



VPS153 VPS Pro

**PROFILING SYSTEMS** 

**SICK**Sensor Intelligence.

#### **PROFILING SYSTEMS**



## Ordering information

Туре	part no.
VPS153	1067558

Included in delivery: Traffic Controller VPS (1), LMS511 SE (1), LMS111-10100S05 (2)

Other models and accessories → www.sick.com/VPS\_Pro



#### Detailed technical data

#### **Features**

Application	System for measurement of vehicle dimensions
Number of covered lanes	1
Scanner design	3-scanner solution
Vehicle data	Vehicle dimensions (length, width, height) 3D measuring points on the vehicle Vehicle speed Start- and end measurement point of the measurement
Recommended vehicle distance	Vehicles must pass through the measuring station one by one
Calibration	Yes
Stop-and-go functionality	Yes

### Mechanics/electronics

Measuring range requirements	Measuring range (spanned by scan planes of the LMS) must be optically clear		
Installation position	Distributed		
Installation height	$5~\mathrm{m}$ $8~\mathrm{m}$ Height of LMS Width, at least $1~\mathrm{m}$ higher than the maximum vehicle height, LMS Length, offset by the maximum vehicle length + $3~\mathrm{m}$ in the direction of travel, mounted laterally or overhead		

#### Performance

Length measurement accuracy	$\pm$ 100 mm with vehicle speed < 7 km/h $^{1)}$ 2)
Width measurement accuracy	$\pm$ 60 mm with vehicle speed < 7 km/h $^{1)}$ $^{2)}$
Height measurement accuracy	$\pm$ 60 mm with vehicle speed < 7 km/h $^{1)}$ $^{2)}$
Calibration accuracy	30 mm x 30 mm x 30 mm (L x W x H) <sup>1) 3)</sup>
Driving speed	3 km/h 7 km/h, for full coverage, achievement of the maximum measurement accuracy of the length, width, and height measurement possible 7 km/h 100 km/h, reduction in length, width, and height measurement accuracy
Minimum object size	1 m x 0.6 m x 0.6 m (L x W x H)
Maximum object size	30 m x 5 m x 5 m (L x W x H)

 $<sup>^{1)}</sup>$  Typical value; actual value depends on environmental conditions.

#### General notes

Items supplied	LMS511 SE
	LMS111-10100S05 (2 x)

 $<sup>^{\</sup>rm 2)}$  Information refers to twice the standard deviation (2 sigma).

 $<sup>^{\</sup>rm 3)}$  Maximum deviation of the measuring points from the ideal test object.

VPS Traffic Controller with VPS software incl. USB stick with TEMS info sample client, source code for TEMS info sample client, TEMS analyz-
er, and operating instructions

#### Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
China RoHS	✓

#### Classifications

ECLASS 5.0	27281001
ECLASS 5.1.4	27280190
ECLASS 6.0	27280190
ECLASS 6.2	27280190
ECLASS 7.0	27280190
ECLASS 8.0	27280190
ECLASS 8.1	27280190
ECLASS 9.0	27280190
ECLASS 10.0	27280190
ECLASS 11.0	27280190
ECLASS 12.0	27280190
UNSPSC 16.0901	41111615

#### Recommended accessories

Other models and accessories → www.sick.com/VPS\_Pro

	Brief description	Туре	part no.	
Commissionin	Commissioning aids and test equipment			
	<ul> <li>Product: Alignment aids</li> <li>Description: Alignment aid for detecting the infrared light (wavelength 780 nm to 1050 nm) of SICK sensors</li> </ul>	Alignment aid	2101720	
device protection and care				
	<ul> <li>Description: Weather hood, 190°</li> <li>Suitable for: LMS10x, LMS11x, LMS12x, LMS13x, LMS14x, LMS15x, S100</li> </ul>	Weather protection cover 190°	2046459	

	Brief description	Туре	part no.		
Mounting syst	Mounting systems				
	Description: Mounting kit for fine adjustment For LMS1000/MRS1000, always use "Mounting kit 1a 2093194" or "Mounting kit 1b 2085935" and "Adapter plate 2085937"     Material: Stainless steel     Details: Stainless steel V2A (1.4301)     Suitable for: LRS4000, MRS1000, LMS1000, LRS4000	Fine adjust- ment bracket	2076764		
	<ul> <li>Description: Mounting plate, adjustable longitudinal axis, only in conjunction with mounting kit 2 (2039302)</li> <li>Packing unit: 1 piece</li> </ul>	Mounting kit 3	2039303		
	<ul> <li>Description: Mounting bracket, adjustable lateral axis, only in conjunction with mounting kit 1a (2034324) or 1b (2034325)</li> <li>Packing unit: 1 piece</li> </ul>	Mounting kit 2	2039302		
	<ul> <li>Description: Mounting bracket for rear mounting on wall or machine</li> <li>Packing unit: 1 piece</li> </ul>	Mounting kit 1a	2034324		
connectors an	d cables				
The state of the s	<ul> <li>Connection type head A: Male connector, M12, 4-pin, straight, D-coded</li> <li>Connection type head B: Male connector, RJ45, 8-pin, straight</li> <li>Signal type: Ethernet</li> <li>Cable: 20 m, 4-wire, AWG26, PUR, halogen-free</li> <li>Description: Ethernet, twisted pair, shielded</li> </ul>	YM2D24-200EA1M- RJA4	6036158		
b. k	<ul> <li>Connection type head A: Male connector, M12, 4-pin, straight, D-coded</li> <li>Connection type head B: Male connector, RJ45, 4-pin, straight</li> <li>Signal type: Ethernet, PROFINET</li> <li>Cable: 20 m, 4-wire, CAT5, CAT5e, PUR, halogen-free</li> <li>Description: Ethernet, shielded, PROFINET</li> <li>Application: Cold bending resistant, Outdoor, Zones with oils and lubricants, seawater resistant</li> </ul>	YM2D34-200P- N4MRJA4	6050685		
	Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Power Cable: 20 m, 4-wire, PUR, halogen-free Description: Power, shielded Connection systems: Flying leads Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2Z15-200UE1XLEAX	6042564		
(6)	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight</li> <li>Connection type head B: Flying leads</li> <li>Cable: 20 m, 4-wire, PUR, halogen-free</li> <li>Description: Shielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A64-200UE1XLEAX	6050687		



## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

# **WORLDWIDE PRESENCE:**

Contacts and other locations -www.sick.com

