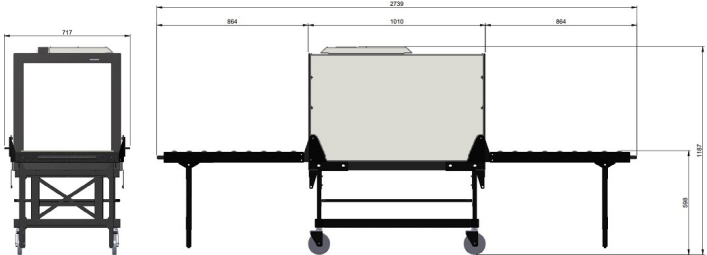# MSTRP-5050 Tunnel Reader

The MSTRP-5050 PJM RFID Tunnel Reader is SATO's flagship Reader with the ability to read and/or encode any number of closely stacked tags at high speed in any orientation. The class leading design is rugged enough to be used in any environment from warehousing to high speed conveyor fed systems yet sophisticated enough to be placed in hospital CSSD departments.

The electronic shielding employed in the design & construction of the MSTRP-5050 reader ensure its suitability for use in most environments including Healthcare, where sensitive equipment may be present – It is even safe enough to be used in hospital operating theatres.

As with all of SATO's PJM RFID readers the MSTRP-5050 provides 100% read accuracy and is supplied with SATO's Reader Manager Software which provides an easy to use platform for reader setup, configuration and testing, ensuring the reader is setup & ready to work with your application in virtually no time.

Electrical	
Operating Frequency	13.56 MHz
ISO/IEC Compliance	18000-3 Mode 2
Command Data Rate	424 kbit/s
Reply Data Rate per Channel	106 kbit/s
Number of PJM Reply Channels	8
Number of Axes	3
Operating Range	Internal Volume
Antenna Cable Length	N/A
Dedicated I/O	N/A
Power Supply	15VDC
DC Power Supply Connector	2.5 mm DC centre pin positive
I/O Connector	N/A
Mains Input	110 - 240 VAC @ 50/60 Hz
Mains Connector	IEC 320/C14
Power Consumption	75W

Performance	
Tag Type	See Tag Reference Table
Identification rate at 100% accuracy	Up to 600 tags/s
Identify & read 96 bits data at 100% accuracy	Up to 250 tags/s
Identify, write & read back 96 bits data at 100% accuracy	Up to 50 tags/s

Host	
Host Interface	USB and Ethernet (Ethernet Cable must be CAT 5 and shielded)
Minimum Host Computer	Windows 7

Software	
Minimum Firmware Reader Server	Version 3.42.8

Environmental	
Operation Environment	Indoor use
Temperature Range	10°C to +45°C
Humidity (non- condensing)	10% to 80%

Mechanical	
External Dimensions (L x W x H)	1010 X 613 X 694 mm
Internal Aperture	500 X 500 mm
Net Weight	120 kg
Net Volume	0.44 m³
Shipping Dimensions (L x W x H)	1150 x 770 x 1080 mm
Shipping Weight	180 kg
Shipping Volume	0.96 m³

Certifications	
USA	Complies with FCC Part 15 Low Power Communication Device
Europe (CE Mark)	EN55022 Class B, 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, EN50357, ROHS
Australia	AS/NZS CISPR 22(2006), EN55022, AS/NZS 4268 (2003), AS/NZS 60950, RPS3 (ARPANSA), RCM
Singapore (IDA)	Registration Number: N0422-15
Japan (MIC/KS)	MIC/KS:ac-14010

General		
Read and write operations	Yes	
No manual calibration needed	Yes	
Automatic tuning	Yes	
Readers can be placed in close proximity to one another	Yes	
Readers are completely safe to use in medical installations	Yes	

Figure 1. Dimensions (mm) front view

Figure 2. Dimensions (mm) side view

Figure 3. Dimensions (mm) with optional conveyor

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Version: December 2021