RAILALERT

Creating safety together!

The new ATWS - Train Warning System

for your temporary and mobile track construction site

Swiss Quality - Low Cost

reliable - simple - effective

RAILALERT ®

Alarm
Error
Accu
Setup
Ready

Enter

RAILALERT-Set

Article no.: 204-001

ATWS - Train warning system

ideal for temporary and mobile operations

Reliable multi-sens alerting

due to permanent radio monitoring

Extremely simple installation

for the quickest installation
and dismantling

Technical data

|	
Light source:	LED
Light color:	yellow / orange
Power supply type:	Rechargeable battery / Solar
Operating voltage:	12VDC
Operating time:	Self-sufficient with solar power
Color:	blue
Assembly:	magnetic (Wheel Sensor)
Sound volume:	126dB
Wireless range:	up to 3km
Radio frequency:	465.85MHz (403MHz - 473MHz)
	433MHz / 868MHz / 915MHz country-specific customisable
Work modes:	standby, alarm, technical alarm
Warning:	visual, audible and haptic
Temperature range:	(-20°C) - 50°C

Videos:

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Characteristics

- Simple installation due to one main switch and LED displays
- Modular system design for flexible requirements with standard applications
- Due to the radio repeater, it is possible to bridge distances of several kilometres between the detection of the train and the construction site
- The individual modules are identical in design and interchangeable with each other and recognise independently which function they need to perform in the overall system
- Personal pager for additional warning as an extra option
- Cost-effective train warning system for temporary and mobile usage
- Fail-safe function due to permanent radio monitoring
- Multi-sensor alerting through sound, light and vibration
- Complete system can be operated self-sufficient with solar power
- Radio strength display for stable operation
- Wheel sensor SIL0-tested
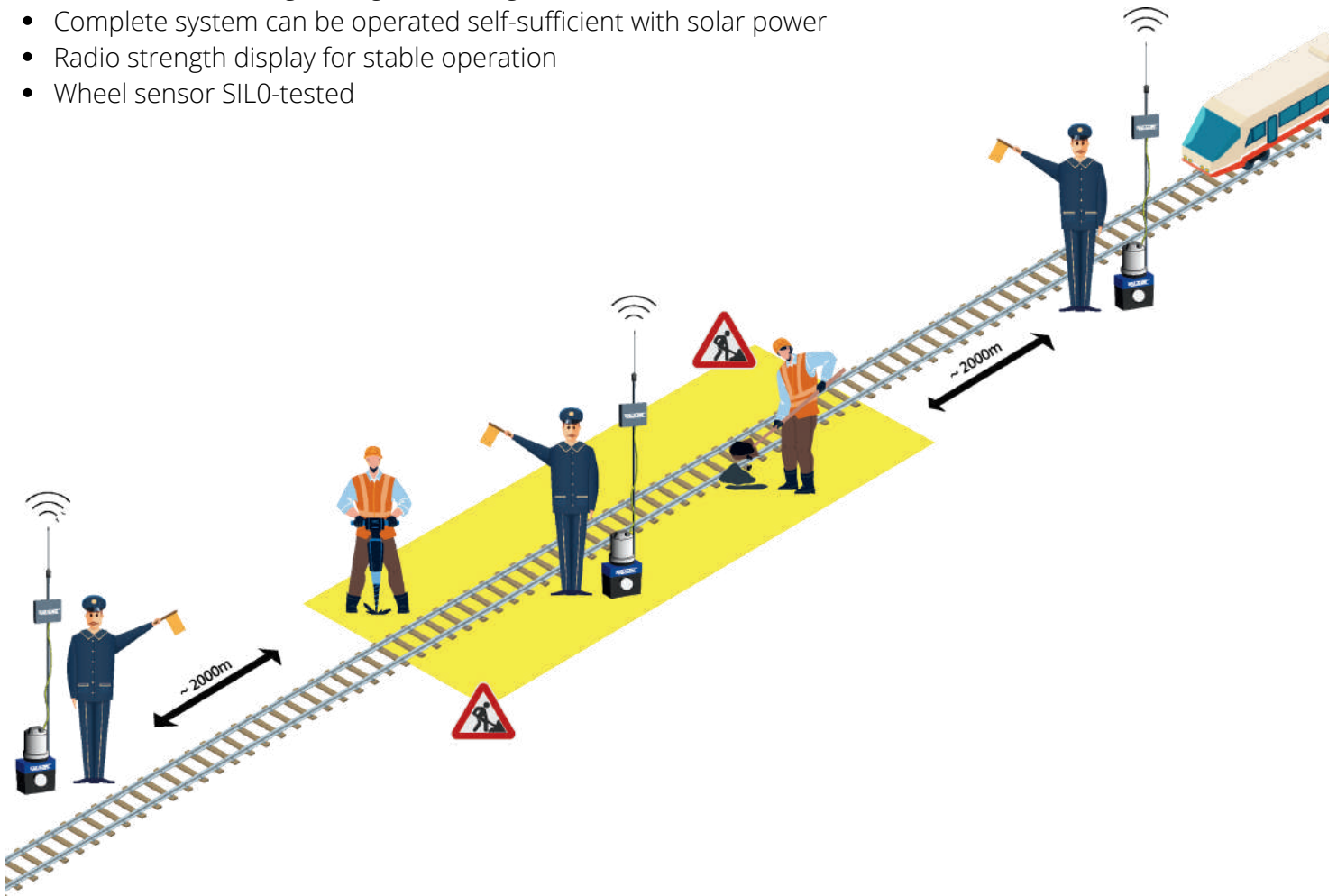
Installation

