DIGITAL INDUSTRIES SOFTWARE

Simcenter Testlab Desktop - Standard

Simcenter/TL-DTP.20.1/2406/20240415

Product Information Sheet

Summary

The Simcenter Testlab family consists of a complete suite of integrated solutions for test-based Noise & Vibration and Durability engineering. It comprises modules for structural testing, rotating machinery testing, acoustic testing, environmental testing, durability, data management and e-collaboration.

Simcenter Testlab enables new standards for productivity and quality and envisions optimized cost of ownership in function of your NVH and durability needs, your budget, the size of your company and the number of people working in your extended department. Designed for ease-of-use and laboratory automation, Simcenter Testlab focuses on performing specific measurements and processing quickly and accurately.

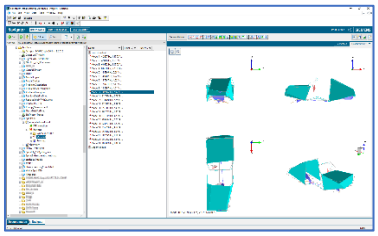
BENEFITS

- Experience the same Simcenter Testlab Desktop - Standard features and look and feel through all Simcenter Testlab applications for consistent and intuitive data handling, visualization and reporting
- Import to the Simcenter LDSF format and annotation of Simcenter SCADAS Recorder and XS setup files
- Keep yout project information, documentation, measured and processed data together
- Dedicated State-of-the-art client/sever architecture optimized for high performance data acquisition
- Visualization of all system hardware settings in GUI
- Direct font-end interaction upon
- changing of hardware settings
- Automatic detection of master/slave
- front-end configuration

FEATURES

- Access to different applications (workbook)
- Multiple project access
- Automatic Setup of a specific operator environment – standard configurability
- Project Management
- Documentation

Templates launched from your desktop describe complete testing procedures including measurement setup, layouts with reference curves and operator directives. Within a few hours, an untrained technician or engineer will run the most advanced tests, compare meticulously the acquired data and publish reports sharing engineering insight through



Active Pictures.

Available on Microsoft® supported Windows® operating systems, Simcenter Testlab Desktop facilitates easy file management and flexible reporting.

The Simcenter Testlab Desktop - Standard
The Simcenter Testlab Desktop – Standard is the Windows® based software platform required to run all applications of the Testlab family. The Simcenter Testlab Desktop license supports running all Simcenter Testlab workbooks (= Simcenter Testlab products) on a single system. Multiple instances of the Simcenter Testlab Desktop on the same system are supported.

The Simcenter Testlab Desktop - Standard provides the Microsoft® Windows® look and feel: straightforward displays, icons, cut and paste. It is the basic layer for the modular organized product suite and covers lots of generic functions such as loading/unloading workbooks, user interface control and standard configurability.

Multiple workbooks
A user can run different Simcenter Testlab products simultaneously configured in separate workbook window. The Simcenter Testlab Desktop - Standard organizes this multiple workbook Interface in a Microsoft® Office approach (comparable to running Microsoft® PowerPoint and Microsoft® Word at the same time). Separate main windows for every running workbook are used. Communication between different workbooks occurs through the Windows Clipboard.

Multiple project access
In one workbook, one or more projects can be opened. These projects appear as child windows in the workbook main window. The standard Windows Multiple Document Interface is selected as ideal window organization mechanism. A project is opened in read/write mode. Multiple read/write is possible within a same workbook process.

Predefined operator environment
The user can define and start up a workbook related job in a predefined configuration. This can be done with or without a predefined project or section template including all needed settings and data structures. This way the Simcenter Testlab Desktop – Standard allows the user to execute jobs creating the same operator environment avoiding errors and reducing measurement time. These templates are easy to create and accessible through specific icons.

Project management
Listing, opening, creation, saving of projects is controlled by the basic layer together with the creation, removal and management of project sections. In the latter all kinds of data types as data blocks and mode shapes can be stored. The projects and sections are accessible by each workbook.

