

Yutraffic **Office**

The integrated traffic engineering workstation for efficient intersection planning and easy controller configuration

One single Tool for all Tasks

Modern traffic light systems have to do more and more: coordinated green times for individual transport, reliable prioritization of public transport and increased safety for particularly vulnerable road users. At the same time, the range of technical solutions is growing and with it the complexity. Cities and operators are therefore faced with the challenge of selecting a suitable, manageable and future-proof solution.

With *Yutraffic Office*, we provide an integrated software system that combines all the necessary tools in one solution based on a common database:

- Planning of signalized intersections
- Planning of traffic actuated control
- Configuration of controllers
- Configuration of control centers

Yutraffic Office covers all phases in the life cycle of signalized intersections.

Features

The operation and the range of functions have been tried and tested in practice and are continuously optimized and enhanced based on user feedback from traffic engineers, service technicians and operators. This includes in particular our customers (e.g. *OCA - Open Traffic Systems City Association e.V.*) and our own team of traffic engineers.

The focus is on efficiency, ease of use and functional safety. The complexity of the system- and traffic engineering is reduced by focusing on the essentials. Extensive support functions guarantee an efficient workflow. In addition, a comprehensive range of training and support services is available upon request. This shortens the training time for new functions or technologies. The guaranteed backward compatibility of the data created ensures investment security.

Data Consistency

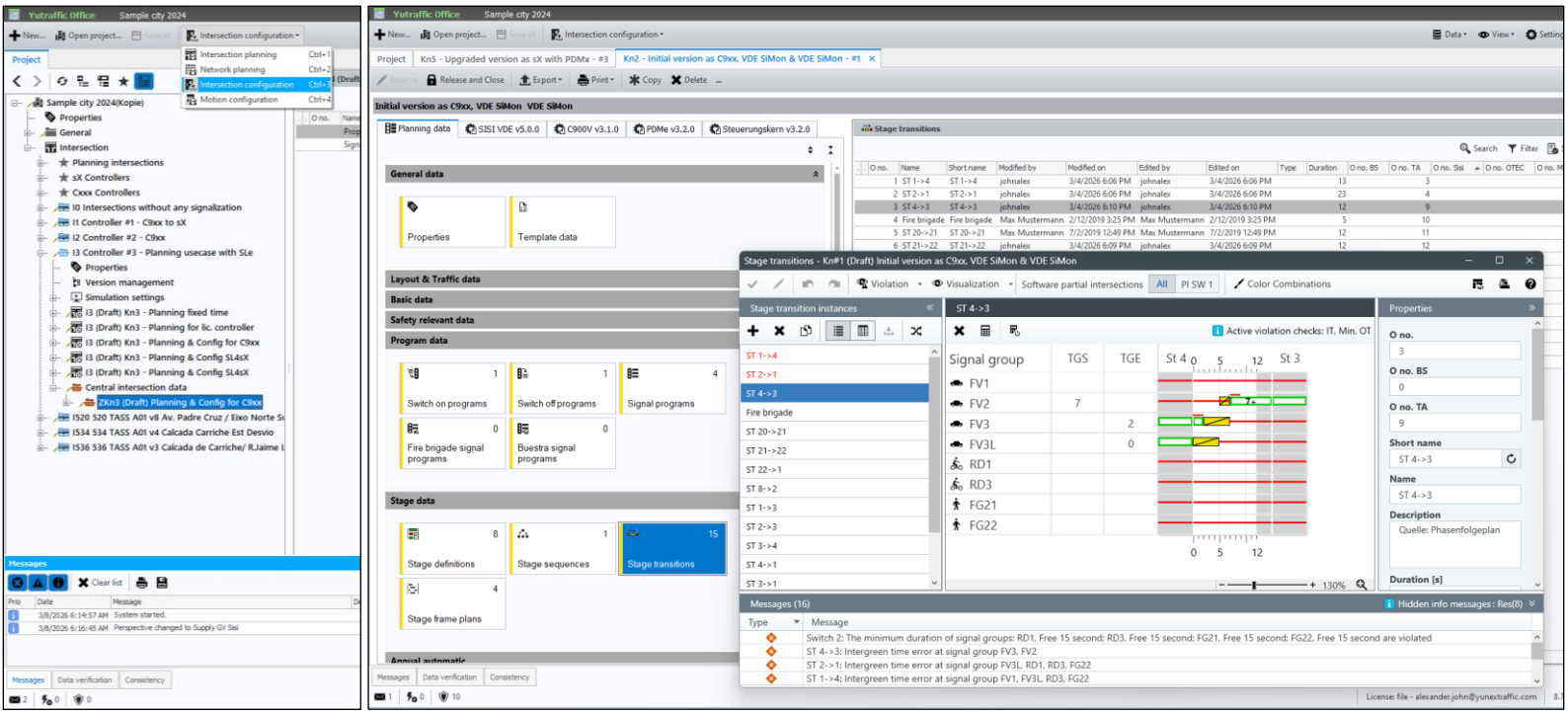
All *Yutraffic Office* software packages employ one single central database. This means that the traffic planner can access exactly the same data as the programmer of the controller or the service technician during maintenance. There is no longer an internal data import or export, there is no need to enter the same data multiple times and errors due to double entries are avoided. This saves time and increases system reliability, because the full consistency of all data at the traffic engineering workstations, the controllers and the control center is guaranteed automatically and without additional effort.

