mains power for operation. In addition, the WLX provides back-to-base monitoring and real-time reporting of every installed device thus allowing for increased efficiency in maintenance activities. The system has very low through-life operating costs, is SIL2 certified, designed to comply with SIL3 requirements and uses encrypted wireless technology for all communications. WLX is simply waves ahead.

A System that Works

WLX represents a completely new approach to the design and construction of automated railway crossings, making them particularly attractive to remote, rural locations. The WLX System is built and tested in the Aldridge manufacturing factory in Sydney. The WLX System is extensively tested before shipping to site. Very little work on site is required to install and commission the WLX System greatly reducing the installation and commissioning costs compared to traditional level crossing systems. All safety critical components in the WLX system are duplicated which increases system reliability. The WLX Controller has been specifically designed by the Aldridge engineering team for this application and utilises core technology developed for safety critical SIL3 Rail applications. It all means you can wave goodbye to past systems with WLX.

Contact:

Email: sales@railsignal.com
Call: +61 2 9807 7777
Fax: +62 2 9807 7477
visit: www.railsignal.com

Aldridge ITS
44 Adderley Street East,
Lidcombe 2141 NSW Australia.
A New Approach

Introducing Aldridge ITS Wireless Level Crossing (WLX), a new wave in automated level crossings. WLX eliminates the problems and high costs associated with power supply, train detection and cabling for automated level crossings. It makes rural installations much more affordable.

The WLX System incorporates low power, high security radio technology with inductive sensor technology to detect trains approaching a level crossing. Wireless technology communicates information about approaching rail vehicles to wayside equipment which triggers a warning to road users.

The power of power savings

The new approach from Aldridge ITS brings new savings with the WLX controller only requiring low power operation supplied by solar panels and 12V battery. That saves on power infrastructure. Communication back to a central server uses 3G/4G to log and manage system data with user access managed from the server. Should sensors need to be located in cuttings or on bends, relay towers (Repeaters) are set up between the sensor transmission tower and the railway crossing to prevent any transmission loss.

Compare WLX to the limits of existing systems.

The problem with automated crossings

Current automated railway crossings require the installation of remote track sensors with the requisite cabling buried for kilometres in track-side trenches. Additionally, current systems have been designed with traditional "track circuit-based" solutions. These can be unreliable due to oxidation of rail surfaces when trains are infrequent. Other failures can occur due to materials on the tracks such as oil, leaf litter, crushed ballast and sand, all exacerbated by a range of environmental conditions such as extreme temperatures and rainfall. Moreover, these track circuits have high power requirements requiring mains infrastructure for continuous operation. Not surprisingly, all this adds significant costs to the construction, maintenance and reliability of automated railway crossings, making them prohibitively expensive for many rural installations. WLX helps solve that.

Reduced Installation Costs

The WLX System significantly reduces the installation costs as there is no requirement to trench and install cables from the wheel sensors, which may be located kilometres from the level crossing. The WLX system is novel in providing a low-cost and low-maintenance alternative for delivery of safety-critical warnings to road users at railway level crossings. This compares to either traditional track circuit technology or newer axle counting technology using expensive inductive wheel sensors, both of which require...