



The End-to-End Solution for Digitalizing Traffic

A range of uses and application scenarios on a central platform

The increasing digitalization of traffic monitoring and of toll collection and enforcement is presenting new challenges for the organizations responsible. As a result, they need increasingly flexible, intelligent, and customizable solutions. The video-based Smart Traffic Sensor SSP-X1 is a vehicle identification sensor that offers many possible uses and application scenarios in a single system.

Fields of application include the establishment of environmental zones, toll collection and enforcement, traffic volume measurement, average speed enforcement, identification of red light violations, and other AI applications.

In Brief

- ✓ High degree of end-to-end automation
- ✓ Outstanding sensor availability rate
- ✓ Remote access for operation and system monitoring
- ✓ Plug and play service
- ✓ Suitable for tolling and traffic enforcement
- ✓ SNMP standard for monitoring
- ✓ Precise and reliable detection
- ✓ AI modularized features
- ✓ Low-maintenance design

Smart Traffic Sensor SSP-X1-V1.6

Mechanical Data

Dimensions (W x D x H)	251 mm x 281 mm x 237 mm
Weight	6,6 kg

Electrical Data

Supply Voltage	12 – 24 V DC
Power Supply	12 V / 24 V DC 5 A / 2,5 A (25 W – max 60 W with heating and external flash)

Interfaces

Ethernet	Yes
Wi-Fi	Yes (optional)
3G / 4 (LTE)	Yes (optional)
Output	External flash modul or µW-DSRC communication

Environmental Conditions

Ambient Temperature	-30 °C to max. +65 °C
Storage Temperature	-40 °C to +70 °C
Relative Humidity	0 – 95 %, non-condensing
IP/ IK rating	IP67 / IK10

Product Compliance

EMC	EN 55032, EN 55035
Photobiological Safety	IEC / EN 62471
LED-Classification	Group 1 (Low-Risk)

Product Features

Camera 1	up to 16 MP, color or B/W
Camera 2	up to 16 MP, color or B/W
Internal Flash	850 nm, 30 High Power LEDs
Sensor	Global shutter CMOS Sensor
Camera Lens	6, 8, 12, 16, 20, 25, 35 mm
Operating System (OS)	LINUX
Main Storage	SSD 128 GB oder SSD 2 TB
GPS	Yes (optional)

Performance Features

Automatic Number Plate Recognition (ANPR)	Yes (optional)
Classification	Yes (optional)
Object Detection & Tracking	VITRONIC AI based Detection Engine
Brand & Model Recognition	Yes (optional)
• Vehicle Color Recognition • Seatbelt- & Mobile Detection • Solid Line Violation • Traffic Exclusion Violation • Lane Restriction • Redlight App • Yellow Box Violation • Illegal Turn & U-Turn • Stop Sign Violation • Make & Model Recognition • Traffic Counting & Statistics	Yes (optional)