The Simcenter Testlab Desktop - Standard takes care of the storage and re-activation of these sections

FEATURES

- Data Navigator with access to Simcenter Testlab data format
- Data Viewing & Interpretation
- Display creation / management
- Data annotation and viewing
- Reporting & Publication
- External files access (export): UFF, ASAM-ODS atfx, SDF, WAV, Excel files, Matlab®, RPC3, Dynaworks, GPS (.nmea and .kml), ASCII,
- MTS I-deas.afu
- External files access (read): UFF/UNV, ASAM-ODS atfx, SDF, Matlab®, RPC3, Excel files, Nastran, Abaqus, Ansys RST, Dynaworks, TEAC TAFFmat, WAV, Head HDF, Simcenter 3D Motion results, VL2TL, nCode DAC & S3T, NI DIAdem, HBM SoMat SIE and SIF, Lexade, MTS I-deas ati/afu, MDF 3.0, DEWESoft d7d, d7z and dxd
- Support of the Simcenter SCADAS family
- Support of CAN2.A, CAN 2.0B, CAN-FD, High Speed CAN and Low Speed CAN, diagnostic mode 1 of OBD-2 (ISO 15031) and SAE J1939
- Support of Vector dbc proprietary database
- Support of FlexRay V2.1A standard. Support of Fibex 3.0.0, 3.1.0 and 3.1.1 database formats
- Support of AUTOSAR standard. Support of arxml 4.4.0 database format
- Unlimited number of CAN- or FlexRay messages can be measured

and section related parameters (e.g. bandwidth, number of channels, tracking control parameters, ...), and of the non-data related parameters of the workbook modules (font size, button colors, ...). The settings and structures for standardized and repetitive tasks can be grouped in one or more project or section templates, enabling the user to start quickly and error-free a new job.

Integration of Teamcenter Share
Teamcenter Share offers an engineering-centric cloud collaboration solution, which will allow different teams to collaborate securely with key stakeholders including designers, managers, test engineers, simulation engineers, suppliers, even customers with appropriate access control. The user can communicate context through project/file information or even via basic tasks. From inside Simcenter Testlab Desktop, the user can share and access projects, project templates, processed or raw data (even 3rd party), Testlab Reports and much more.
The user doesn't need to care about IT infrastructure or deployment effort and cost, Siemens takes care of the complete setup.
Requirement: Hybrid SaaS subscription license.

Documentation
The documentation worksheet provides all means for adding extra information to projects and sections. All information defined in this worksheet is saved within the Simcenter Testlab project, thus keeping the data and their descriptive information together.

Different types of information can be added.

- User attributes. Attributes of different types (text, date, number and list) can be used to document projects, sections and measurement run in a more structured way. Templates of attribute lists can be saved and loaded to assure consistency.
- Free text. A free text field is available for adding comments in textual form.

Attachments. Any type of file or document can be added as attachment to projects and sections. An embedded preview of the attachments renders pictures as well as documents and presentations.

As of Simcenter Testlab 2206.0001, the Descriptive Annotation concept can be enabled. All data can then be annotated by descriptive properties via Descriptive Templates based on a consistent Descriptive Data Model. The Simcenter Descriptive Data Model and Template Editor helps to align and agree on the consistent Descriptive Data Model. This tool allows users to create different Descriptive Templates according to a specific Unit Under Test, Test, or even Team.

Data navigator
A specific Testlab data navigator comparable with the Microsoft® Windows® Explorer allows navigating through the hierarchically structured data sets and through the file system itself. It can be used to select data for displaying (drag/drop, copy/paste) and to manipulate (rename) and organize (move) data sets.

- Listing, opening, saving, creation of projects and sections
- General Data Navigator allows browsing through the Simcenter Testlab data structures
- General Management: delete, move and copy
- Property Sheets provide access to all native annotations
- Powerful search mechanism allows to quickly finding any type of data. Data can be filtered on different header fields like in excel.
- Possibility to make links to frequently accessed data and manage these links in the same style as favorite web links
- Data basket for management and manipulation of search results

- Export/read Simcenter CADA-X Database, ASCII, WAV, UFF, RPC3, SDF, Dynaworks, Matlab, Excel

