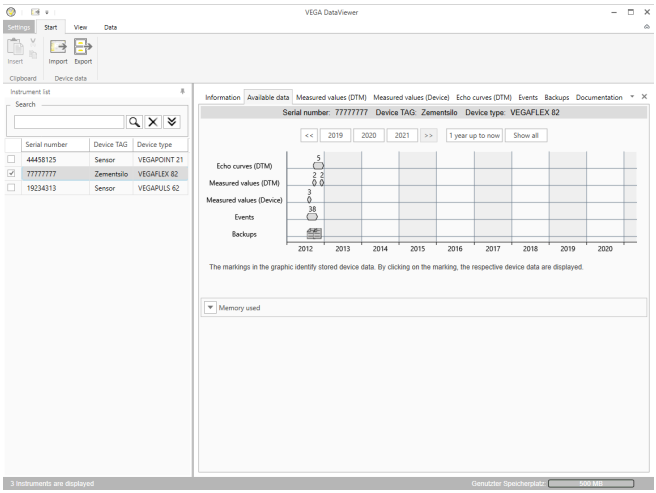

Fig. 7: Device data - Available data

This window provides an overview in graphic form of all data stored from a device. The different data objects are represented in a calendar graphic. The contained graphic symbols have a hyperlink function, i.e. each data object can be directly opened in the appropriate view with a mouse click. Depending on the selected calendar resolution,

the software composes individual symbols into one symbol. In this case the number of compiled data objects is indicated by a number above the symbol. The function "*Memory usage*" gives an overview of the utilized memory per device and data type. Functions for targeted deleting of data objects are also provided here.

Echo curve (DTM)

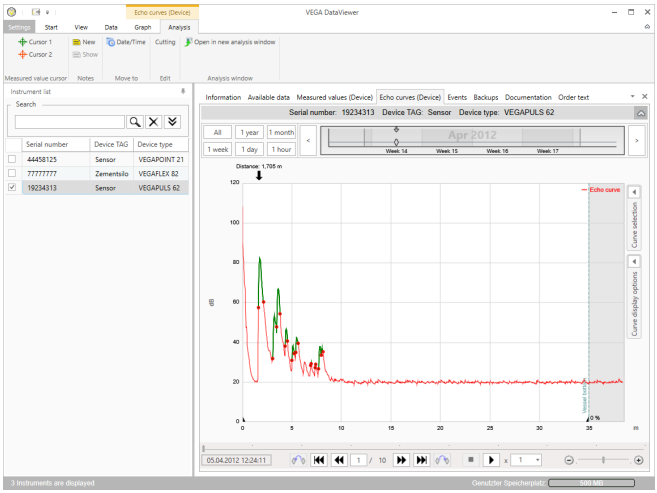

Fig. 8: Device data - Echo curve (DTM)

In this window, the imported data blocks are each displayed by individual symbols in the calendar bar. If data blocks were imported with time overlap, the DataViewer treats the data blocks as one coherent block. The same applies if two neighbouring data blocks lie close together with respect to time (< 2 minutes).

Different functions for navigating the curves as well as for adapting the presentation and analysing data are provided. For the operation of these functions, the menu bar is extended by the tabs "*Presentation*" and "*Analysis*". In addition, corresponding control elements are placed at various points around the echo curve graphic.

Measured value (DTM)

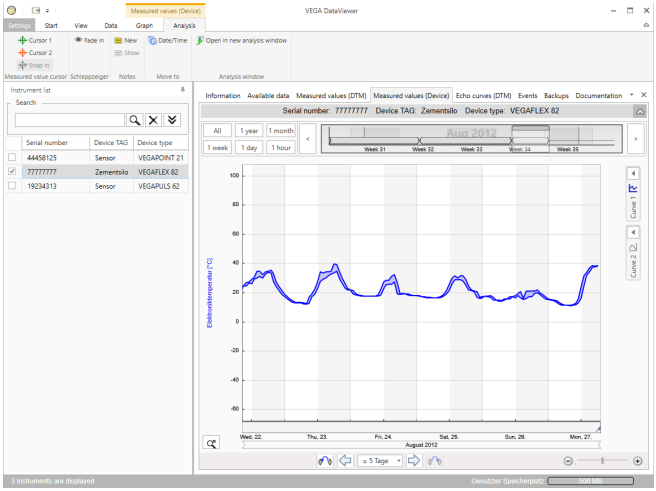

Fig. 9: Device data - Measured values

In this window, the imported data blocks are each displayed by individual symbols in the calendar bar. If data blocks were imported with time overlap, the DataViewer treats the data blocks as one coherent block. The same applies if two neighbouring data blocks lie close together with respect to time (< 2 minutes).

