## HISIC450

# Overheight traffic detectors

## Reliable overheight detection of vehicles

 Reliable signals – even in nasty weather conditions



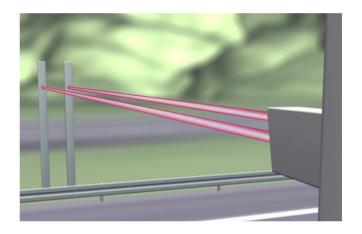
### Reliable overheight detection of vehicles

Reliable detection of vehicles in flowing, slow-moving and stationary traffic is the key to future-oriented traffic planning and efficient traffic management. We provide the

ideal solutions for the requirements of any situation, offering high availability and flexibility.

#### Dual sender/receiver system

The HISIC450 overheight detectors consist of two single-beam photoelectric safety switches, mounted at a distance from one another and in parallel, but facing in opposite directions. Although, unlike a photoelectric retro-reflective sensor, the sender and receiver system requires a power supply on each side of the road, it does provide reliable measurement results, even in adverse weather conditions. A logical link between the two single-beam photoelectric safety switch signals makes it possible to detect overheight vehicles, while largely avoiding false alarms.



#### **Detection of high vehicles**

A reliable means of detecting overheight vehicles is required in order to protect bridges and entrances to tunnels, but it is vital that antennas and other small objects do not trigger an alarm. The HISIC450 overheight detectors, with their housing featuring protection against corrosion, and additional weather protection cover, can be used in any outdoor environment. The sender/receiver principle results in a large light spot and high light reserve, which allows the detectors to be used over long distances and in bad weather conditions.

#### Detecting ships on rivers and canals

In order to coordinate locks as efficiently as possible and control automatic draw bridges, it is necessary to detect approaching vessels in good time. The HISIC450 comprises two outdoor single-beam photoelectric safety switches, which can be installed along rivers or canals as far in front of the draw bridge as desired, providing reliable detection of ships.





## HISIC450 Overheight detection of vehicles



#### **Product Description**

The HISIC450 overheight detector monitors the height of vehicles – at tunnel entrances, low underpasses or bridges, for example. Reliable stop and alarm signals are activated when a vehicle infringes both photoelectric switches of the HISIC450 and this signal is then combined with traffic data

(e.g. induction loop signal). Even overheight vehicles travelling at speeds of up to 100 km/h are reliably detected. It can cope with difficult weather conditions, i.e. rain, snow or dust clouds, due to Its large beam diameter and high signal reserve.

#### At a glance

- Aluminum enclosure with anti-corrosion coating and high enclosure rating
- Built-in lens heaters to prevent condensation or icing
- Weather protection against snow, rain and dust clouds

#### Your benefits

 Reliable signals – even in nasty weather conditions

#### Fields of application

 Overheight detection in front of tunnels and bridges

- Accessories (weather hood and mounting bracket) made of stainless steel
- Sensitivity adjustment
- Insensitive to ambient light



#### More Information online

For more information, enter the link or scan the  $\Omega R$  code to get direct access to technical data, operating instructions, software, application examples, and much more. www.endress.com/hisic450



## Technical data

The precise device specifications and product performance data may vary and are dependent on the respective application and customer specifications.

Measured values	Overheight
Maximum number of measurands	1
Measurement principles	Double photoelectric switch
Length of measuring path	≤ 100 m (328.08′); for outdoor measurement
Response time	HISIC450-N250, HISIC450-P250: $\leq$ 500 μs HISIC450-R250: $\leq$ 10 ms
Ambient temperature	-25 °C +55 °C (−13 °F +131 °F)
Electrical safety	CE
Enclosure rating	IP 67
Digital outputs	1 PNP output: 200 mA Short-circuit-proof, only HISIC450-P250 1 NPN output: 200 mA Short-circuit-proof, only HISIC450-N250 1 relay contact: 750 mA, 120 W Electrically isolated, only HISIC450-R250
Dimensions (W x H x D)	60 mm x 126 mm x 105 mm (2.36 in x 4.96 in x 4.13 in)
Power supply	
Voltage	HISIC450-R250: 24 240 V DC HISIC450-N250, HISIC450-P250: 10 60 V DC
	Connections; protected against polarity Reversal, only HISIC450-N250 and HISIC450-P250
Current consumption	HISIC450-N250, HISIC450-P250 ≤ 250 mA
Power consumption	HISIC450-R250 ≤ 6 W

## **Order information**

Our regional sales organization will be glad to advise you on which device configuration is best for you.

## Dimensional drawings

HISIC450 sender/receiver unit (dimensions in mm (inch))