Assembly and disassembly is very quick and easy:

1. Attach the magnetic wheel sensor to the inside of the rail using the assembly jig
2. Pull the cable underneath the track
3. Connect the cable to the base station
4. Connect the long range radio module to the base station
5. Switch on the base station, wait for automatic sensor calibration
6. Use the wheel sensor to specify the direction of travel with the wheel flange simulator
7. Install the next base station as a repeater or as an end station

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RAILALERT-Set

Micro construction site
Article no.: 204-071

Consisting of:

- Base Station
- Personal Pager (3 pcs.)
- Disk Horn
- Charger
- Transport Box

Detection
Article no.: 204-001

Consisting of:

- Base Station
- Wheel Sensor
- Assembly Jig for Wheel Sensor
- Wheel Flange Simulator
- Long Range Radio Module
- Antenna Mast
- Disk Horn
- Charger
- Transport Box

Alerting
Article no.: 204-011

Consisting of:

- Base Station
- Long Range Radio Module
- Antenna Mast
- Personal Pager (3 pcs.)
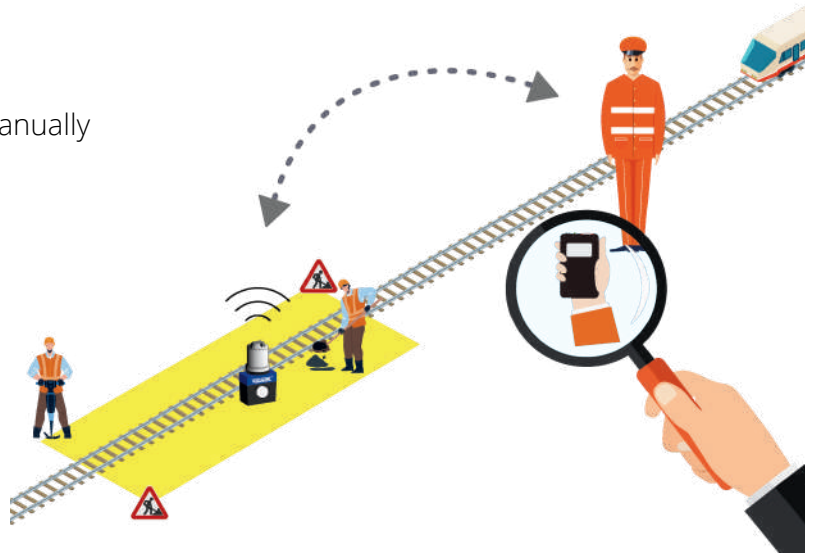- Disk Horn
- Charger
- Transport Box