Different functions for navigating the curves as well as for adapting the presentation and analysing data are provided. For the operation of these functions, the menu bar is extended by the tabs "*Presentation*" and "*Analysis*". In addition, corresponding control elements are placed at various points around the measured value graphic.

Events

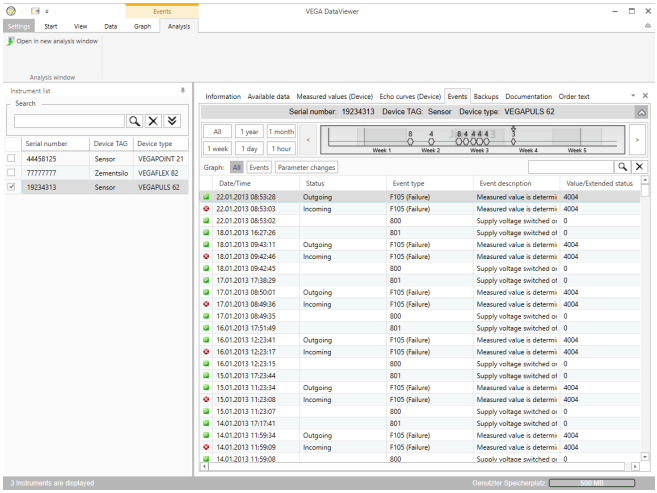

Fig. 10: Device data - Events

In this window, the imported events are each displayed by individual symbols in the calendar bar. If two or more neighbouring data blocks lie close together with respect to time (< 2 minutes), the DataViewer treats the data blocks as one coherent block. In this case, a number above the symbol represents the number of compiled events.

Different functions for navigating the recordings as well as filtering the presentation and searching are provided. For operation of these functions, the DataViewer offers control elements at various points around the event table.

Backup

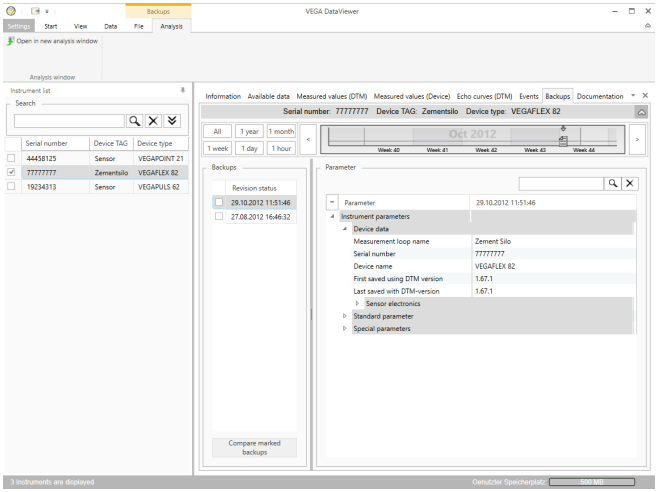

Fig. 11: Device data - Backup

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In this window, the imported backups are each displayed by individual document symbols in the calendar bar. If two or more neighbouring backups lie close together with respect to time (< 2 minutes), the DataViewer treats the data blocks as one coherent block. In this case, a number above the document symbol represents the number of compiled backups.

Different functions for navigating the recordings as well as filtering the presentation and searching are provided. For operation of these functions, the DataViewer offers control elements at various points around the backups.

Impedance curve

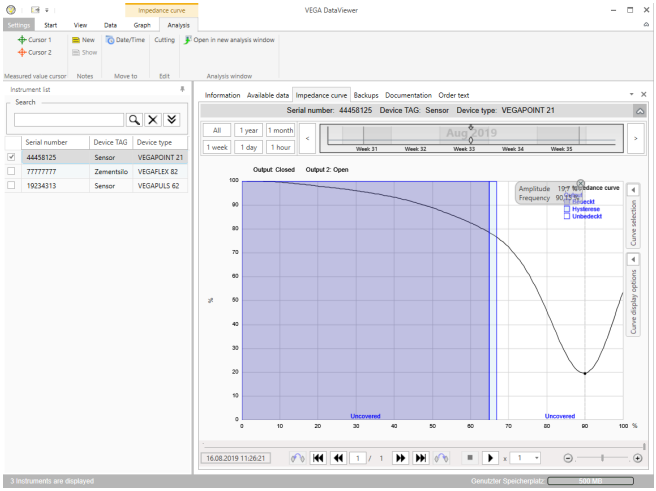

Fig. 12: Device data - Impedance curve

In this window, the imported data blocks are indicated by individual symbols in the calendar bar. If data blocks with overlapping times were imported, the DataViewer regards the data blocks as a contiguous block. The same applies if two adjacent data blocks are close together in time (< 2 minutes). Various functions are offered for navigating in the curves and for adjusting the display and for analysis. To operate these functions, the menu bar is extended by the tabs "*Presentation*" and "*Analysis*". In addition, corresponding adjustment elements are arranged around the impedance curve graphic.