Data viewing & interpretation

- Selected data can be viewed in Front/Back, Upper/Lower, Octave, XY, Bode, Nyquisit, Multi-trace, Function Map, Rainflow, Waterfall, and Colormap function displays. No limitation on number of curves on the same display as long as they have the same unit.
- Geometry related results can be viewed in the 3D geometry display, which allows animation of modal mode shapes or operational deformations. It is also to show/hide the different components of the geometry, as well as defining individual colors for every component.
- The Map display plots the GPS data of your test on Google Maps in Simcenter Testlab Desktop.
  Note: The availability of this feature depends on your geographical region. A separate plug-in needs to be downloaded and installed from the Support Center website.
- Displays offer the required functions for data interpretation such as cursors (Single, Double, Harmonic, Cross, ...); axis conversions (Linear, Octave, phase, dB, Log,...), color and line styles, and geometry manipulation.
- A movable and sizable legend can be completely configured to show all necessary details describing the data ; an additional cursor legend shows extra information like RMS, min, max, ..., calculated between double cursors, or Tone-to-noise ratio (TTNR), and Prominence Ratio (PR) for single cursors in spectral displays.
- Validate measurements or processing by visually scrolling through the measured or processed data according to a given property. Different display layouts tailored to a specific validation can be used. The content of the displays is changed when scrolling through the values of a property, for instance when scrolling through DOF IDs. Specific curves can be locked to serve as reference while scrolling. This visual scrolling capability is available for DOF ID, Channel ID, Reference DOF ID, Section Value, Tracking Time and Tracking Value properties.
- Simcenter Testlab Array Data Selection & Comparison is an add-in on Simcenter Testlab. It is targeted on efficiently selecting, displaying and comparing data from Simcenter Testlab HD Acoustic Camera and Simcenter Testlab 3D Acoustic Camera workbooks.
- The Array Data Selection & Comparison add-in allows users to:
  - Open multiple databases with processed results at the same time
  - To filter through these databases to select similar results
  - To assign these results to up to 12 hologram displays
  - To visualize these for side-by-side comparison and align zoomed view and dynamic range axes.
  - And finally, to export this data to clipboard or file for further reporting.

Display creation/management

The Simcenter Testlab Desktop enables the user to organize display using the Layout Manager available in every workbook. At the same time, it gives the user the possibility to save, load and list his created layouts. The user can define favorite layouts, which are directly accessible through specific buttons.

Displays are extensively configurable:

- Easily manage and change curve styles (line colours, thickness, ...) and engineering displays elements (axes, grids, cursors, units, ...) to match your needed reporting formats.
- Align the formatting of engineering displays across your report in one step.

Reporting & publication

- Viewed data displays can be copied into clipboard and pasted as Enhanced Metafile objects (that allow further editing using Microsoft® Office tools), or as device independent bitmaps.
- Displays can also be embedded as OLE objects (Active Pictures) within documents giving access to the display functions also from within these documents. This allows the reader to modify the graphics layout, change amplitude formats, add cursors or a legend.
- The data of the active picture are embedded in the document itself or linked with the data residing on another system in the same network. Using 'link data' makes the size of your documents smaller and enables a more efficient use of this data and related disk space.
- Complete or modify active pictures with new measurements by simply dragging and dropping new curves in the displays already present in your existing Microsoft Office reports.
- Format and layout management allows bookmarking specific views for repeated interpretation, or automatic report generation.
- Export data to Microsoft® Excel

Data conditioning

Data conditioning functions allow to condition and view the data for optimal interpretation. Following conditioning functions are available:

- DFT/FFT
- Spectrum Amplitude Format Conversion
- Averaged Spectrum
- Acoustic Weighting
- Smoothing

- Curve Fitting
- Integration
- Differentiation
- Arithmetic functions (+,-,*,/)