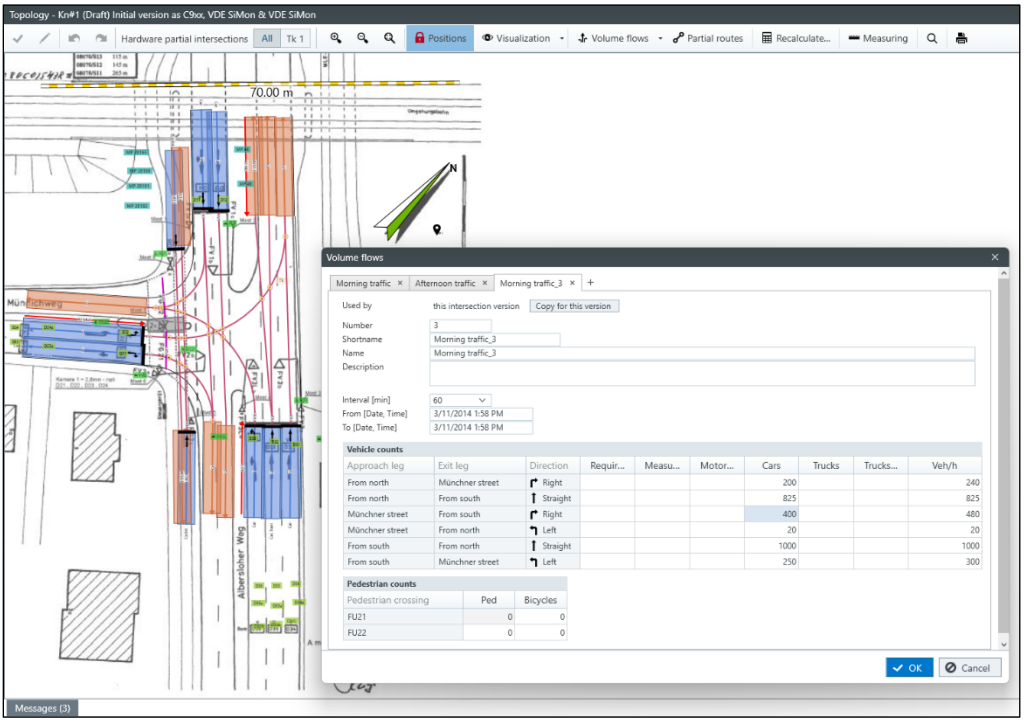
Optimal Workflow

Yutraffic Office works according to the multi-user/multi-client principle. The management of all projects and users within the system is organized in such a way that users at multiple traffic engineering workstations can work on the same project in parallel, without problems and without the risk of confusion or data inconsistencies.

Scalability

The modular structure of *Yutraffic Office* enables the step-by-step implementation of an overall system over a longer time period. The flexible and modular license model enables the successive activation of additional functions and function packages to adapt to growing requirements.







Advanced Intersection Planning

Punctual public transport, minimized traffic jams, optimized signal programs, an efficient traffic flow both during peak- and off-peak hours - tasks that can be difficult to implement in planning even for experienced traffic engineers. *Yutraffic Office* offers a range of powerful, advanced features that help traffic planners to complete their tasks much faster and always based on a reliable and consistent database.

Focus on the Essentials

Regardless of what task the user of *Yutraffic Office* is currently working on – planning a single intersection or an entire network of intersections, providing configuration data for the controller or working in *Yutraffic Scala/Symphony* – *Yutraffic Office* offers the right visualization to focus on the relevant data and functions for the respective use case.

