Medication Tracking Solution
Achieve CLMA with RFID-Based Technology
Enhance CLMA Efficiency with RFID Tracking Technology

Closed-Loop Medication Administration (CLMA)

Advantech’s intelligent medication solution, known as medTRx, enables every hospital to achieve closed-loop medication administration (CLMA). medTRx comprises two medical carts, one dispensing cabinet, and a medication management system.

Integrated with RFID-based tracking technology, medTRx provides a hospital-wide interface for medicine/patient information exchanges, streamlining medication inventory and dispensing, as well as bin exchanges at hospital pharmacies, nursing stations, and patient wards.

Solution Offerings

AMiS-830
General UD cart

AMiS-850
Intelligent medication cart

AMiS-870
Automated dispensing cabinet
Track medication from prescription to administration

Key Features

- RFID-based medication bins with individual locking mechanism
- Supports centralized, decentralized, and hybrid medication management
- Medication API and demo program can be integrated with EMRs
- Offers secure access and control of all medications
# Enabling Medication Safety With medTRx

**Lite**  Medicine cabinet control intermediary
- Default application to manage the medication box and cabinets
- Built-in Lite control software for the AMiS cart touchscreen user interface.

**Basic**  Integrated workflow
- Basic client and server structure supports management of multiple devices
- Users can electronically assign bins using the computer keyboard to input data
- Streamlines the medication administration workflow and reduces medication errors

**Pro**  Comprehensive platform for CLMA
- Fully integrated with hospital information systems
- Enables HL7 integration and utilizes the ADT feed to link real-time patient information to individual bins
- Supports nurse work shift durations
- All-in-one solution for hospital CLMA management

## medTRx Software Solution

<table>
<thead>
<tr>
<th>Function</th>
<th>Lite</th>
<th>Basic</th>
<th>Pro</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RFID bin setting (assign patient/assign medication)</td>
<td></td>
<td></td>
<td>Automatically integrated with HIS</td>
</tr>
<tr>
<td>Control UI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scan barcode to access the system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Integration</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic access log</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centralized database for management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HL7 interfaces (HIS/ADT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge/transfer integration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assign bins with barcodes to patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>System Client/Server</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client application only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client/Server architecture</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Intelligent Medication Dispensing Made Easy

According to the HIMSS Analytics’ Electronic Medical Record Adoption Model (EMRAM), technology-enabled medication dispensing is a key Stage 6 requirement for enabling the adoption and utilization of electronic medical records (EMRs) in hospitals. Advantech’s intelligent medication administration solution streamlines medication inventory and dispensing at hospital pharmacies, nursing stations, and patient wards.

By utilizing RFID technology and an individual bin locking mechanism, the solution reduces errors and ensures secure medication exchanges during the dispensing process. Moreover, to support all existing medication management processes and ensure the correct medication is provided to the correct patient, Advantech’s intelligent medication dispensing solution is compatible with centralized, decentralized, and hybrid medication distribution models.

<table>
<thead>
<tr>
<th>STAGE</th>
<th>EMR Adoption Model Cumulative Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Complete EMR; External HIE; Data Analytics, Governance, Disaster Recovery, Privacy and Security</td>
</tr>
<tr>
<td>6</td>
<td>Technology Enabled Medication, Blood Products, and Human Milk Administration; Risk Reporting; Full CDS</td>
</tr>
<tr>
<td>5</td>
<td>Physician documentation using structured templates; Intrusion/Device Protection</td>
</tr>
<tr>
<td>4</td>
<td>CPOE with CDS; Nursing and Allied Health Documentation; Basic Business Continuity</td>
</tr>
</tbody>
</table>
RFID-Based Medication Bin Setting Station  
**AMiS-810**

The RFID-based medication bin setting station uses RFID scanning to match each medication bin with the correct medication and patient for automated medication bin management. With this station, RFID tags are encoded with the patient ID and medication information and then affixed to a specific medication bin for subsequent administration.

General UD Cart  
**AMiS-830**

A computerized unit dose (UD) cart with integrated touch computer and barcode reader is used to transfer RFID-tagged medication bins from the pharmacy to the nursing station or patient wards. The interchangeable design of the electronic medication boxes allows them to be easily exchanged at the pharmacy, saving time.

Intelligent Medication Cart  
**AMiS-850**

Equipped with an electronic medication box, the AMiS-850 cart is ideal for patient medication administration in hospital wards. With the individual bin locking mechanism, nurses can use the barcode reader to scan patient wristbands and unlock the correct medication bin for increased medication control and safety. This cart optimizes patient care by providing a mobile point-of-care workstation seamlessly integrated with a first-class medication cart.

Automated Dispensing Cabinet  
**AMiS-870**

The AMiS-870 automated dispensing cabinet improves medication management by capturing medication data to streamline dispensing and reduce inventory holding costs. By enabling inventory tracking and automated data collection, this cabinet offers clinicians enhanced control over the medication dispensing process while freeing up more time for patient care.

Join Our Developer Community

If you are interested in becoming an Advantech medication dispensing solution partner or developer, please contact us at amis.sales@ advantech.com.

---

**Advantech Headquarters**

No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei, Taiwan 11491  
Phone: 886-2-2792-7818  www.advantech.com

US/Canada: 1-888-676-9668  
Europe: 00800-2426-8080/8081  
Netherlands: 31-76-5233100  
China: 800-810-0345  
Taiwan: 0800-777-111  
Japan: 0800-500-1055  
Korea: 080-383-9494  
Other countries: 0800-777-111

www.advantech.com  
Please verify specifications before quoting. This guide is intended for reference purposes only. All product specifications are subject to change without notice. No part of this publication may be reproduced in any form or by any means, electronic, photocopying, recording or otherwise, without prior written permission of the publisher.  
All brand and product names are trademarks or registered trademarks of their respective companies.  
© Advantech Co., Ltd. 2019