

## ***Multi-Lane LF RFID Reading System*** ***Wagga Sales Yard***



### **The Customer:**

The Wagga Wagga Livestock Marketing Centre (located in Wagga Wagga NSW) is the premier livestock market in Australia. Established in 1979, it has since led the way in the selling of Livestock for over 20 years.

Each year about 1½ million sheep and 130 000 cattle are sold through the Centre.

### **The Requirement:**

The Wagga Wagga Livestock Marketing Centre had originally installed RFID readers to meet their regulatory obligations to collect cattle RFID tag data, and transfer this data to the National Livestock Identification System (NLIS) (<https://www.nlis.mla.com.au/>). A total of eight lane readers were installed to read cattle tags as the cattle were transferred from sorting pens to the sale pens. Each lane reader comprised of four RFID panel readers. To date, the system had proven unreliable, as they had been unable to consistently read RFID tagged cattle on their first pass through. This resulted in costly delays as cattle had to be re-scanned.

### **The Solution:**

After a site visit by UMD Design Engineer, Alan Walker, it was clear why the system had experienced problems. The combination of undesirable antenna placement within the saleyard structure and the complexities of an intricate system of gates and fences provided multiple pathways for signals from panels to interfere with each other.

The resulting solution involved the custom design and manufacture of a synchronisation interface and controller to coordinate all 32 panels simultaneously thus eliminating the interference.

### **The Outcomes**

The installed system has resulted in near 100% read rates and an ecstatic response from the Operations Manager which solicited the following customer feedback:

**"I can't praise or recommend your company and work highly enough"**  
Paul Martin, Manager Wagga Wagga Livestock Marketing Centre.