Documentation

The archived documentations are managed and displayed in this area. The name of the documentation contains the serial number, the date and the type of documentation. The documentation can be displayed, printed or saved again locally with a double click in the PDF Viewer.

5.5 Share device data with service

If the support of the VEGA service is required for the interpretation of the device data, the device data can be released for inspection by a service employee with the "*Share*" function. Before this, the device

data must be synchronised with myVEGA, only then the "*Share*" is available. Once the support by the service employee has ended, the release of the device data can be cancelled.

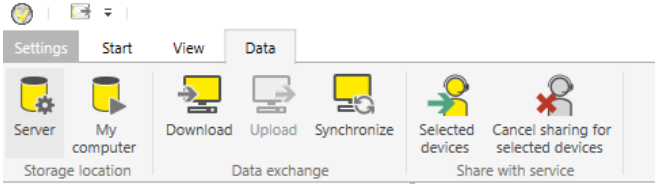

Fig. 13: Release of the "Share" function for the VEGA service

The following adjustment options are available for sharing or cancelling device data:

- Via the menu bar "*Data*" with the adjustment elements of the group "*Share with service*"
- Via the right mouse button on a selected entry of the device list

6 Deinstallation

6.1 Deinstallation procedure

If you want to remove the DataViewer from your PC, please proceed as follows:

1. Select item "*Apps & Features*" in the Control Panel (can be reached via "Start - Settings - Apps").
2. Select the entry "*DataViewer*" from the list and push the button "*Deinstall*".
3. Carry out the deinstallation in the way suggested by the assistant and complete the procedure with a Windows restart.

7 Supplement

7.1 System requirements

Hardware	
Processor	CPU 1 GHz or higher
Memory	At least 4 GB RAM or higher
Hard disk	At least 10 GB free memory
– Interfaces	Bluetooth/USB/Ethernet

Software	
Operating system	Windows 10/11 (32/64 Bit)
Software	Microsoft .NET Framework 3.5, 4.6.1 and .NET8

7.2 EULA für Setup des VEGA DataViewers

Nutzungsbedingungen für VEGA DataViewer („Softwareprodukt“).

§ 1 Geltungsbereich

Diese Endbenutzer-Nutzungsvereinbarung („EULA“) ist ein rechtsgültiger Vertrag zwischen Ihnen (entweder als natürlicher oder juristischer Person) und der VEGA Grieshaber KG, Schiltach („VEGA“) über die Nutzung des Softwareprodukts. Indem Sie das Softwareprodukt installieren, kopieren oder anderweitig benutzen, erklären Sie sich mit den Bestimmungen dieser Nutzungsvereinbarung einverstanden. **Installieren Sie das Softwareprodukt nicht, sollten Sie mit den Bedingungen dieser Nutzungsvereinbarung nicht einverstanden sein.**

§ 2 Gegenstand

VEGA DataViewer besteht aus der eigentlichen Software und der entsprechenden Dokumentation wie Handbuch, Online-Hilfe usw. („Softwareprodukt“). Das Softwareprodukt wird sowohl durch das Urheberrecht und internationale Urheberrechtsverträge geschützt, als auch durch weitere Gesetze und Verträge über geistiges Eigentum. Das Softwareprodukt wird nicht verkauft, sondern nur zur Nutzung überlassen.

§ 3 Nutzungsrechte

- Das Softwareprodukt ermöglicht die Ansicht und Analyse von Geräte-Daten, die mit VEGA-DTM aufgezeichnet wurden. Dies sind z. B. Messwerte, Ereignisse bzw. Echo- und Trendkurven.
- Sie sind widerruflich berechtigt, alle ihre Rechte aus dieser Nutzungsvereinbarung dauerhaft zu übertragen. Voraussetzung ist, dass Sie das vollständige Softwareprodukt (einschließlich aller Komponenten, der Medien und des gedruckten Materials) übertragen, und der Empfänger den Bedingungen dieser Nutzungsvereinbarung zustimmt. Sie sind verpflichtet, mit dem Dritten eine schriftliche Vereinbarung zu treffen, die den Bestimmungen dieser Vereinbarung entsprechen. Sie sind für die Beachtung etwaiger Ausfuhrerfordernisse aufgrund aller geltenden Rechtsvorschriften und Anordnungen verantwortlich. Sie stellen VEGA von sämtlichen Ansprüchen Dritter frei, die aus einem Verstoß gegen diese Regelung entstehen.