Support Features

Yutraffic Office offers an optimal working environment for traffic engineers. Numerous support functions for automatic generation, e.g. of signal programs, stages and stage transitions, facilitate the planning process. Subsequent manual adjustments are possible at any time and are supported by *Yutraffic Office* with intelligent pre-selections and editing functions. When entering parameters manually, smart pre-assignments and validations support the efficient and error-free input of planning data.

Manufacturer Independence

The planning functionality is available independently of the controller configuration functionality. For example, the scale measurement of the site plan, the calculation of the intergreen times or a quality assessment of traffic flow according to HBS 2015 can be carried out for pre-defined signal programs and traffic loads. Exchange formats in accordance with the OCIT standard (*Open Communication Interface for Road Traffic Control Systems*) are available for the exchange of the corresponding data.

Efficiency & Standardization

Yutraffic Office includes general, project-independent templates for intersections, intersection versions, and entire networks. The templates contain standard parameters that can be adapted or extended depending on country, city, or project-specific requirements. This reduces the need for duplicate and tedious parameter entry, thus saving valuable time. In addition, standards can be implemented in this way that make cross-team and cross-site cooperation between different editors more efficient. In the further course of the life cycle, the maintenance of the data by changing the responsible editor is also facilitated.

Consideration of Guidelines

The process of intersection planning is based on the respective country-specific laws and regulations. Therefore, *Yutraffic Office* offers comprehensive user support depending on the policy chosen. This support includes numerous validations and checks of user input, e.g. for intermediate and minimum times, which are intuitively displayed visually. *Yutraffic Office* supports compliance with guidelines and standards in Germany (RiLSA 92 & 2010/2015), Austria (RVS 5.32), Switzerland (SN Switzerland) and Poland.

© 2026 Yunex Traffic

Fully integrated **T**raffic **A**ctuation

An integral part of the planning functionality of *Yutraffic Office* are the **tr**affic-**a**ctuated (TA) control methods. As part of the planning functionality, these can be seamlessly parameterized, programmed, simulated and uploaded into the controller.

A variety of different TA methods is available for each controller and country. For the *Yutraffic sX* and *C900* controller families, the established *PDM* and *SL* control methods *are* available. In the international environment, these are supplemented by the *STRIDE, FESA* and *NORRA* methods. For *Yutraffic sX*, TA planning in 100ms time intervals is supported for *NORRA* and *STRIDE.*

Programmed vs. Parameterized

The *PDM* and *SL* methods are prototypes for possible solutions for the creation of traffic-actuated control. *PDM* offers flexible adaptation to the respective requirements of different intersections. This is made possible by free programming in the Yunex proprietary *Traffic Language* (TL). Alternatively, the *SL* control method offers an approach based purely on parameterization and thus enables efficient implementation of traffic-actuated control. Optionally, however, a purely parameterized *SL* control can also be extended by a programmed part in *Traffic Language*. The gain in flexibility and speed combines the best of both worlds.

Further Development

Both methods are continuously developed further based on feedback from our customers and our own traffic engineering team. Special attention is paid to backward compatibility. In the case of controller migration, e.g. from C900 to sX, a low-cost migration of the TA configuration is usually possible. In addition, when using *Traffic Language*, access to new technologies, such as SREM/SSEM (**S**ignal **R**equest **E**xtended **M**essage / **S**ignal **S**tatus **E**xtended **M**essage), is possible.

Stage-oriented Approach

PDM and *SL* are based on a stage-oriented approach. Stages and stage transitions are configured in *Yutraffic Office*. Stage sequences for up to four partial intersections can be controlled separately. When employing *Traffic Language*, special commands for individual signal group manipulation provide additional flexibility.

