

vs | plus

The Manufacturer-Independent, Traffic-Actuated Control Method

One Method. All Controllers. All Requirements

vs | plus is a traffic-actuated control method for traffic light systems – uniformly deployable on controllers from different manufacturers.

It is suitable for standalone intersections as well as coordinated networks and provides a robust foundation for modern network control systems.

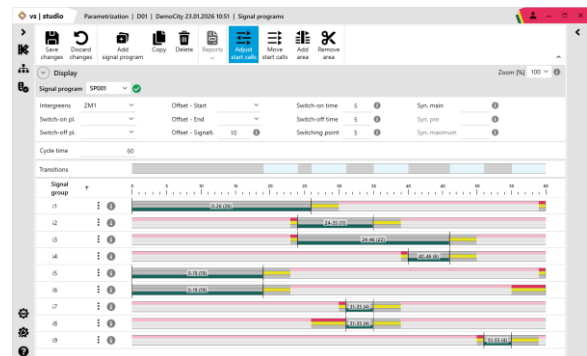
Proven in practice for over 35 years and continuously further developed.

Your Benefits with vs | plus

- **Manufacturer- and controller-independent**
A uniform standard for planning, operation, and further development.
- **Parameterization instead of programming**
Adjustments possible without specific programming expertise.
- **Simple, economical, and transparent**
Low maintenance, transparent logic, and adaptable independently of the original planner.
- **Flexible prioritization**
Public transport, pedestrians, cyclists, private traffic, or emergency vehicles – situation-dependent and rule-based.
- **Future-ready**
Designed for modern traffic systems and future cooperative applications.

Typical Areas of Application

- **Traffic-actuated standalone intersections**
Flexible, detector-based control for signalized intersections with dynamic traffic demand.
- **Coordinated networks with partial traffic dependency**
Combination of frame signal plans and traffic-actuated operation for stable and high-performance network control.
- **Public transport and special vehicle priority**
Situation-dependent prioritization of public transport as well as emergency and special vehicles.



- **Pedestrian and bicycle traffic**
Consideration of non-motorized traffic to enhance safety and comfort.
- **Complex urban traffic environments**
Robust control under high traffic volumes and diverse operational requirements.



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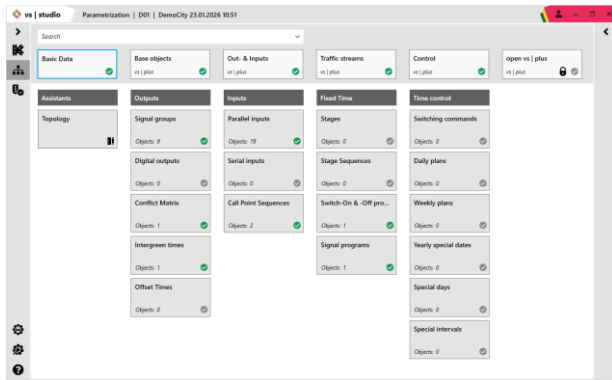


The vs | plus - Ecosystem

vs | plus is fully and seamlessly integrated into the tool environment of vs | verkehrssysteme ag:

vs | studio

Planning, parameterization, and testing of control logic at the traffic engineer's workstation.



vs | mate

Systematic testing and realistic simulation with a connection to PTV Vissim.

Name	Logical input	Waiting time	Max. waiting time	Occupied?	Occ. Degree	Occ. Time	Time gap	Time gap gross	Faulty?
D1.1	D1.1_1	0	No	0	0	110	117	No	
D1.2	D1.2_2	0	No	0	0	130	132	No	
D2.1	D2.1_3	0	32	No	0	30	35	No	
D2.2	D2.2_4	0	36	Yes	70	7	7	No	
D3.1	D3.1_5	0	27	No	0	20	24	No	
D3.2	D3.2_6	0	7	Yes	30	2	2	No	
D4.1	D4.1_7	48	Yes	100	460	0	460	No	
D4.2	D4.2_8	52	No	0	0	130	133	No	
D5.1	D5.1_9	0	No	0	0	250	251	No	
D5.2	D5.2_10	0	No	0	0	305	310	No	
D6.1	D6.1_11	0	Yes	100	90	0	90	No	
D6.2	D6.2_12	0	No	0	0	20	25	No	
D7.1	D7.1_13	0	No	0	0	1020	0	No	
D8.1	D8.1_14	0	No	0	0	1020	0	No	
D9.1	D9.1_15	0	No	0	0	1020	0	No	
B2off	B2off_17	0	No	0	0	0	0	No	
B2on	B2on_16	9	No	0	0	0	0	No	
B3off	B3off_19	0	No	0	0	0	0	No	
B3on	B3on_18	0	23	No	0	0	0	No	

vs | go

Optimization of vs | plus control systems using intelligent, self-learning techniques.

Together, these tools form an end-to-end environment from planning through to operation of traffic light systems.

C-ITS-ready

vs | plus supports Cooperative Intelligent Transport Systems (C-ITS).

The exchange of digital messages between infrastructure and road users contributes to improved traffic safety and optimized traffic flow.

On the Safe Side with vs | plus

The integration and conformity of vs | plus are verified and certified for each controller type in cooperation with the respective controller manufacturer.

Certified controller manufacturers:

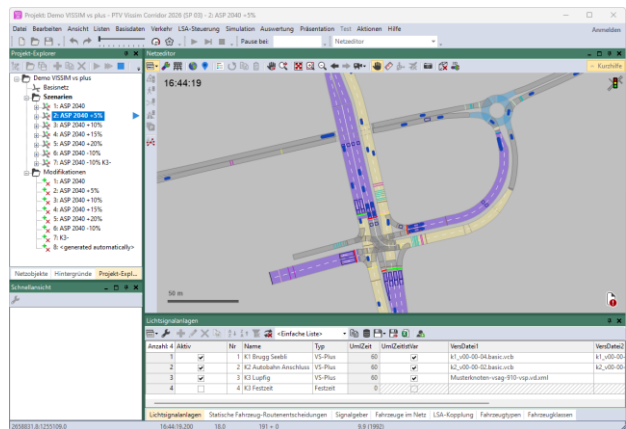
- AVT-Stoye
- Cross
- Stührenberg
- VRAG
- Bergauer
- Kummler+Matter
- Swarco
- Yunex

An up-to-date list of all certified manufacturers is available on our website.

Simulation with PTV Vissim

With vs | mate, vs | plus control systems can be realistically simulated on a PC.

Since the same vs | plus core used in field controllers is applied in the simulation, the simulated behavior corresponds exactly to real-world system performance – ideal for stress testing and scenario comparisons.



Ready for the Next Generation

vs | plus is continuously being enhanced.

With the new generation vs | plus G2, we are laying the foundation for intelligent, predictive, and adaptive traffic control – today and in the future.

We would be pleased to demonstrate how vs | plus can be implemented in your project.

