



M4 MedCenter



M5 MedCenter

Physical Characteristics

Dimensions and Floor Loading

Vault and kiosk are a single unit.

- **Footprint:** Less than 13 ft²
- **Dimensions:** 53.6" long × 34.4" wide × 79" high
- **Floor loading:** 136 lb/ft² (664 kg/m²)

Vault and kiosk are separate.

Vault (1 load module, 2 storage modules, 2 dispense modules and 1 console module)

- **Footprint:** Less than 76 ft²
- **Dimensions:** 152" long × 72" wide × 100" high
- **Floor loading:** 100 lb/ft² (488 kg/m²)

Kiosk (walk-up and drive-thru kiosks have same footprint and loading)

- **Kiosk footprint:** 29" long × 41" wide × 65" high
- **Kiosk wall loading:** Wall should allow 250 lb. pullout force at top of kiosk. This should be much higher for outdoor applications where security is a concern.

Vault Capacity

- Each MedCenter stores approximately 600 packages, depending on the formulary and bin configuration.
- The system supports the following range of package sizes:
 - **Minimum:** 0.5" × 1.0" × 2.25"
 - **Maximum:** 3.5" × 4.5" × 7.1"

- The M5 vault stores 3,000+ packages, depending on the formulary and number of storage modules.
 - Each extra storage module adds approximately 900 packages to the capacity, depending on the formulary and bin configuration.
 - Each extra dispense module adds approximately 600 packages to the capacity, depending on formulary and bin configuration.

- The system supports the following range of package sizes:
 - **Minimum:** 0.5" × 1.0" × 2.0"
 - **Maximum:** 4.7" × 5.9" × 9.0"



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Site and Installation Requirements

Site Requirements

- The MedCenter is a standalone kiosk installed in interior locations only.
 - Must be installed in a well-ventilated area
 - Ambient temperature between 15°C and 22°C (59°F to 72°F) to keep products between 15°C to 25°C (59°F to 77°F)
 - Must have no heat sources located above (or directed at) the MedCenter

- The M5 kiosks can be installed for walk-up and drive-thru applications.
- Kiosks can be mounted outdoors with an overhang for protection from the elements.
- The suggested exterior measurements for the vault enclosure with 2 storage modules and 2 dispense modules is 9'8 3/4" x 20' with minimum 9' ceiling height
 - Vault must be installed indoors in a well-ventilated area
 - Ambient temperature between 15°C and 22°C (59°F to 72°F) to keep products between 15°C to 25°C (59°F to 77°F)
 - Must have no heat sources located above (or directed at) the vault

Required Clearance

- Additional clearance required for installation and to open doors:

Left side	12"
Right side	24"
Behind MedCenter	4"
Above MedCenter	6"

- Additional clearance required for installation and to open doors:

Load module side	48"
Console module side	48"
Side without kiosk	24"
Above vault	9"



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Customer Experience (Patient)

Patient Interface

- Customer places mobile phone and ID cards face up in photo bay.
- Patient printouts are available from dispense bay with packages.
- Packages and printouts that are not taken from the dispense bay drop into discard bin.
- The kiosk touchscreen has a larger aspect ratio than the M5 touchscreen.

- Customer places mobile phone and ID cards face down in the photo bay.
- Patient printouts are available as a sheaf from the printer output slot, beneath the dispense bay.
- Printouts that are not taken are drawn back into the kiosk and retained in the printer discard bin.
- Packages that are not taken from the dispense bay are dropped into a discard bin.
- There is an NFC pad for phone tap. (future functionality)
- The kiosk touchscreen has a smaller aspect ratio than the M4 touchscreen.

Patient Privacy

- Optional privacy panels are available and can be installed on the MedCenter.
- The privacy handset is available on all kiosks.

- Fastened privacy panels not available for the kiosk. Other privacy panel solutions can be provisioned where required.
- There is no handset on drive-thru kiosks.



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Customer Experience (Pharmacy)

Door Access

- Physical access to MedCenter doors is controlled through permissions and access cards.
- A user can be authorized to open specific MedCenter doors, such as the inventory load drawer or the printer paper door. When a user taps an access card and enters the correct 4-digit PIN, the MedCenter unlocks the doors permitted to the user based on the user's assigned permissions.
- M4 MedCenter access cards have an 11-digit unique identifier which is stored by the manufacturer.