Configuration and Simulation

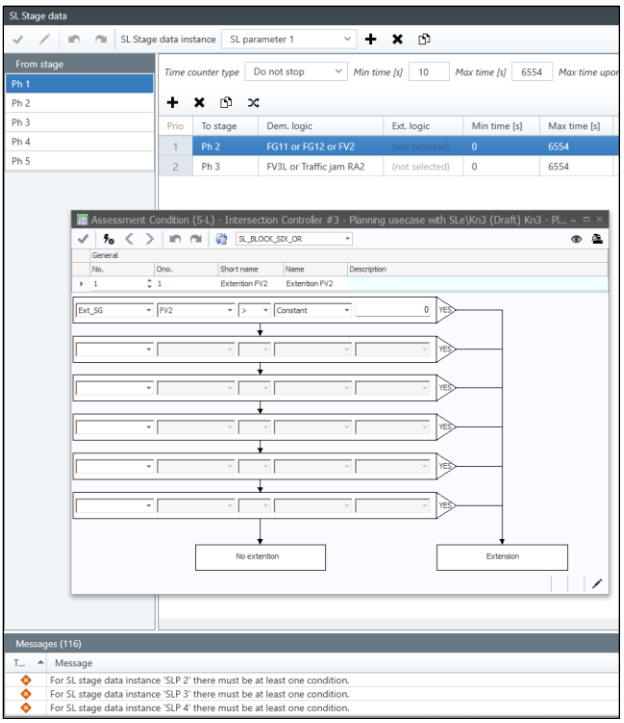
The configuration data for both methods is created as usual with *Yutraffic Office*. This means that the TA configuration data is also part of the seamless and transparent system integration of supply processes. For testing the control system, an interface to the common microsimulation tools *AIMSUN.Next* and *PTV Vissim* is provided.