§ 4 Nutzungseinschränkungen

Die Nutzung des Softwareprodukts erfolgt ausschließlich gemäß der Bedingungen dieser EULA. Sie sind insbesondere nicht berechtigt, die Software (i) zu ändern, anzupassen, zu erweitern, zurückzuentwickeln oder zu übersetzen, (ii) Teile herauszulösen, (iii) oder zu versuchen, den Quellcode abzuleiten oder zu entschlüsseln, (iv) Eigentumsvermerke (einschließlich Urheberrechtsvermerke oder Markenzeichen) von VEGA oder ihren verbundenen Unternehmen oder Partnern zu entfernen, zu verändern oder zu verdecken, oder (v) die Software zu vermieten oder zu verleasen.

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§ 5 Verstoß gegen Nutzungsrechte

Ungeachtet anderer Rechte ist VEGA berechtigt, diese Nutzungsvereinbarung zu kündigen und Ihnen die Nutzung des Softwareprodukts zu untersagen, wenn Sie gegen die Bedingungen dieser EULA, insbesondere die vereinbarten Nutzungsrechte und -einschränkungen verstoßen. In diesem Fall sind Sie verpflichtet, alle Kopien des Softwareprodukts und all seiner Komponenten insbesondere der Software-Produktscheine zu vernichten und VEGA darüber Nachweis zu führen.

§ 6 Gefahrenübergang bei elektronischen Kommunikationsmedien

Bei Überlassung von Software über elektronische Kommunikationsmedien (zum Beispiel insbesondere über das Internet) ist der Zeitpunkt des Gefahrenübergangs der Zeitpunkt, bei dem die Software die Sphäre von VEGA verlässt.

§ 7 Mängelhaftung

- Wird das Softwareprodukt auf einem Datenträger von VEGA zur Verfügung gestellt, ersetzt VEGA diesen bei offensichtlichen Mängeln durch ein mangelfreies Exemplar.
- Als Mängel in Bezug auf das Softwareprodukt gelten solche von Ihnen nachgewiesene, reproduzierbare, nicht unerhebliche Abweichungen von der dazugehörigen Dokumentation.
- Eine Nachbesserung erfolgt üblicherweise durch Lieferung oder Bereitstellung eines neuen Produktausgabestandes (Update/Upgrade).
- Die Fehlerdiagnose und die Mängelbeseitigung im Rahmen der Gewährleistung erfolgen nach Wahl von VEGA bei Ihnen (vor Ort) oder bei VEGA. Sie stellen VEGA die zur Mängelbeseitigung benötigten Unterlagen und Informationen zur Verfügung. Erfolgt die Mängelbeseitigung vor Ort, stellen Sie unentgeltlich die benötigte Hard- und Software sowie die erforderlichen sonstigen Betriebszustände mit geeignetem Bedienungspersonal so zur Verfügung, damit die Arbeiten zügig durchgeführt werden können.
- VEGA kann die Vergütung des Prüfaufwandes aufgrund einer Mängelanzeige ihrerseits verlangen, wenn ein Mangel nicht nachweisbar ist.
- Sie haben alle angemessenen Maßnahmen zu ergreifen, weitergehende Schäden zu verhindern oder zu begrenzen, die aus einem Mangel am Softwareprodukt resultieren, insbesondere VEGA den Mangel unverzüglich anzuzeigen und für die Sicherung der eingegebenen und zu verarbeitenden Daten zu sorgen.
- Die Gewährleistungsfrist für Softwareprodukte beträgt 12 Monate. Die Frist beginnt mit dem Zeitpunkt des Gefahrenübergangs.

§ 8 Datenverlust

Bei Beschädigung von Daten durch einen Mangel in der gelieferten Software umfasst die Ersatzpflicht nicht den Aufwand für die Wiederbeschaffung verlorener Daten und Informationen.

§ 9 Ergänzende Regelungen

Die Nutzung des Softwareprodukts unterliegt ergänzend zu den in dieser EULA festgehaltenen Bedingungen den Allgemeinen Lieferbedingungen der VEGA. Diese finden Sie im Internet unter www.vega.com/agb. Im Falle von Abweichungen oder Widerspruch gelten die Bedingungen dieser EULA vorrangig für die Nutzung des Softwareprodukts.

