

RAV overheight vehicle detection system

Fixed installation, complete set · Art. 7820120

RoHS
Compliant

WEEE
Marked

CE
Marked

230 V
Mains + battery

TECHNICAL FEATURES

Complete fixed RAV system for protecting an underpass, tunnel, overpass or entrance against overheight vehicles. A single roadside laser scanner measures the height of passing vehicles by time-of-flight; when the set height is exceeded, the control unit immediately activates the LED message panel, the two LED flashers and the red traffic light ahead of the structure. Detection length, width and minimum object size are programmed with the IR remote control. The set covers one approach; a second scanner and further warning devices can be added for the opposite direction.



INCLUDED COMPONENTS		
1	7820100	RAV laser scanner 10 x 10 m, fixed system, incl. IR remote control and stainless steel case
1	7820107	RAV laser scanner bracket, band-it
1	7820105	RAV/RAS control unit, fibreglass cabinet with post, timer, flashing control board and battery charging
1	7820110	Battery 12 V 18 Ah AGM for the control unit
1	7820109	RAV LED message panel, 2 lines, 100 mm characters
2	7820114	RAV Basic 201 LED flasher, 12 V external control
1	7820112	RAV red traffic light Ø200 mm, 12 V
1	7820108	RAV junction box, 3-4 outlets
SYSTEM DATA		
Article no.	7820120	
Detection	One laser scanner, time-of-flight, motion and presence; area up to 10 x 10 m, programmable via IR remote control	
Power supply	100 ÷ 240 Vac mains; 12 V 18 Ah AGM battery backup with integrated charging (photovoltaic supply on request)	
Control unit outputs	12 Vdc flashing output (flashers) and 12 Vdc steady output (message panel, traffic light)	
Warning devices in set	LED message panel HEIGHT EXCEEDED, 2 x Ø200 mm LED flashers, 1 x Ø200 mm red traffic light	
Expansion	Up to 2 message panels, 8 Basic 201 (or 4 Basic 304) flashers, 16 Ø200 mm traffic lights per control unit; optional speaker	
Sensor to control unit	10 m cable (wireless link available on request)	
Environment	Scanner IP65, -30 to +60 °C; control unit IP65, -10 to +55 °C; message panel IP55	

RAV laser scanner 10 x 10 m

Infrared laser scanner, time-of-flight measurement

ELECTRICAL FEATURES

Article no.	7820100 (band-it bracket 7820107)
Technology	Laser scanner, time-of-flight measurement
Power supply	10 ÷ 35 Vdc
Power consumption	< 5 W
Detection area	10 x 10 m (5 x 5 m and 25 x 25 m versions available)
Detection mode	Motion and presence
Response time	typ. 20 ms, max. 80 ms (plus output activation delay)
Outputs	2 electronic relays, galvanically isolated, polarity free
Laser	IR 905 nm, Class 1 (IEC 60825-1); visible red 650 nm alignment laser, Class 3R, inactive in normal operation
LED signal	Blue power-on · orange error · 2 bi-coloured detection/output
Wiring	Supplied with 10 m multipolar cable
Programming	IR remote control (included)
Insulation class	Class III

MECHANICAL FEATURES

Operating temperature	-30 °C ÷ +60 °C
IP protection degree	IP65
Dimensions	188.37 x 152.4 x 212.12 mm (without brackets)
Weight	2.5 kg (cable included)
Materials	PC/ASA (laser); painted stainless steel (case and plate)
Fixing	Wall, 60 mm pole, 90 mm pole or band-it bracket (band-it included in this set)

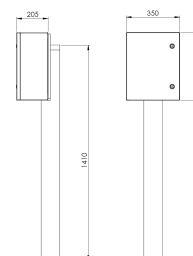


RAV/RAS control unit

Fibreglass cabinet with post, power supply, timer and flashing control board

ELECTRICAL FEATURES	
Article no.	7820105
Input voltage	100 ÷ 240 Vac
Input voltage sensors	12 Vdc
Output voltage projectors (flashing output)	12 Vdc
Output voltage display (steady output)	12 Vdc
Battery	12 V 18 Ah AGM (art. 7820110, included in this set)
Protection	Over-discharge cutoff; overvoltages; overcurrents
Insulation class	Class I

MECHANICAL FEATURES	
Operating temperature	-10 °C ÷ 55 °C
IP protection degree	IP65
Weight	25 kg
Dimensions	350 x 1495 x 205 mm (cabinet 350 x 445 mm, post Ø120 mm)
Material	Fibreglass



RAV LED message panel

Two-line fixed message display, HEIGHT EXCEEDED / FLOODED TUNNEL

OPTICAL FEATURES	
Article no.	7820109
Optic	Single-side
Number of lines displayed	2
Character height	101 mm
Distance between two contiguous pixels	16 mm
LED colour	Amber



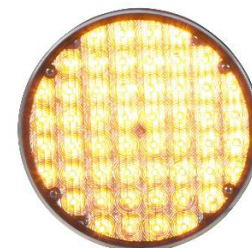
ELECTRICAL FEATURES	
Power supply	12 Vdc
Power consumption	28 W
Insulation class	Class III
Wiring	Two power cables, one per message

MECHANICAL FEATURES	
IP protection degree	IP55
Dimensions	850 x 380 x 70 mm
Weight	7 kg
Operating temperature	-30 ÷ +85 °C
Housing material	EN AW 6060 aluminium alloy, matte black

RAV Basic 201 LED flasher (2 pcs)

Ø200 mm LED flasher, 12 V external control, EN 12352 L8H/L8M

OPTICAL FEATURES	
Article no.	7820114
Light source	52 SMD LEDs
Optics	Single-sided
Colour	Amber / Red
EN 12352 class	L8H/L8M
Duration of the optical group	> 50'000 hours
ELECTRICAL FEATURES	
Supply	12 Vdc (11 ÷ 13 Vdc) or 12/24 Vdc (11 ÷ 30 Vdc)
Nominal power	7.8 W @ 12 Vdc
Nominal current	650 mA @ 12 Vdc
Protections	Reverse polarity; overvoltages
Operation	External control by the RAV/RAS control unit (steady or flashing)
Insulation class	Class III
MECHANICAL FEATURES	
Operating temperature	-30 °C / +55 °C
Lens / body	Polycarbonate / PA6
IP protection class	IP65
Weight	500 g
Dimensions	Ø 200 mm x 25 mm
Fixing	4 rear inserts for bracket attachment
Wiring	Supplied with 5.1 m long 2x0.75 mm² cable



RAV red traffic light Ø200 mm

Single red traffic light, 12 V, switched by the control unit

FEATURES	
Article no.	7820112
Colour	Red
Diameter	200 mm
Supply	12 V
Operation	Steady output from the RAV/RAS control unit
Max. per control unit	16



RAV junction box, 3-4 outlets

Distribution box for warning lights on one post

FEATURES	
Article no.	7820108
Outlets	3-4
Use	One feed from the control unit to the flashers and traffic light on the same post