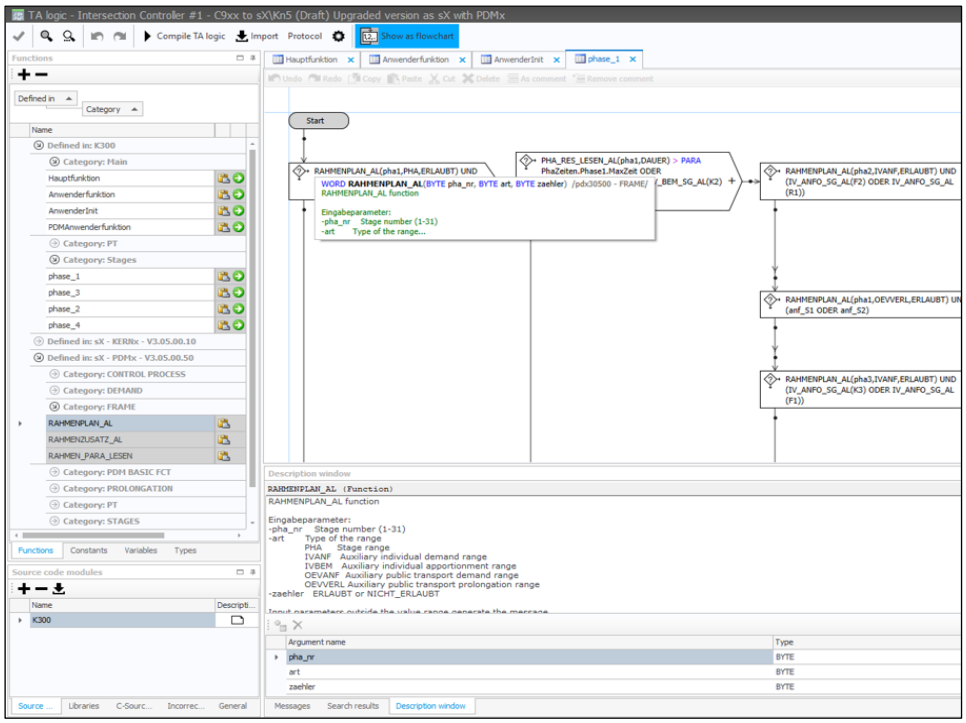
License for Yutraffic sX

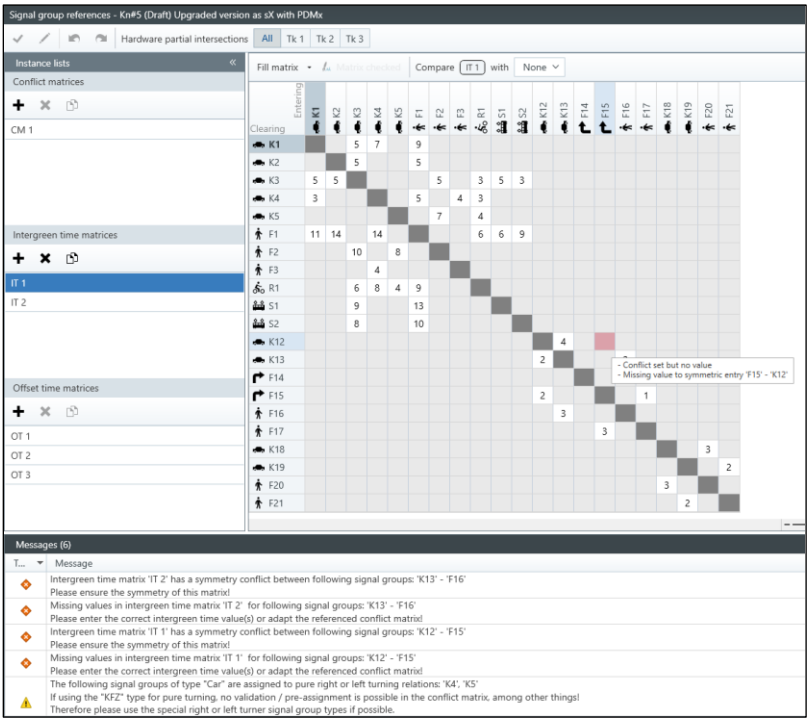
All Yunex TA methods for the sX controller uniformly use the ATE (**A**dvanced **T**raffic **E**ngineering) license. This makes it easier to select the TA method purely on the basis of traffic engineering requirements.

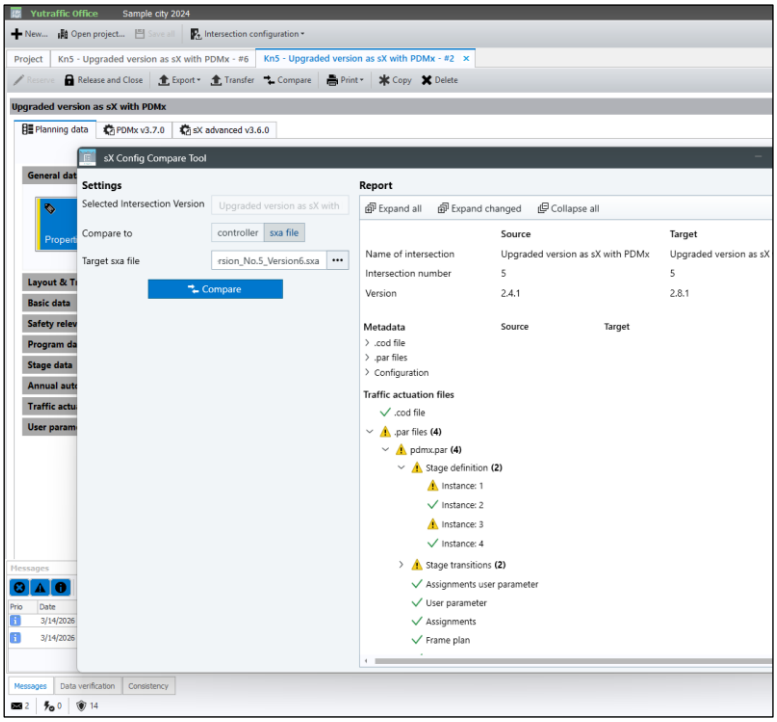
Licensing for 3rd party Controllers

The *PDM* and *SL* control methods are also available for third-party controllers and are available for licensing by other manufacturers.









Consistence of Configuration Data

The preparation of the planning data is followed by the creation of the controller- and signal monitoring configuration. Depending on the employed workflow, these are completely separated steps. *Yutraffic Office* enables the smooth transfer of controller-independent planning data into controller-specific configuration data. Dedicated plausibility checks indicate where adjustments are necessary. This avoids time-consuming troubleshooting in the laboratory or in the field, even before the data is loaded into the controller for the first time.

Remote Supply

In addition to uploading the finished configuration data via a local connection, the data can also be conveniently supplied remotely from the central, respectively the traffic control center. This means that time-consuming field operations can be avoided, especially for changes regarding traffic flow optimizations. In addition, *Yutraffic Office* has an optional connection to the *Yutraffic VD server.* This enables standardized remote supply in accordance with the OCIT standard.

Integrated Central Supply

Yutraffic Office also integrates the functionality for supplying configuration data to the traffic control center. A permanent automatic data comparison between planning and so-called supply data ensures full consistency between the control center and controller.

Changes are made particularly easy by our supply assistant. This guides the user through the necessary steps for creating, changing or deleting supply data for typical changes. Resulting changes, such as creating an EPS plan after changing a signal plan, are automatically performed and exported to *Yutraffic Scala/Symphony*. In addition, generic central supplies can be created and managed for controllers from other manufacturers in accordance with the OCIT/Canto standard.

