

# TUNNEL READER | MSTRP-5050



## Overview

The MSTRP-5050 Tunnel Reader is one of Magellan Technology's flagship products. With a large internal volume and multi-axis operation it enables the user to read and write information to thousands of RFID tagged items at a time. Its complete 3 dimensional read capability allows read/write functions while tags are organised in any orientation – even when tightly stacked or touching\*.

Complete with internal ferrite shielding, this state of the art tunnel reader can be placed in close proximity to other readers and tags without experiencing any programming interference. Magellan readers are supplied with *ReaderManager* software which provides a platform for reader setup, configuration, demonstrations, testing and application development.

The MSTRP-5050 is suitable for any application where tagged items need to be identified quickly and reliably. Utilised in the logistics and supply chain industries, Magellan tunnel readers are especially suited to industries where high value items need to be tracked in real-time. Diamond and precious gems, healthcare and medical industries, including orthopaedics, dental, blood and reagent tracking and supply chain operations.



\*Subject to tag specifications

## FEATURES AND BENEFITS

- » Read up to 600 tags per second
- » Write unique GS1 numbers and Electronic Product Codes at a rate of 50 tags per second
- » Program tagged items in any orientation - even when tightly packed or touching
- » Robust industrial design with full ferrite shielding and field cancellation protection
- » Excellent network connectivity offering a full Ethernet and USB interface
- » Complete integration with Magellan PJM Implant Management System (*PIMS*) and Software

# SPECIFICATIONS

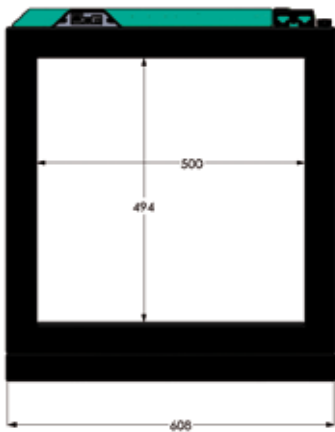


Figure 1. Dimensions (mm) back view

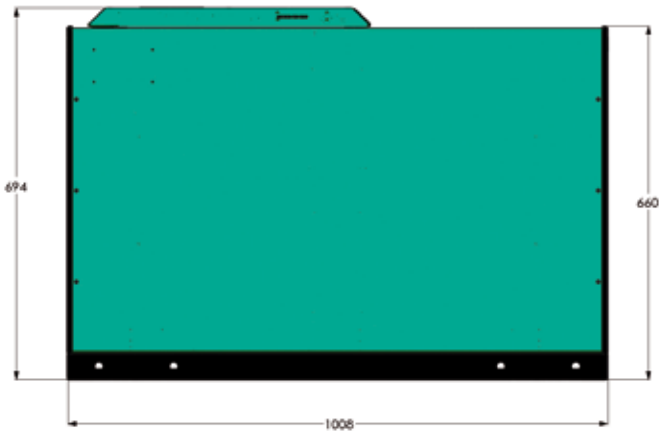


Figure 2. Dimensions (mm) side view

Electrical	
Operating Frequency	13.56 MHz
ISO/IEC Compliance	ISO/IEC 18000-3 Mode 2
Command Data Rate	424 kbit/s
Reply Data Rate	106 kbit/s per channel
Number of Reply Channels	8
Number of Axes	3
Operating Range	Within active internal volume
Power Supply	110-240 VAC @ 50/60Hz
Power Consumption	75W
Performance	
Recommended tags	See website for Tag Reference Table
Identification rate at 100% accuracy	Up to 600 tags/s
Identify and read 96 bits data at 100% accuracy	250 tags/s
Identify write and read back 96 bit data at 100% accuracy	50 tags/s
Host	
Host Interface	USB, Ethernet
Minimum Host Requirements	Windows XP SP2 / 500 MHz CPU / 128 MB RAM
Environmental	
Operating Environment	Indoor use
Temperature Range	0°C to +45°C ambient
Humidity	10% to 80% (non-condensing)

Mechanical	
External Dimensions : (L x W x H)	1010 x 610 x 710 mm
Net Weight	120 kg
Net Volume	0.44 m3
Certifications	
USA	Complies with FCC Part 15 Low Power Communication Device and EN 55022 Class B
Canada	Complies with RSS-210 EMI regulations
Europe (CE Mark)	EN55022, EN 301 489-1 V1.6.1, EN 301 489-3 V1.4.1, EN 61000-3-2, EN 61000-3-3, EN 61000-4-2, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11, EN 60950.1, EN 300 330-1 V1.3.1, EN 300 330-2 V1.3.1, EN 50364, EN 50357, RoHS
Australia	AS/NZS CISPR 22(2006), EN55022, AS/NZS 4268 (2003), AS/NZS 60950, RPS3 (ARPANSA)
Other Features	
Operation	Powerful processing platform allowing for stand-alone reader operation
Calibration and Tuning	No manual calibration or tuning required
Shielding Methods	Ferrite shielding
Reader Placement	Can be placed next to each other



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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 PJM 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.