

## Outdoor units for level crossing protection system

### INDOOR EQUIPMENT



### OUTDOOR EQUIPMENT



### Road Signal CS - LHR

Road signals provide light and acoustic warning about approaching trains for drivers and pedestrians.

The Road Signal CS-LHR consists of two red lanterns with shades on the triangle board, connection box, column and optional St. Andrew cross. Modular design of the signal provides easy access to each component for maintenance purposes.

Lanterns can be delivered in LED technology or with classic two-filament bulbs.

Optionally installed electromechanical or electrical signal bell.

Failures on (configurable) number of LEDs do not reduce the signal functionality.

### LED Driver's Indication Signal KS11

LED Driver's Indication signal consists of board with LED lanterns, connection box, column and maintenance platform.

Electrically compatible with systems designed for classical light bulbs.

Independent supervision of voltage and current drops for each LED separately.

Switch off in case of failure on 2 or more LEDs.

Blinking / steady light modes.

Extended lifetime.

Power supply 36 - 40 VDC.

Possible extension with autostop function via an INDUSI cabinet and a track balise.



Tel: +385 1 6011 700, Fax: +385 1 3666 078

Velika cesta 41, 10 020 Zagreb, Croatia



[www.altpro.hr](http://www.altpro.hr)



[altpro@altpro.hr](mailto:altpro@altpro.hr)

## Application



LED Driver's Indication Signal KS11



Half-barrier PB13



Road Signal CS - LHR

### Half-barrier PB13

Barriers and halfbarriers are providing additional safety for traffic participants by creating a physical obstacle for road vehicles when the level crossing protection system is switched on.

Barrier Drive PB13 uses a 24 V DC electric motor for rising and lowering the barrier arms. The electric motor is fitted with an electromagnetic brake which provides locking of the barrier in vertical, horizontal or current position.

The Barrier Drive door has three locks – two for mechanical latching to the frame and a key lock to prevent unauthorized door opening.

Barrier arm length up to 7,5 m.

In specific cases, there is also the possibility to manually operate the barrier drive, using a mechanical lever, in which case the electric motor and the brake are automatically switched-off.

Configurable arm lifting and lowering times and detection of broken barrier arm.

Built-in heater for the barrier drive.

### Technical characteristics:

#### Road Signal CS - LHR

#### Half-barrier PB13

#### LED Driver's Indication Signal KS11

Water and dust protection	IP55 CS - LHR IP54 PB13 IP54 KS11
Shock resistance	CS - LHR - class IR3 according to EN 60598-1
Vibration resistance	CS - LHR - class WL9, TDB2, DSL4 according to EN 50293
EMC (EN50121-4)	CS-LHR, PB13
Operating temperature	CS-LHR - -40 °C - +60 °C PB13 - -40 °C - + 70 °C KS11 - -40 °C - + 70 °C

### Order codes

Road Signal CS - LHR .....	AP215789
Half-barrier PB13 .....	AP215738
LED Driver's Indication Signal KS11 .....	AP215787
Central device RLC23 .....	AP215766



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