



SPEEDSTOP – RADAR CONTROLLED SIGNAL

- Transport modulation system
- Suitable for places with possible hazard occurrence
- Maximum efficiency and effectiveness
- High reliability
- Easy installation

General Description

Most of cities, towns and municipalities in our country are facing, on a daily basis, the issue of breaking the speed limit which is amongst the most frequent causes of traffic accidents, in particular collision with pedestrians. The current situation calls for a modern solution to increase safety in cities, towns and municipalities, that is the ability to prevent consequences of tragic accidents. A system that is able to efficiently lower the speed of passing vehicles, thus ensuring smooth and safe passage through an urban area is radar controlled light signal.

If a vehicle is passing through a measured section with a higher than allowed speed, the control system will temporarily switch to a full-red phase on the signal by selecting the red signal "STOP". Thus it will force a fast running vehicle to slow down or fully stop, or conversely give signal "CLEAR" to a vehicle running with allowed speed.

This system is mainly applicable:

- before limited speed sections
- before hazardous sections
- for long and tangent sections tempting drivers to speed up

Basic

Technical Description

Light signal is added with a stationary microwave radar used to measure speed in a section before the place intended to halt vehicles.

Vehicle speed is sensed within a distance of app. 120 m–50 m before the stop line. Thus if a vehicle is entering the measured section at 120 m away from the stop line, the microwave radar will measure its speed through the approach at 50 m before the stop line. For this duration, the radar will send information to the SpeedStop system for further processing.

SpeedStop works in two possible set modes.

1. CLEAR idle mode. Green signal is "continuously" lit. If exceeding the set speed limit value is registered by the radar, the system will switch the green signal CLEAR to red signal STOP. A fast running vehicle is then forced to stop. The red signal lit up interval is adjustable according to the transport solution design.

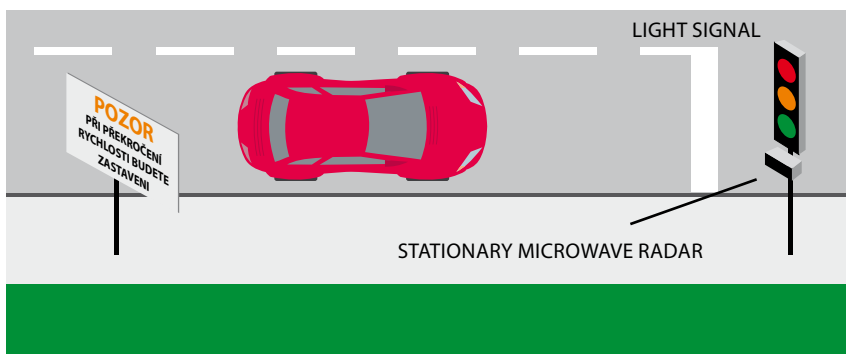


2. STOP idle mode. Red signal is "continuously" lit. If the sensed radar field is entered by a vehicle running with allowed speed, the device will switch to green signal CLEAR before the driver had to slow down. The vehicle will move on continuously. If the sensed radar field is entered by a speeding vehicle, the red signal STOP will remain to be lit forcing the driver to slow down, or to fully stop in case of high speeding. After the preset time of signal STOP expires in this situation, vehicles are allowed to pass and the device will reset the idle mode. The control system can handle a queue of cars as well as possible traffic jam and consequent clearing of the road. The device is one-way taking no account of lateral directions.



Traffic sign IP 22 is installed before the measured section to inform drivers about the presence of this system in the given zone.

Intelligent transport system Speed-Stop is characterized by maximum efficiency and effectiveness and highly contributes to safety of all road traffic participants.



SpeedStop Application Layout



Information traffic sign IP 22

Basic Technical Parameters

Power supply	230 V / 50 Hz \pm 10 %
Power consumption	80 W with LED signals
Signal response time	arbitrary depending on transport solution (ČSN)
Measured section range	50 m–120 m
Detected speed range	5 km/hr to 100 km/hr, with step 1km/hr
Maximum error to speed 100 km/hr	<3 km/hr
Ambient temperature – working	–20 °C to 50 °C
Dimensions (w × h × d)	300 × 400 × 170 mm
Coverage	IP 54; IP 10 if open



SpeedStop control device