HI-PARADIGM

The HI-Paradigm cart line provides the ultimate in medicine dispensing organization. The configurable drawers can be tailored to your distribution needs and help keep employees on track. The electronic locking keypad, coupled with our Med Manager software, provides our carts with premier security capabilities.

ERGONOMIC FEATURES

• A short distance between the worksurface, keyboard tray, and patient bins reduces unnecessary arm movements and bending
• Ergonomic adjustable push handles with soft-touch grip on front of cart are available
• Rubberized foot rests on each side of the cart allow for a more relaxed stance and relieves fatigue
• Slide-out keyboard tray with integrated wrist rest (max keyboard dimensions 18.2" W x 7.5" D x 1.6" H)
• Keyboard is auto-leveling with a -15 degree negative-tilt and a positive-tilt up to 6 degrees
• Open architecture at wheel base allows end user to maintain their normal walking stride
• One-touch worksurface height adjustment allows for a full sit/stand range of motion
• The HI-Paradigm carts have a centralized control panel that enables the user to easily access all of the cart features by having them located in one central location
• Available with on-demand steer assist technology (SAT)
• When SAT is engaged, the rear casters act as pivot points, easing and stabilizing the navigation, and effortlessly allows the end user to navigate around corners, doorways, and other changes in direction
one-touch height adjustment for worksurface

one-touch independent height adjustment for monitor

ergonomic push handles

auto-leveling keyboard with negative/positive tilt

rubberized footrests

open architecture at wheel base

on-demand steer-assist technology
FEATURES

- Central control panel with convenient electronic worksurface and monitor height adjustment, lighting controls and storage management
- VESA monitor mount has tilt, swivel, and rotation adjustments
- Flexible storage configurations with add on capability can be customized to fit multiple workflows (narcotics locking options available)
- Universal accessory mounting locations on rear of cart and on monitor mount (choose from 12+ optional accessories)
- 270° wrap-around handle on sides and rear
- Large, raised-edge worksurface area (17" W x 14.3" D) with translucent protective cover
- Medical grade (all touch surfaces)
- Dedicated cable management area with easy access panels to manage and house excess cables
- Integral AC power distribution with 6 AC receptacles for powering customer equipment
- Large, fan cooled, PC compartment (17.1" W x 12.5" D x 3.2" H)
- Includes 4-port USB Hub
- Battery fuel gauge
- The easy-swap cassettes allow the HI-Paradigm cassettes to be easily swapped between the cart to a Transfer cart
- 8ft coiled power cord with hospital-grade AC plug with dual integrated hooks and integrated pull loop (Hospital Grade)
- (4) 5" dual wheel premium casters (2 locking casters on front)
- Tool-less battery cover (snap-on) and tool-less battery and power supply replacement
- Standard power module (smart charger) with intake filter
- Available with multiple power options that you can choose from to best fit your workflow, including Howard Powermax 150 and the hot-swappable Scott Clark power system
- Remote cart monitoring and management software
- Advanced electronics are an option on the HI-Paradigm with features such as: drawer sensing, automatic drawer lighting, and drawer ajar alarm
- Mouse surface and mouse holder (left or right)
- Cart and cart accessories ship fully assembled in one box for convenience
- Advanced Electronics are standard on the HI-Paradigm carts with ajar alarm lighting and sensing
- Meets UL and CE standards
The dimensions and data below is a comparison of the various HI-Paradigm carts. Contact your local Howard Medical Account Executive for further information.

## DIMENSIONS

The dimensions and data below is a comparison of the various HI-Paradigm carts. Contact your local Howard Medical Account Executive for further information.