External File Access
In addition to the ability to read data from Simcenter simulation solutions LMS Virtual.Lab and systems simulation, Simcenter Testlab Desktop - Standard (or any workbook) enables the user to read UFF/UNV, ASAM-ODS atfx, SDF, Matlab®, RPC3, Excel files, Nastran, Abaqus, Ansys, Dynaworks, TEAC TAFFmat, WAV, Head HDF, Simcenter 3D Motion results, VL2TL, nCode DAC & S3T, NI DIAdem, HBM SoMat SIE and SIF, Lexade, MTS I-deas ati/afu, MDF 3.0, DEWESoft d7d, d7z and dxd. The data are accessed by Simcenter Testlab in their native format, without conversion or duplication of the original data.
As a result, the data navigator recognizes these file formats, allowing to exploit powerful data and selection capabilities:

- Browsing over and into the files
- Searching for files or data in files
- Sorting the entries according to different criteria

Data from these file types can be compared to all other data types by simply dragging and dropping them into the Testlab displays. Also, these data can be processed with any Testlab workbook or option.

Simcenter Amesim
The Desktop allows to access simulation results contained in .ame files. Upon accessing a .ame file, all simulation results are automatically listed.
The simulation results are automatically recognized, allowing to exploit powerful data selection capabilities and allowing to transparently use the data for processing.
This functionality requires the installation of the Simcenter Amesim driver. The latest Amesim driver for Testlab supports the latest released Amesim version as well as the previous ones

SDF
Standard Data Format is a Hewlett Packard data format allowing sharing data between HP analyzers and computers in general. It contains following kinds of measurement data:

- Time, auto- & cross correlation, impulse response
- Frequency spectrum (linear, auto- & cross power, frequency response, coherence
- Amplitude histogram, probability density
- Octave spectra
- Waterfall data
- Acoustic pressure, intensity, sound power, velocity

UFF
Universal File Format is an ASCII format, containing symbolic data in physical records with maximum length of 80 characters. A complete file can contain a number of "file data sets":

- 151 Header file data set
- 164: Units file data set describe the units
- 58: time or frequency domain function at nodal DOF
- 58b: time or frequency domain function at nodal DOF in binary format
- 55, 2414: modal analysis data such as mode shapes at nodes
- 15: nodes in global coordinate
- 82: connections between nodes

ASAM-ODS ATFx
The ASAM-ODS standard is defined by the ASAM e.V. (Association for Standardization of Automation and Measuring systems) for making it possible to exchange data between different systems. ODS stands for Open Data Service.

The standard defines the data exchange based on a client-server infrastructure and the ATFx file format. The Testlab ASAM ODS Driver allows reading and writing ATFx files.

Siemens PLM Software is member of the ASAM e.V. and contributes actively to the definition of the standards. Initiated and driven by Siemens PLM Software, the ASAM ODS standard has been extended with a data model for exchange of NVH data.

The Simcenter Testlab Desktop Neo supports:

- Reading 1D Tacho vector, 2D and 2.5D (waterfall) data from ATFx files.
- Writing 1D Tacho vector, 2D and 2.5D data to ATFx files.

Simcenter Testlab Desktop Neo can read data from any application data model. The ASAM-ODS data export is configured by default for support for the ASAM-ODS NVH data model according to ASAM-ODS standard 5.3.

Simcenter Testlab is able to directly write time traces in the ASAM ODS atfx format during data acquisition. This supports users harmonizing their data in the open ASAM ODS format.

Nastran
Supported Nastran data formats:

- *.op2 and punch files are supported.
- The following functions are supported: Frequency spectra, Transfer functions, Waterfalls and Order sections (only *.pch)
- Supported Model data are: geometry & static modes (only *.op2), Load and response function.

Abaqus
Only geometry and modes are supported.

Ansys
As of Ansys 2019, geometry and modes are supported.

MATLAB
MatLab files (.mat) are written by MATLAB. Block data in Testlab can be exported to .mat file and re-read in Testlab with the same format. Waterfall data in Testlab can be

exported as a matrix to a .mat file and re-read in Testlab.

RPC3
RPC3 files (.rpc) contain time history data and are commonly used in the context of durability data acquisition and durability testing. Simcenter Testlab Desktop supports both reading from and writing to RPC3 files (writing implies export of time domain data to RPC3). Different export strategies are supported, allowing to manage the export of time data at different sample rates and giving control to the user to organize the exported RPC3 files on disk in a directory structure that represents the structure and organization of the source data in Simcenter Testlab Desktop.

