

RFID that Delivers the Future Today

SATO's PJM (Phase Jitter Modulation) RFID is a set of Auto-Identification tools fully compliant with the ISBT guidelines for the use of RFID technology in Transfusion Medicine and is an open ISO standard available for worldwide use on an unlicensed and unrestricted basis. It is based on the ISBT recommended RFID standard ISO/IEC 18000-3 and offers the world's fastest and only 100% accurate read result even when tags are tightly packed or stacked, regardless of their orientation or placement. No changes to your handling procedures are required and PJM RFID can be fitted to your existing appliances without any loss of capacity.



Vein-to-Vein Blood Safety with PJM RFID



PJM RFID for Blood Management

PJM RFID is extensively used in Healthcare throughout Australia at over 80 hospitals for medical device management. Operating at the ISBT recommended frequency (13.56MHz), PJM RFID is safe to use with biologicals and blood products. Being unaffected by liquids, PJM RFID is the ideal technology for the tracking of blood and blood fractionated products from donation to transfusion.

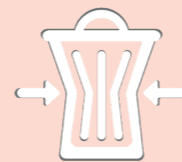
Enhanced patient safety

- High-level automated verification reduces potential for blood handling errors
- Speedy processing reduces risk of blood quality deterioration
- Reduced time-to-freezer provides greater assurance of blood product quality



Minimised blood product wastage

- Real-time visibility of blood inventory at multiple locations enables more efficient use of existing stock
- Greatly reduce need for 'safety stock' with increased confidence in ability to supply
- First-Expiry First-Out management reduces wastage of blood products



Increased supply chain efficiency

- Eliminate shipping errors with automated and 100% accurate picking and packing
- Dramatically reduce counting & scanning as large volumes of blood products stacked closely can be scanned at one go
- End-to-end visibility of blood units throughout supply chain



Greater fate-of-unit visibility

- Eliminate manual tracking of blood units thus avoiding human errors
- Automated capture of audit trail for blood units and products as they move through the entire supply chain
- Know exact fate of each blood unit at anytime from anywhere with real-time visibility



Vein-to-Vein Blood Safety with PJM RFID

1. Donor Registration

Positive donor identification to ensure blood safety

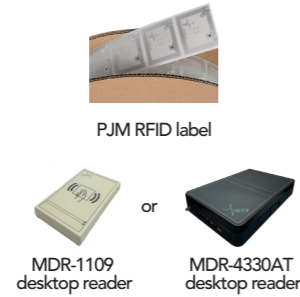
Print barcode/QR code wristband with donor's details for accurate identification and association to donated blood.



2. Donation Bag Tagging

Accurate identification of donation bag donation details for traceability

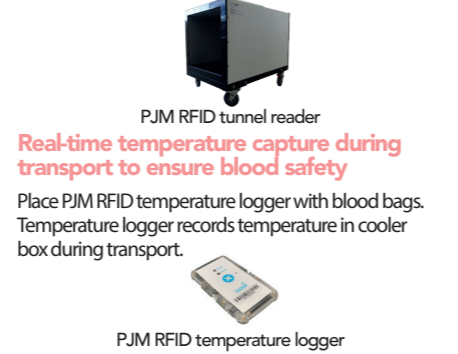
Attach PJM RFID label to the donation bag. Place the donation bag on the RFID reader, scan the bag ID to associate the bag ID, donor ID & RFID tag ID.



3. Dispatch to Blood Centre

Efficient and accurate dispatch with full traceability

Bulk scan donation bags in cooler/transport boxes using a tunnel reader with 100% accuracy regardless of the orientation of blood/component bags even when bags are tightly packed or stacked.



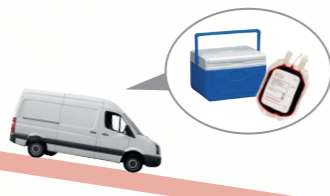
8. Receiving & Storage

Accurate blood bags receiving & real-time management

Receive blood and blood components with 100% accuracy either by processing the units through a PJM RFID reader or by simply placing the units into a PJM RFID enabled appliance. Obtain complete temperature readings during transport to ensure 100% safety. Storing all blood and blood components in PJM RFID enabled storage provides real-time management.



Donation Centre



Blood Centre



Blood Bank



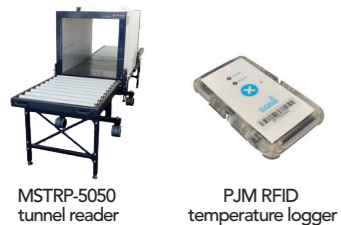
4. Donation Bag Receiving

Efficient and accurate donation bag receiving

Scan donation bags in cooler box with a PJM RFID tunnel reader for 100% accuracy regardless of the orientation of donation bags even when bags are tightly packed or stacked.

Download temperature readings captured during transport to ensure donation bags were kept within specifications.

100% cold chain visibility ensures blood safety and compliance.



5. Blood Component Tagging & Storage

Accurate identification of blood components for traceability

Attach a PJM RFID label to processed blood component. Place the PJM RFID labeled blood component bag on the reader to associate donation bag with blood component ID. Alternatively, directly print and encode the PJM RFID blood component label with a PJM RFID enabled printer to associate the blood component bag(s) with blood component bag ID.



Real-time visibility of all inventory and all inventory movements

Store all tagged blood and blood components in PJM RFID enabled blood fridges, freezers and incubators for real-time inventory visibility.

Ensure that all components are stored in the correct location and immediately locate recalled, expired or special blood components.

Perform completely unattended cycle counts & stock takes with automated error detection and alerts.

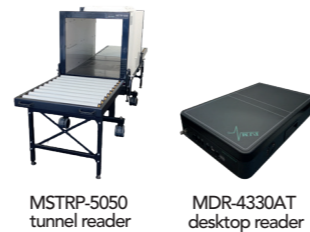


6. Order Processing

Quick and accurate order picking

Bulk scan picked blood and blood components with 100% accuracy using PJM RFID readers, verifying against the client order.

Reduced checking time minimizes handling exposure of blood products to excess temperature - enhancing blood safety.



7. Dispatch to Blood Bank

Efficient and accurate dispatch of blood components based on order

There is no need to barcode scan the bag labels. Simply pack the bags in the cooler box and pass the entire cooler box through the PJM RFID tunnel reader. All units will be read with 100% accuracy regardless of their orientation or packing density.



Real-time temperature capture during transport to ensure blood safety

Place a PJM RFID temperature logger with the blood component bags to record the temperature in the cooler box during transport.



1. Patient Registration

Positive identification to ensure patient safety

Print barcode/QR code wristband with patient's details for accurate identification and association to transfused blood.



2. Surgery Preparation

Accurate blood sample collection

Collect blood sample, print and attach PJM RFID label for sample tube at patient's bedside.



Ensure blood compatibility before transfusion

Conduct compatibility test and label blood/component bag.



Ensure transfusion safety

Before transfusion, scan nurse ID, patient wristband and blood bag to print transfusion label for traceability.



*Association of PJM RFID tag will be done using NFC-enabled mobile device.

Hospital