### OVERALL DIMENSIONS

<table>
<thead>
<tr>
<th>Storage</th>
<th>3-Tier</th>
<th>6-Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Cart Weight (lbs)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Powered</td>
<td>111.0</td>
<td>133.8</td>
</tr>
<tr>
<td>Powered</td>
<td>137.0</td>
<td>159.8</td>
</tr>
<tr>
<td>Overall Dimensions (in)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>21.4</td>
<td>21.4</td>
</tr>
<tr>
<td>Depth</td>
<td>23.3</td>
<td>23.3</td>
</tr>
<tr>
<td>Work Surface Assembly (in)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Surface Height Adj. (in)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>19.0</td>
<td>19.0</td>
</tr>
<tr>
<td>Max</td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Base Footprint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>8.3</td>
<td>8.3</td>
</tr>
<tr>
<td>Depth</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Base Height (in)</td>
<td>12.2</td>
<td>12.2</td>
</tr>
<tr>
<td>Caster Size (in)</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Writing Surface Size (in)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width (in)</td>
<td>17.0</td>
<td>17.0</td>
</tr>
<tr>
<td>Depth (in)</td>
<td>14.3</td>
<td>14.3</td>
</tr>
<tr>
<td>Area (ft²)</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Height Adj. Range (in)</td>
<td>12.8</td>
<td>5.6</td>
</tr>
</tbody>
</table>

* weight with Howard Powerrmax 150 and 40 Ah battery
Bin dividers are included with bins
Howard’s innovative storage options ensure that you get the features you want and the capacity you need. Drawers unlock via the keypad console. Electronic locking storage also comes with a manual keyed bypass in case of a power failure. We offer both three-tier and six-tier cabinets which can be configured with both drawers and patient bins.

**STORAGE**

- Med Drawer lighting for continuous use in low light conditions without disturbing your patient
- Programmable secure access to storage drawers and patient bins via keypad on the cart’s centralized control panel
- Independent bypass key for manual emergency access
- Automatic relock with adjustable timer (6 seconds - 1 hour)
- Audible beep for code entry confirmation
- Supports up to 2000 unique user IDs (3-8 digits)
- On Screen drawer configuration and status via Med Display
- Local management of user IDs and locking system settings via Med Display
- Remote management of user IDs and locking system settings via Med Manager
- User ID, time, and date of each unlock event is stored in an audit log
- Locking system status displayed by LED’s on the cart’s centralized control panel
- Powered by cart power system
- Optional independent narcotics security
- Configurable secure storage options
- Patient bins are in quick swap cassettes
- Dividers included with all drawers and patient bins
- Magnetic sensors detect which drawers and patient bins have been opened
- Drawer open alarm notifies user when a drawer is left open
CASSETTE AND DRAWER OPTIONS

- Provides configurable secure storage
- Installed onto the cart frame below the keyboard drawer

HI-Paradigm Narcotics Locking Option (for top drawer of 6-tier cabinet)

- Narcotics locking option available for the six-tier configuration
- Provides second-level locking for the uppermost drawer
- Bypass key included for emergency access
- Narc drawer can be a 1 or 2-tier tall drawer
- The narc drawer option is not compatible with 3-tier storage cabinet
POWER OPTIONS

HOWARD POWERMAX 150

40 AH BATTERY
- 3-year lithium iron phosphate battery defect
- 3-year lithium iron phosphate battery performance
- 3-year or 3000 cycles, (battery will maintain 50% or greater of charging capacity)
- 5-year optional upgrades available
- 40 Ah / 512 Wh lithium iron phosphate battery
- 150W inverter
- Run time: 10 hr (full charge to 0% charge)
- Battery life expectancy: 5+ years

50 AH BATTERY
- 3-year lithium iron phosphate battery defect
- 3-year lithium iron phosphate battery performance
- 3-year or 3000 cycles, (battery will maintain 50% or greater of charging capacity)
- 5-year optional upgrades available
- 50 Ah / 640 Wh lithium iron phosphate battery
- 150W inverter
- Run time: 12.5 hr (full charge to 0% charge)
- Battery life expectancy: 5+ years
The data below is a comparison of the electronics options available on the HI-Paradigm carts. Advanced electronics come standard on the HI-Paradigm, but it can be configured with basic.