TEAC TAFFmat
TAFFmat (TEAC Data Acquisition File Format) files are written by several data recorders from TEAC. The file extension of the main data file is *.DAT (binary data file), which always has an associated header file with the file extension *.HDR.

Head HDF
Head HDF time history data is recognized in the data selector, accessing all powerful data and selection capabilities:

- Browsing over and into the files
- Searching for files or data in files
- Sorting the entries according to different criteria

Time history data from Head HDF files can be compared to all other data types in Testlab by simply dragging and dropping them into the Simcenter Testlab displays. Also, these data can be directly accessed within any Simcenter Testlab worksheet, without any data conversion, for usage in e.g. Testlab Time Data Selection, Testlab Time Data Processing, or in customized reports.
Specifically, for Head data, the RPM signal which is coded into the acoustic channels is extracted and presented in Simcenter Testlab as rpm-over-time and raw tacho signal so that the extensive set of Simcenter Testlab tracked processing functions, including angle domain analysis, can be applied.

Durability Data Formats
Data access to nCode DAC time history data (data values and annotation), NI DIAdem, HBM SoMat SIE and SIF, Lexade, MDF 3.0 and DEWESoft d7d, d7z and dxd data is available.
The content of those durability data formats can be browsed, searched, sorted and compared to all other data types in Testlab by simply dragging and dropping them into the Simcenter Testlab displays. Also, these data can be directly accessed within any Simcenter Testlab worksheet, without any data conversion, for usage in e.g. Testlab Time Data Selection, Testlab Time Data Processing, or in customized reports.

Excel data import/export
In Simcenter Testlab, data can be exported to Excel sheet by copy/paste from the Simcenter Testlab display - and imported in Testlab with the same format. Each sheet in the Excel file is treated as a folder. Waterfalls can also be processed and will be processed as a folder or a complete sheet of the Excel file.

Data compatibility matrix
The Data Compatibility overview table summarizes the read and export capabilities of Simcenter Testlab Desktop.

In addition to the mentioned standard drivers, the external data interface of Simcenter Testlab Desktop can also be customized for reading DSPCon DATX data and time history data in ascii format (format restrictions apply).

Data type	Read	Write
Abaqus	Y	N
ATF/XML	Y	Y
Ansys	Y	N
ASCII	N	Y
Cada-X Project DB	Y	N
DATX	Y	N
DEWESoft d7d, d7z and dxd	Y	N
Dynaworks	Y	Y
Excel files	Y	Y
GPS (.nmea)	N	Y
Google© .kml	N	Y
HBM SoMat SIE	Y	N
HBM SoMat SIF	Y	N
Head .hdf	Y	N
Lexade	Y	N
Matlab	Y	Y
MDF 3.0	Y	N
MTS ati / afu	Y	afu
Nastran	Y	N
nCode DAC	Y	N
nCode Glyphworks S3T	Y	N
NI DIAdem	Y	N
Pimento	Y	N
RoadRunner	Y	N
RPC III	Y	Y
SDF	Y	Y
Systems simulation	Y	N
Simcenter 3D Motion	Y	N
Simcenter Testlab	Y	Y
Simcenter Testxpress XDF	Y	N
STL	Y	N
TDF/LDSF	Y	Y

Teac TaffMAT	Y	N
Tydex	Y	N
Universal File	Y	Y
Wave File	Y	Y

Offline extraction of Digital channels

The user can create additional traces in the acquired throughput file starting from the raw recorded digital bus file.

- Support of raw bus data files (.rddf)
- Support of one or multiple raw bus data files per Simcenter Testlab Run
- Support of one or multiple Simcenter Testlab Runs in one extraction process
- Support for direct extraction during the import-process of standalone recording(s)
- Decoding of CAN-bus raw data through Simcenter Digital Bus Definition (.scdbd) or .dbc file
- Decoding of FlexRay raw data through .fibex file
- Automatic unit mapping
- User-definable interpolation type (Zero-hold, Linear) and Sample rate individually configurable per channel
- Support of Event based traces for support of time non-equidistant CAN data
- CAN J1939 specific signal decoding

