

PJM RFID RETROFIT KIT

SATO's PJM RFID Retrofit Kits have been designed to fit directly into client's existing equipment with little to no loss in storage capacity. The RFID antennas used provide a full 3D reading field resulting in unparalleled performance & ease of use with no process change required for staff as there is no need for any special handling procedures for placement of product. The PJM RFID antennas are completely orientation insensitive and capable of reading deeply stacked PJM RFID tagged products in any orientation with 100% data accuracy, a feature unique to PJM RFID.

The antenna enclosures used are constructed from food grade high density polyethylene and are completely flat with no moving parts making them easy to clean, unlike some products that contain moving parts like slides or drawers which present a serious cleaning issue, especially in medical applications.

Stock security is provided by the addition of optional access control, ensuring that product movements are accurately and securely tracked and recorded. Connectivity to PJM RFID readers is provided either via USB or Ethernet allowing users to perform immediate, accurate stock takes of their critical supplies in seconds, either locally or remotely. Business rules can also be developed in client applications to provide/enable advanced functionality such as:

- *Logging of auditable stock level and stock movement records.*
- *Automated FEFO enforcement.*
- *Close to expiry warnings.*
- *Minimum stock level warnings.*
- *Automated stock reordering.*
- *Unauthorised access alerts.*
- *Immediate network wide searches for urgent products.*

PJM RFID technology conforms to **ISO 18000-3 Mode 2** and is completely safe to use with all biological agents and materials; it operates in the 13.56MHz frequency range which is the **International Society of Blood Transfusion (ISBT)** recommended frequency for use in blood banking and transfusion medicine.

Electrical		Host	
Operating Frequency	13.56 MHz	Host Interface	USB or Ethernet
ISO/IEC Compliance	18000-3 Mode 2	Host OS	Windows 10 or later
Command Data Rate	424 kbit/s	Environmental	
Reply Data Rate per Channel	106 kbit/s	Operating Environment	Indoor use
Number of PJM Reply Channels	8	Temperature Range	+45°C to -40°C (Shelves)
Access Control	Optional	Mechanical	
Power Supply	12VDC	RFID shelves x 6	ABS
Number of Internal Antennas	As Required	Feet	Adjustable metal
DC Power Supply Connector	2.5 mm DC centre pin positive	Wheels	Optional wheels available
Mains Input & Connector	110 - 240 VAC @ 50/60 Hz - IEC 320/C14 connector	Sizes (W x D x H)	670mm x 510mm x 1820mm
Power Consumption	Typical 48W	Access control	Optional - RFID with key override
Performance		 <p>5 Shelf Kit and 3 Shelf Kit shown, as well as various sized shelves</p>	
RFID field	3D		
Operating range	Shelf surface		
Identification rate with 100% data accuracy	Up to 250 tags/s		
General			
Performs read and write operations ✓			
No manual antenna calibration needed ✓			
Automatic antenna tuning ✓			
Can be placed in close proximity to one another ✓			
RFID field unaffected by liquids ✓			
100% safe to use with biological material ✓			
RFID tags can be presented in any orientation ✓			
100% safe to use in medical applications ✓			