Compatibility

Yutraffic Office automatically imports the inventory data of the previous products (*Sitraffic Office* with *Sitraffic Control*) at startup. Existing *Sitraffic Control* projects can be taken over and seamlessly continued in *Yutraffic Office*.

When migrating a Scala/Symphony system, all inventory data is also imported. This secures the expenditure invested in data creation and maintenance in the long term.

The Installation Variants

Depending on the use case there are three installation variants of *Yutraffic Office* to choose from.

- Office with local data storage
- Office Client with server
- Office client with server as part of a central system

For maintenance tasks, for example when servicing the controller, a simple installation with local data storage is available. Alternatively, server-based data storage and integrated version management support working in larger teams. This applies in particular to working in the environment of the central system. There, centralized data storage also includes central supply data.

© 2026 Yunex Traffic

Specifications in Detail

Technical Features

Supporter controller types	• sX Controller family • C900 Controller family • C800 Controller family • M-Controller family (partially) • Generic OCIT Controller • Generic CANTO Controller
Supported TA methods (selection)	• PDM – also licensed to 3rd party controllers • SL – also licensed to 3rd party controllers • VSp • FESA • STRIDE • NORRA • OML – C900 controllers only • OMTC, TRELAN/TRENDS – external TA method for sX, i.e. without parameters in Office, only declaration in basic supply
System clock	• 1s – planning, controller- and TA configuration PDM/SL • 200ms – TA configuration NORRA, STRIDE • 100ms – partially planning, controller- and TA configuration • forNORRA, STRIDE
Micro-Simulation	• AIMSUN.Next • PTV VISSIM
Traffic Control Centers	• Yutraffic Scala • Yutraffic Symphony
Adaptive network control methods	• Yutraffic FUSION • Yutraffic MOTION
Supported Guidelines	• RiLSA 2010/2015 • RILSA 92 DE and RILSA 92 Int • RVS 5.32 Austria • SN Switzerland • Polish Guideline
Centrals Communication Protocol (depending on controller and central)	• OCIT-O 3.0 and 2.0 • CANTO 1.3 and 1.0 • TCP-IP_ZENTRALE • Befa 12 and AWA
Data Export/Import	• OCIT-C 2.0 and 2.1 • OCIT-I 1.1 and 1.0 • SOP6 – proprietary exchange format
Data migration from legacy tools	• Yutraffic/Sitraffic P2 • Yutraffic/Sitraffic Language TL • Yutraffic/Sitraffic Control • Previous versions of Yutraffic/Sitraffic Office in general

General Features

Product Variants	• Office Standalone • Multiple Office Clients connected to common data base – TE (**T**raffic **E**ngineering) Server • Multiple Office Clients connected to common database as part of the traffic control center Scala/Symphony
License Model	• One-time purchase and license subscription • Based on required feature scope • Service packs and hot fixes free of charge – in case of preexisting license for the respective major version
Supported Languages	• German, English, Czech, Spanish, French, Italian • German and English for Traffic Actuated Control • Project-specific localization available upon request
Supported Operating Systems	• Microsoft® Windows 11 x64 – Office Client and Office Standalone • Microsoft® Windows Server 2022 x64 – TE-Server
System Requirements	• PC or Notebook – x64 compatible • Computers with a CPU not older than 3 years and at least 6 cores • Free hard disk at least 60 GB • Main memory minimum 32 GB, with loss of performance 16 GB
Information Security Standard	• Development process in accordance with ISO/IEC 27001
Download for full version and free demo version	• Yunex Traffic Tools - Home • digitally signed setups for ensuring authenticity
Video Tutorials	• Youtube
Product Training	• upon request with Yunex Academy • available on-site or in Munich at Yunex Academy • E-mail: academy@yunextraffic.com • WWW: https://academy.yunextraffic.com/
Related Products	• Traffic Light Controllers • Adaptive Traffic Control • Traffic Centers • Connected Mobility Solutions • AIMSUN.Next
Technical Support	• E-mail: support-center@yunextraffic.com • WWW: https://customerportal.yunextraffic.com/en-US/

Yunex GmbH

Otto-Hahn-Ring 6
81739 Munich
Germany

Contact us
Email: contact@yunextraffic.com

All hardware and software names used are brand names and/or trademarks of their respective holders.

© 2026 - Yunex Traffic.
Right of modifications reserved.

Imprint
Data Privacy

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