Alias mapping table

In several cases, it is necessary to combine data coming from different departments in the same company, where acquisition systems, naming convention or even local axis orientation might differ. A typical example is Transfer Path Analysis, where body and transmission departments need to combine their measurements with the operational ones collected by the field-testing department. Other customers may acquire data with no forethought about using Point Ids compatible with geometry, and only in a second moment would like to use those data for ODS or Modal Analysis.
To support these scenarios, an Alias Mapping Table can now be defined at Testlab project level to create a link between the data and a reference Point Id set. The reference Point Ids can be defined using time histories, spectral quantities, orders, Frequency Response Function or Geometry. Imported time histories, spectral quantities, orders and FRF can then be mapped on the reference Alias Mapping table.
The Alias Mapping table, once defined, will be always active. Without modifying the original data, whenever an analysis or processing is performed, the Alias DOF Id will be used instead of the original one. Thanks to this feature, customers will be able to analyze their legacy data without the need to manually correct them.

Options

Configurability & Customization

- TL-DTP.30.3 Simcenter Testlab Windows Automation Support
- TL-MAP-0001 Simcenter Testlab Google Maps Plug-in
  Note: The availability of this plug-in depends on your geographical region. This separate plug-in needs to be downloaded and installed from the Support Center website.

Analysis

- TL-SIG.54.3 Simcenter Testlab Run Data Averaging & Comparison Organizer
- TL-GEO.03.2 Simcenter Testlab Geometry workbook
- TL-ODS.52.2 Simcenter Testlab Operational Deflection Shape and Time Animation workbook
- TL-ACT.57.3 Simcenter Testlab Audio Replay & Filtering
- TL-GPR.59.3 Simcenter Testlab Interactive Time Data Editing Add-in
- TL-ENV.26.3 Shock Response Processing (Offline SRA)

The Simcenter Testlab Front-end Driver

The Simcenter Testlab Front-end driver delivers a coherent set of functions required for acquisition workbooks to access the Simcenter SCADAS III, SCADAS mobile, SCADAS recorder, SCADAS Durability, SCADAS

Lab front-end and the SCADAS XS Frontend.

The front-end driver makes full use of the advanced real-time functionalities provided by the operating system.

The Simcenter SCADAS III family consists of the SC310/11S series (with 10/11 slots) or the SC316/17S series (with 16/17 slots).
The Simcenter SCADAS Mobile family consists of the SCM09/10S (with 9/10 free slots), SCM05/06S series (with 5/6 free slots), SCM02/03S series (with 2/3 free slots) and SCM01 (with 1 free slot).
The Simcenter SCADAS Recorder family consists of the SCR09 (with 9 free slots), SCR07 (with 7 free slots), SCR05 (with 5 free slots), SCR02 (with 2 free slots) and SCR01 (with 1 free slot).

The Simcenter SCADAS Durability Recorder family consists of the SCD07 (with 7 free slots) and the SCD09 (with 9 free slots).
The Simcenter SCADAS Lab family consists of the SCL20-ENV, SCL20-SIG

and SCL20-STR (with each 20 free slots).

The Simcenter SCADAS XS family consists of the SC-XS06-KIT.

Vehicle Bus Support
The Simcenter Testlab Desktop – Standard (via dedicated add-in) allows the acquisition setup of CAN, CAN-FD or FlexRay buses data, in parallel to the dynamic or static data, via the Simcenter SCADAS Mobile Front-end, Simcenter SCADAS Recorder, Simcenter SCADAS Durability Recorder, Simcenter SCADAS Lab, Simcenter SCADAS XS Front-end.

The Controller Area Network (CAN) is a message oriented serial bus system according to the ISO 11898 standard (high speed) and the ISO 11519 (Low speed). The Simcenter Testlab CAN bus solution provides support for CAN-FD, CAN2.A and CAN 2.0B standards (Extended Frame Format) that are widely used in passenger cars, and support for the J1939 Truck & Bus standard. Additionally, OBD-2 legislated PID's according to ISO 15031 can be requested and recorded through the OBD-2 connector of passenger cars.