- Physical access to MedCenter doors is controlled through permissions and access cards.
 - There are more doors on the M5 MedCenter and kiosks.
 - There is a separate locked access door for document discards that were not retrieved by the customer.
 - When a user has access to the labeler doors, they can access all labeler doors (dispense and load labeler) and can unlock them from the console screen.
- M5 access cards are generated by MedAvail and include a 12-digit unique identifier stored by MedAvail.
- When unlocking doors during regular operation, user must tap card, enter PIN, and then select specific door to open.

Product Security

- The vault is made from 10-gauge steel.
- Product is loaded through locked load area preventing access to previously stocked inventory.
- The kiosk has ¼" hardened steel concealed hinges to prevent entry.
- Over 3000 lb. force is required to break main door lock.
- There is hardened steel bushing around the main lock bolt to deter cutting with grinder or saw.
- The machine is bolted to the ground with 6 concrete anchors each with a pullout force over 3000 lb.
- Door access is controlled via two factor authentication, a physical card and PIN. Door sensors raise an alert when there is unexpected access.
- The vault has 24/7 monitoring for temperature and humidity.

- The vault is made from 12-gauge steel.
- The vault is located in a secure room separated from customers by the kiosk and a wall.
- Product is loaded through a locked load area preventing access to previously stocked inventory.
- The kiosk is clamped to the wall and bolted to the ground with 2 concrete anchors each with a pullout force over 3000 lb.
- Door access is controlled via two factor authentication, physical card and PIN. Door sensors raise an alert when there is unexpected access.
- The vault has 24/7 monitoring for temperature and humidity.



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Customer Experience (Pharmacy)

Inventory

- Packages loaded into the inventory load drawer are picked and processed by the system before they are made available for dispense.
 - Packages are registered in the system with a package definition. Each package definition contains all data required to track and dispense the package through the system.
- During a dispense, photos are taken allowing the user to see the package pre-label and post-label.
 - These photos are reviewed during the QA/Consult/Authorize task.
- In MedOps, the Vault view displays the entire inventory of the MedCenter.
- Packages that are not recognized during stocking or are not retrieved by the customer are placed in the discard bin.

- Packages loaded into the inventory load drawer are picked, serialized, and processed by the system before they are made available for dispense.
 - Every package has a package definition and unique ID to differentiate two otherwise identical packages.
 - Photos are taken of all sides of the package during stocking. After the images are taken, it is labeled with the unique ID.
- During a dispense, photos of the package are taken after labelling.
 - A photo is taken of the label before it is applied to the package, so the user can see the entire printing.
 - These photos are reviewed during the QA/Consult/Authorize task.
- In MedOps, the Vault view only displays the inventory of one module at a time. The user can use the package view to see all inventory counts (table view).
- The system now separates stocking/harvest discards and dispense discards in separate bins.



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Customer Experience (Pharmacy)

Maintenance

- The kiosk uses the Zebra printer for patient documents.
 - **Number of pages per roll:** 580
- Changing the paper roll is challenging (user must get on the floor).
- There is a single labeler.
 - **Number of pages per roll:** 1500

- It is easier to replace the printer roll on the Custom American document printer.
 - **Number of pages per roll:** 1000
- There is a load labeler and a dispense labeler.
 - **Number of labels per load labeler roll:** 2700
 - **Number of labels per dispense labeler roll:** 3500
- There may be multiple dispense labelers, depending on the number of kiosks in the configuration.
- The load labeler is located near the top of the load module.
 - A step ladder is required to change the load label roll

Alerts and Reporting

- Alerts display for the MedCenter only.
- There are MedCenter and MedPlatform logs available.
- Dashboard widgets are specific to the Organization unit or MedCenter.
- Reports identify the affected MedCenter.

- Alerts now define whether a problem was at a kiosk or the MedCenter.
 - When alert is for the MedCenter, highlights where there is an impact to the kiosk
 - New printer-paper discard bin alert (separate from Rx document and Rx package bin)
- There are kiosk logs, in addition to MedCenter and MedPlatform logs.
- Kiosk-level information is included in Dashboard widgets.
- New columns in reports include Kiosk Name and Kiosk (for the serial number) for those reports where applicable.