Standard applications

Micro construction site

- Alarm is triggered by the security guard by manually pressing the pager

Consisting of:
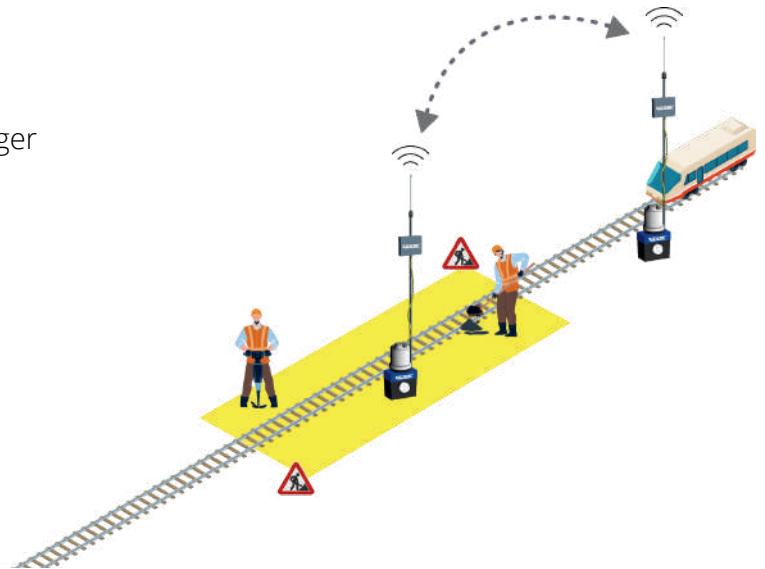
- 1x RAILALERT set micro construction site

Unidirectional traffic

- Alarm is triggered by the wheel sensor **or** the pager
- Train only approaches from one direction

Consisting of:

- 1x RAILALERT set detection
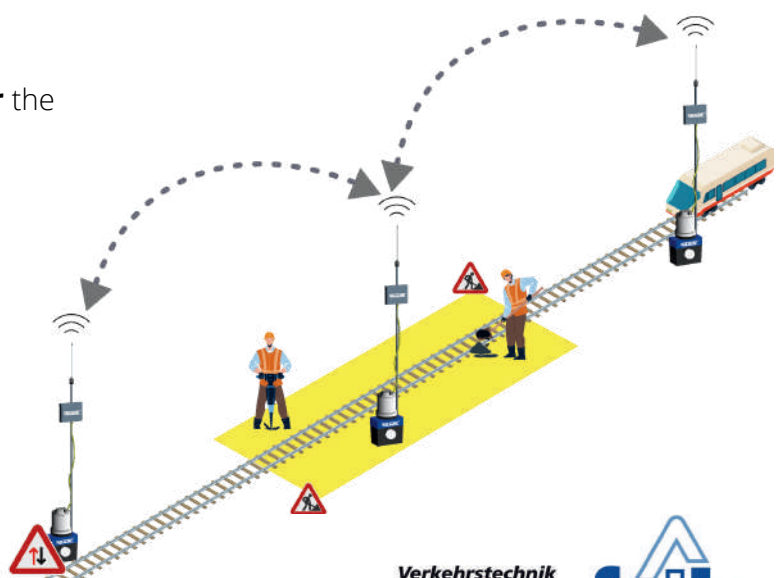- 1x RAILALERT set alerting

Bidirectional traffic

- Alarm is triggered by the both wheel sensors **or** the pager
- Train approaches from both directions

Consisting of:

- 2x RAILALERT set detection
- 1x RAILALERT set alerting

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Base Station

Article no.: 204-100

Technical data

Dimension (LxWxH):   282mm x 215mm x 423mm

Weight with battery: 9.5kg

Wireless range: Long-Range: up to 3km

           Near-Field (Pager): 100m

Characteristics

- Reliable multi-sense alerting due to permanent wireless monitoring
- Can be used universally - identical in construction as a detection, repeater or alarm station
- Vibration warning by pager as an additional option
- Maximum safety due to permanent radio monitoring
- Alarm message in the event of train detection
- In addition to the alarm, the technical alarm indicates a system error
- Long operating time of 5 days

Wheel Sensor

Article no.: 204-110

Technical data

Dimension (LxWxH):   400mm x 155mm x 70mm

Weight: 5.4kg

Safety integrity level: SIL0

Characteristics

- Safe function due to the fail-safe principle
- Quick installation by using the magnetic holder and assembly jig
- Can be used worldwide on all track types for wheel detection
- Possible speeds: 0 km/h - 450 km/h
- Possible wheel diameters: 300 mm - 2100 mm
- Mounting with the magnet enables quick installation and removal, especially suitable for temporary and mobile construction sites

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Assembly Jig for Wheel Sensor

Article no.: 204-120

Technical data

Dimension (LxWxH):   535mm x 165mm x 190mm

Weight: 1.41kg

Form: adaptable to various track types

Characteristics

- Ideal guidance for mounting the wheel sensor magnetically
- Can be used universally on all track types
- Quick and easy installation due to magnets and stoppers
- Adjustable stoppers allow the assembly jig to be adjusted to any track type
- Quick-release clamps bring the assembly jig into the correct position on the rail head
- Optical detection to ensure the wheel sensor is set correctly