AUTOSAR is a global development partnership of automotive interested parties which aims at creating and establishing a standardized software architecture for automotive ECUs. In such context arxml files are used as database files that describe the ECUs networks.

The FlexRay communications bus is a deterministic, fault-tolerant and high-speed bus system developed in conjunction with automobile manufacturers and leading suppliers. FlexRay delivers the error tolerance and time-determinism performance requirements for x-by-wire applications (i.e. drive-by-wire, steer-by-wire, brake-by-wire, etc.). The FR4 module offers an interface to connect to a FlexRay network for monitoring FlexRay based messages according to protocol specifications V2.1A.

Acquisition & Processing of Vehicle Buses:
- Transparent and parallel data acquisition via SCADAS hardware
- Selection in Channel Setup of CAN and CAN-FD signals (based on a DBC file or arxml file) or FlexRay signals (based on a Fibex file) is available online and offline for tracking and triggering, visualization or processing during and directly after the measurement
- Recording of the complete raw CAN or CAN-FD stream for always keeping access to all signals in post-processing even when the DBC file was not available before and during acquisition
- Automatic unit conversion and sample rate alignment
- CAN, CAN-FD or FlexRay data is stored as Static data, and all selected CAN, CAN-FD or FlexRay channels are available as additional Z-axis in Waterfalls, or additional X-axis for 2D-data

Product requires
Software for Vehicle Buses:
- Combined with one of following acquisition products:
- TL-SIG.33.2 Simcenter Testlab Signature Testing – Standard
- TL-SIG.34.2 Simcenter Testlab Signature Testing – Advanced (or 8-16 channel versions)
- TL-SIG.14.2 Simcenter Testlab Signature Acquisition Workbook
- TL-STR.26.2 Simcenter Testlab MIMO FRF Testing
- TL-ACT.25.2 Simcenter Testlab Exterior Pass-by Noise
- TL-ACT.27.2 Simenter Testlab In-room Pass-by Noise
- TL-ACT.78.2 and TL-ACT.79.2 Simcenter Testlab HD Acoustic Camera

Hardware for CAN and CAN-FD buses:
- Simcenter SCADAS Mobile, Simcenter SCADAS Recorder
- SCM2E01, SCM2E02, SCM2E05, SCM2E09: On-board CAN-bus interface
- SCM-CN4-II Simcenter SCADAS Mobile Quad CAN and CAN-FD bus interface module
- Simcenter SCADAS Lab
- SCL2E20: On-board CAN-bus interface
- SCL-CN4-II Simcenter SCADAS Lab Quad CAN and CAN-FD bus interface module
- Simcenter SCADAS XS
- SC-XS06-EC, SC-XS12-AC, SC-XS12-NC: On-board CAN-bus interface

Hardware for FlexRay bus:
- Simcenter SCADAS Mobile, Simcenter SCADAS Recorder
- SCM-FR4 Simcenter SCADAS Mobile Quad FlexRay network interface module
- Simcenter SCADAS Lab
- SCL-FR4 Simcenter SCADAS Lab Quad FlexRay network interface module

Product contents
Supported interfaces
- SCADAS III: Supported hardware interfaces: UTP
- SCADAS mobile: Supported hardware interfaces: Ethernet interface (UTP) for connection to host computer
- SCADAS recorder: Supported hardware interfaces: Ethernet interface (UTP) for connection to host computer
- SCADAS Durability Recorder: Supported hardware interfaces: Ethernet interface (UTP) for connection to host computer
- SCADAS Lab: Supported hardware interfaces: Ethernet

interface (UTP) for connection to host computer
- SCADAS XS: Supported hardware interfaces: USB 2.0 for connection to host computer

Product status
- Available on PC running Microsoft Window OS:
  - 64-bit Windows® 10 and Windows® 11 (no restrictions) (Please check installation Manual for detail versions)
  - Limited support (non-acquisition products) for Windows Server® 2016, 2019 and 2022, excluding the CAD display.
- Support of Microsoft Office® 2016, 2019, 2021 and 365 ProPlus except online office (Office365 online is not supported) Please check installation Manual for details on supported versions
- Available license configuration: Node-locked, Floating, upgrade to Floating or tokens