

"AS OF NOW PEOPLE WARN THE MACHINES"



DISPLAY UNIT

ANTENNA

RFID TAGGED
HARD HAT

RFID TAGGED
SAFETY VEST

SYSTEM OVERVIEW AND SPECIFICATIONS

ANTENNA



Housed in a rugged and sealed weatherproof enclosure the beam-shaping antenna monitors the area behind the vehicle. The antenna system is designed to detect authentic next-generation SCAN~LINK construction Safety Apparel and uses a reliable wireless link to relay its information to display unit located near the equipment operator.

Technical Specifications

| | | | |
|---------------------------|-----------------------------|------------------------|---------------------|
| OPERATING VOLTAGE: | 12VDC – 28VDC nominal | RFID FREQUENCY: | 902.3MHz – 927.7MHz |
| POWER CONSUMPTION: | 7.5W | WIRELESS LINK: | 2.4GHz |
| POWER SOURCE: | Ignition and reverse signal | TYPICAL RANGE: | 5 meters |
| TEMPERATURE: | -40°C to +85°C | RoHS COMPLIANT: | Yes |

DISPLAY UNIT



The hardy and compact Display Unit uses both bright visual display (LEDs) and an audible alarm (adjustable volume) to alert the equipment operator when Armour safety apparel is detected. The visual display is always active while the audible alarm is enabled only when the equipment is in reverse. The Display Unit is linked wirelessly to the antenna and regular self-diagnostic checks ensure that the link to the antenna is present and the system is functioning normally.

Technical Specifications

| | | | |
|---------------------------|-----------------------------|------------------------|--------------------|
| OPERATING VOLTAGE: | 12VDC – 28VDC nominal | WIRELESS LINK: | 2.4GHz |
| POWER CONSUMPTION: | 1W | VOLUME CONTROL: | Push button select |
| POWER SOURCE: | Ignition and reverse signal | RoHS COMPLIANT: | Yes |
| TEMPERATURE: | -40°C to +85°C | | |

RFID TAGGED VEST AND HARD HAT



Each Armour Safety Vest features a five-way tear-away Velcro™ design with 14 strategically positioned RFID tags for reliable detection. These highly visible vests are a bright fluorescent yellow-green colour and highlighted with 3M Scotchlite™ reflective markings. Made from a durable 100% polyester material the vests are comfortable, lightweight and meet both CSA Z96-02 Class 2 Level 2 and ANSI/ISEA 107-2004a standards. Combine the vest with the Hard Hat Armour kit which provides another 10 RFID tags to further enhance detection of the wearer.



“World First”



The combination of the WebbairProlec control system and the Scan-link system through our interphase controller brings the highest level of safety for site staff that has ever existed.

For the first time ever if a person onsite that is wearing his Scan-link PPE walks round the side of an excavator the machine will pick up that person, set off an alarm on the machine and stop the machine from slewing around and hitting that person. This means no more blind spots and no more injuries. Call us for your custom solutions or to quote up your machine. See the full range of WebbAir Prolec products at www.webbair.com.au

RFID Protection for Infrastructure & Vehicles

In addition to detecting when people are too close to a heavy vehicle, RFID obstacle detection technology is capable of alerting the operator of the vehicle or machine when they are approaching specially marked inanimate objects. This reduces the chances of an expensive collision between the vehicle and object that could potentially damage both and also result in personal injury.

The technology is suitable for making the position of static infrastructure such as pipes, vents, transformers, open pits, site huts, etc. Although these objects do not move around on a worksite, they may not be easily visible to the operator inside of a large vehicle, or they may become obscured over time by vegetation. Serious injury could result if a vehicle were to strike or run over an object such as a pipe or vessel containing pressurized or flammable material. By marketing the location of these objects the RFID obstacle detection system on the operator's vehicle can warn the operator if their vehicle comes too close to the object.

This application of RFID technology is also suitable for making the location of mobile equipment such as vehicles or generators. Just like people, moveable equipment can easily change position on a worksite and may go unnoticed by the operator of a larger, heavier vehicle as they are concentrating on the task at hand, The RFID obstacle detection system on the larger vehicle can detect the marked object and issue a warning to the operator if they are getting too close.

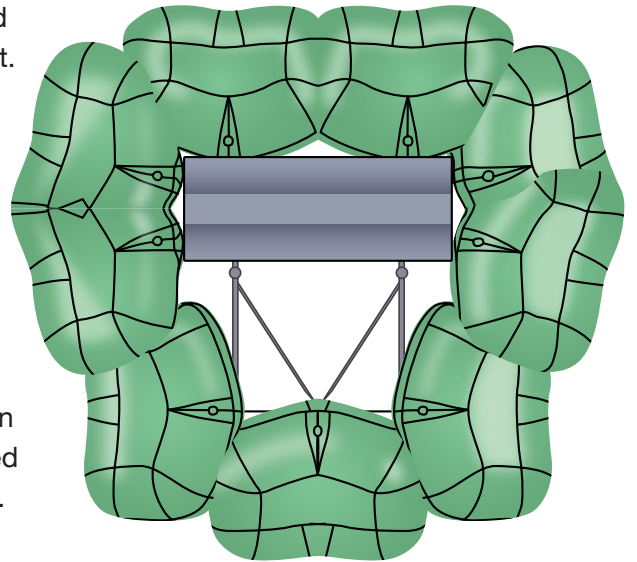


RFID Protection for Infrastructure & Vehicles

Many workplaces use dangerous machinery that can be operated safely provided that people do not get too close to the equipment. When the machinery is larger it can be impractical or simply not possible to install a guard or barrier that physically separates people from the machine.

For these applications RFID Perimeter Monitoring can provide a warning system that is capable of monitoring sizeable lengths of the perimeter surrounding dangerous equipment. The RFID Perimeter Monitoring system works by scanning a region that extends outwards from the perimeter of the machinery. If a person wearing SCAN~LINK Radio Frequency Identification (RFID) tagged apparel is sensed within this region the system produces an alert.

RFID Perimeter monitoring can be set up for use all the way around a piece of large machinery, or if needed it can be installed to monitor particular sections of the machine where people are not normally supposed to be during its operation. The perimeter monitoring system is suitable for use on equipment that is used in one place (such as a long conveyor system), as well as on large, mobile equipment such as a crane bale or heavy vehicle.



RFID Safe-Zone Sentinel

The Safe-Zone Sentinel is used to determine when everyone in a group of people is accounted for within a small zone or region located close to the sentinel. In a typical application the Safe-Zone Sentinel is used to verify that a group of employees are present at the emergency muster point.

The Sentinel is controlled and configured through a wireless communications link. It is through this link that a central controller provides the Sentinel with the list of personnel to search for as well as determining if the Sentinel has accounted for all the people in the list.

The Safe-Zone Sentinel can also be used in conjunction with 'Gate Access Control' to provide Safe-Zone monitoring inside a restricted area.