Sollten einzelne Bestimmungen dieser EULA nicht wirksam sein, berührt dies nicht die Wirksamkeit der übrigen Bestimmungen. Die Vertragspartner werden die unwirksame Bestimmung einvernehmlich durch eine wirksame und angemessene Bestimmung ersetzen, die dem wirtschaftlichen Gehalt der ursprünglichen Bestimmung möglichst nahe kommt.

EULA for Setup of VEGA DataViewer

Terms of use for VEGA DataViewer ("Software product").

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§ 1 Scope of application

This End User License Agreement ("EULA") is a legal contract between you (either as a natural person or a corporate entity) and VEGA Grieshaber KG, Schiltach ("VEGA"), for the use of the software product. By installing, copying or otherwise using the software product, you agree to be bound by the terms of this User Agreement. **If you do not agree to the terms of this User Agreement, do not install the software product.**

§ 2 Subject matter

VEGA DataViewer consists of the actual software and the corresponding documentation such as user manual, online help, etc. ("Software product"). The software product is protected by copyright law and international copyright treaties, as well as other intellectual property laws and treaties. The software product is not sold - it is only made available for use.

§ 3 Usage rights

- The software product enables the viewing and analysis of instrument data recorded with VEGA-DTM. This includes e.g. measured values, events or echo and trend curves.
- You are entitled to permanently transfer all your rights under this user agreement, but also to revoke the transfer of those rights. The prerequisite is that you transfer the complete software product (including all components, data carriers and printed material) and that the recipient agrees to the terms of this user agreement. You are also required to make a written agreement with the third party that complies with the terms of this agreement. You are obligated to comply with any export requirements mandated by all applicable laws and regulations. You indemnify VEGA against all third-party claims arising from a violation of this regulation.

§ 4 Restrictions on use

The software product may only be used in accordance with the terms of this EULA. In particular, you are not authorised to (i) modify, adapt, extend, reverse engineer or translate the software, (ii) extract parts, (iii) or attempt to derive or decipher the source code, (iv) remove, alter or obscure proprietary notices (including copyright notices or trademarks) of VEGA or its affiliates or partners, or (v) rent or lease the software.

§ 5 Violation of rights of use

Irrespective of other rights, VEGA is entitled to terminate this usage agreement and to prohibit you from using the software product if you violate the terms of this EULA, in particular the agreed usage rights and restrictions. In such case, you are obliged to destroy all copies of the software product and all of its components, in particular the software product certificates, and to provide VEGA with proof of this.

§ 6 Transfer of risk with electronic communication media

When software is transferred via electronics communication media (for example and in particular via the Internet) the transfer of perils to the buyer takes place when the software leaves VEGA's sphere.

§ 7 Liability for defects

- If VEGA provides the software product on a data carrier, VEGA will replace it with a defect-free copy in case of obvious defects.
- The software product is considered defective if you can prove there are significant, reproducible deviations from the associated documentation.
- A rectification of defects is usually effected by delivery or provision of a new product version (update/upgrade).
- Fault diagnosis and rectification within the scope of the warranty are carried out at VEGA's discretion either at your premises (on site) or at VEGA's premises. You provide VEGA with the documents and information required to remedy the defect. If the defect is to be remedied on site,

you provide the required hardware and software as well as the necessary operating conditions with suitable operating personnel free of charge so that the work can be carried out quickly.
- If it cannot be proven there is a defect, VEGA can demand compensation for the work involved in examining and checking the software.
- You must take all appropriate measures to prevent or limit further damage resulting from a defect in the software product, including notifying VEGA of the defect immediately and backing up your data, especially data that has been entered or is yet to be processed.
- The warranty period for software products is 12 months. The period begins at the time of the transfer of risk. The warranty period for the master copy applies to copies made by you.

§ 8 Loss of data

If data is damaged due to a defect in the supplied software, the obligation to pay compensation does not include the cost of recovering lost data and information.

§ 9 Supplementary provisions

In addition to the conditions stipulated in this EULA, the use of the software product is subject to VEGA's general terms of delivery. You can find these on the Internet at www.vega.com/agb. IIn the event of any discrepancy or contradiction, the terms of this EULA shall govern the use of the software product.

If individual provisions of this EULA are found to be legally void, this does not affect the effectiveness of the remaining provisions. The contracting parties shall by mutual agreement replace the invalid provision with an effective and appropriate provision that comes as close as possible to the economic intent and purpose of the original provision.

51547-EN-241021

Printing date:

51547-EN-241021

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