



# MARS

## Multi Antenna Reader System



### Overview

The Multiple Antenna Reader System (**MARS**) is an RFID reader-writer designed to operate up to 6 single external antennas (**MARS-6**) and to meet the requirements to verify, inventory, monitor and control a large number of valuable items located in one position or moving on a conveyor at high speed.

The **MARS** is a high performance system for PJM StackTag® and PJM ItemTag® RFID tags. It provides fast and reliable operations with different external antenna types.

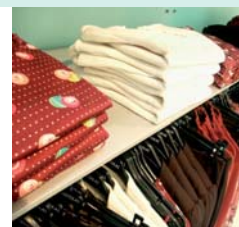
### Product Description

The **MARS** operates with a single antenna and is particularly well suited to


- gaming
- jewelry
- document management
- pharmaceutical and
- retail applications

The **MARS** features:

- The ability to identify, read and write reliably to over 100 tags in 1-3 seconds
- Reliable identification of tightly stacked and overlapping or touching tags
- Fast operation with 2 reply channels
- Operates PJM StackTag® and PJM ItemTag® simultaneously
- A powerful processing platform allowing for stand-alone reader operation
- Very good connectivity offering both Ethernet and USB interfaces
- Complies with ISO/IEC 18000-3 Mode 2



## Specifications

- Read and write operations
  - No user-serviceable parts
  - ISO/IEC Compliance: 18000-3 Mode 2
  - Operating Frequency 13.56 MHz
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- External Dimensions (L x W x H):  
270 x 196 x 46 mm incl. fixed mounting brackets
  - Net Weight: 1.5 kg (without external antennas)
- Low Voltage Input: 12 VDC @ 1.5 A
  - Operation environment: Indoor use
  - Temperature range: +10°C to +45°C
  - Humidity: 10% to 80% (non-condensing)
  - Minimum Host Computer Requirements:  
Windows XP SP2/ 500 MHz CPU/ 128MB RAM
  - Host Interface: USB and Ethernet
- Command Data Rate of 424 kbit/s
  - Reply Data Rate of 106 kbit/s per channel
  - Number of Reply Channels: 2
  - Number of External Antennas: 1, 2, 4 or 6
  - Antenna Connection Cable of 1.5 m length
  - Single axis antennas with dimensions:  
Round: 60 mm diameter and 124 mm diameter  
Rectangular: 60 x 420 mm, 120 x 240 mm  
and 202 x 352 mm  
(special antennas are available on request)



For further information on technology, delivery terms and conditions and prices please contact your nearest Magellan Technology office:

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### About Magellan

Magellan Technology Pty Ltd, Sydney, Australia, is a technology developer, manufacturer and licensor of advanced read/write 13.56 MHz RFID systems. Magellan designs and offers RFID chips, inlets, a complete portfolio of reader/writers and operating software. Magellan's Phase Jitter Modulation (PJM) technology complies with the International Standard ISO/IEC 18000 Part 3 Mode 2.