Personal Pager

Article no.: 204-180

Technical data

Dimension (LxWxH):   120mm x 80mm x 40mm

Weight: 0.19kg

Wireless range: 100m

Characteristics

- Manual alarm triggering through manual activation by pressing the button
- The alarm appeals to several senses of the body (visual, acoustic and haptic)
- Permanent radio connection
- When leaving/entering the secured area, the personnel pager logs out/in
- Simple operation due to a single switch (ON/OFF)
- Status is displayed by red/green LED
- Smartphone size with belt clip

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Long Range Radio Module

Article no.: 204-140

Technical data

Dimension (LxWxH):	200mm x 135mm x 700mm
Weight:	2.75kg
Wireless range:	up to 3km

Characteristics

- Up to 3km radio distance
- Expandable with peripherals via plug connection
- Long range radio module to bridge long distances between train detection and alarm signalling
- Two plug-in contacts to connect additional alarm accessories, such as the disc horn or the solar module, for self-sufficient operation of the RAILALERT system

Solar Panel

Article no.: 204-210

Technical data

Dimension (LxWxH):	645mm x 345mm x 200mm
Weight:	3.8kg
Peak Power:	30W

Characteristics

- 100% self-sufficient operation of a complete RAILALERT set
- The solar panel generates enough energy to power a RAILALERT base station independently
- Due to the flexible tube mounting option, the solar panel can also be fixed to the antenna mast, like all other modules of the RAILALERT system
- The solar panel can either be plugged directly into the base station or into the long range radio module on the antenna mast

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Disk Horn

Article no.: 204-160

Technical data

Dimension (LxWxH):	245mm x 91mm x 70mm
Weight:	0.47kg
Sound volume:	110dB

Characteristics

- 110dB volume for an effective warning
- Flexible alignment due to magnetic mounting
- Effective acoustic warning device
- Amplifies the acoustic warning of the base station
- Shrill audio frequency to increase awareness
- Space-saving additional warning device

Antenna Mast

Article no.: 204-150

Technical data

Dimension (LxWxH):	880mm x 430mm x 110mm
Weight:	1.8kg
Form:	Telescopic tube

Characteristics

- Fast installation without any additional tools
- Stable stand due to the solid base plate
- Telescopic for various working heights: 1165mm - 3900mm
- Universal mounting option on the round tube for various peripherals (e.g. long range radio module, solar panel)
- With integrated ejector spring for quick installation

Charger

Technical data

Dimension (LxWxH):	115mm x 50mm x 35mm
Weight:	0.32kg
Charging time:	24h

Characteristics

- RAILALERT base station fully charged within 1 day
- Country-specific use due to C7 plug
- IU_0U charging characteristic for lead-acid batteries
- Charging with CA 6 LD round plug coupling for standard RAILALERT interface

Transport Box

Technical data

Dimension (LxWxH):	800mm x 600mm x 340mm
Weight:	12.2kg
Material:	PP

Characteristics

- Spacious box storage for all the RAILALERT utensils of one set
- Can be equipped individually
- Folding handle for optimal carrying comfort
- Up to 8 boxes can be stacked on a Euro pallet

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Wheel Flange Simulator

Article no.: 204-130

Technical data

Dimension (LxWxH):	200mm x 81mm x 82mm
Weight:	0.61kg
Form:	Wheel flange

Characteristics

- Manual actuation as an aid for manual triggering and configuration of the wheel sensor
- Mechanical guidance on the rail
- Grinding on the rail over the wheel sensor triggers it
- Simple simulation of a wheel flange
- Test equipment

Signal Horn on Tripod

Article no.: 204-170

Technical data Horn

Dimension (LxWxH):	375mm x 250mm x 220mm
Weight:	9.4kg
Sound Volume:	126dB

Characteristics

- 126dB volume for intensive warning effect
- Can be set up universally on all surfaces due to the telescopic tripod
- Visual and acoustic warning
- Manual triggering possible with push button
- Standalone operation possible with integrated rechargeable battery
- Battery charged by the system, charger or solar panel

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Mobile Carrying Unit

Article no.: 204-220

Technical data

Dimension (LxWxH):	580mm x 350mm x 950mm
Weight:	3.65kg
Base:	self standing

Characteristics

- Local intensive warning with portable base station
- For mobile work zones
- Maximum carrying comfort in cooperation with Tatonka
- Same carrying comfort as a trekking rucksack