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>BASIC ELECTRONICS</th>
<th>ADVANCED ELECTRONICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto light power – on when unlocked, auto power – off when relocked.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Auto light power – on when any drawer is opened, and auto power – off when all drawers are closed.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Programmable lower limit lift column allows easier in-field storage cabinet expansion options</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Drawers and Bins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audible alarm on all carts</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Both audible and visual (Flashing red task light)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Audit Trail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*allows tracking of the following information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>User ID</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Time of unlock</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Time of relock</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Drawers accessed</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Drawers left open at relock</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>500 users Support</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2000 users Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add up to 3 users from keypad outside of Med Manager Software</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Our carts are designed with the healthcare setting clearly in mind; with a range of features expressly integrated to ease workloads for nurses and other healthcare professionals, as well as to enhance patient care. Howard’s family of carts can be used in a variety of applications that include Charting and EMR, Medication Dispensing, and Nursing Education. Our carts are engineered to meet the exacting requirements of the healthcare industry, and built tough enough to withstand daily use in the most demanding environments.
Our E-comm and X-comm carts are designed with features to automate, update, and communicate based upon the individual needs of your facility.

With two great cart technology offerings available, Howard will find the right solution for you.

- Central control panel with easy touch sealed membrane keypad for:
  - storage access
  - power system controls
  - battery fuel gauge with visual and audible alerts
  - cart height adjustment
  - monitor height adjustment
  - on-demand steer assist technology
  - cart lights
- Power Module
- Audible Alarms
- Visual Indicators
- Battery Fuel Gauge

- Remote management (Med Manager) and remote monitoring (Power Manager) are independent—do not require a parent computer or software to be installed on the PC
- Fully compatible with thin clients and zero clients
- Onboard dedicated computer with color LCD touchscreen
- Up to 2000 user profiles and cart settings
- Centralized command center
- 7” high-resolution color touchscreen
- Central control panel with touchscreen for:
  - storage access
  - power system controls
  - battery fuel gauge with visual and audible alerts
  - cart height adjustment
  - monitor height adjustment
  - on-demand steer assist technology
  - cart lights
- Power module
- Low battery and open drawer alarm volume control
- Visual indication of narc lock status on cart
- High-resolution battery fuel gauge
- Displays run time remaining
- Onboard Wi-Fi
- Supports user presets for auto adjustments to preferred worksurface and monitor heights
- Asset location assistance
- Local management
- Call home feature
- Med Manager admins or users can broadcast messages to the cart
- Intelligent storage calibration
- On-screen cart DNA information
- Energy saving mode
Howard offers several accessory mounting options and configurations that provide a smoother and more sanitary work flow. With hundreds of options and configurations available, you can tailor your cart to best fit your facility’s needs and applications.

accessory options may vary between carts
mounting locations are not available for all Howard carts
ACCESSORY MOUNTING EXAMPLES

LOCATION 1
BARCODE SCANNER

LOCATION 2
2.2 QT SHARPS CONTAINER

LOCATION 3
SANI WIPES BRACKET

LOCATION 4
MINI WASTE BIN AND BRACKET
Howard's specialized Software Solutions help you manage your assets more effectively by optimizing cart performance and maximizing availability. With features such as remote monitoring and configuration, as well as data and event logging, you have instant access to vital information about cart power and medication dispense systems.

POWER MANAGER

Power Manager is a powerful web based tool for remote monitoring and management of cart power systems on your entire fleet of Howard Medical carts. The application runs as a web service allowing easy access by an administrator anywhere on your network via a web browser. Carts on your network will automatically "call home" to Power Manager, announce themselves and request to be managed and then periodically "call home" to report power system data. Power Manager provides administrators detailed control over power system data logging, alarm thresholds, and notification rules used for real-time alarm notification. Data from cart power systems throughout your fleet is continuously pushed up to and stored in Power Manager for later review. Robust data mining and reporting tools are available to analyze collected cart power system data or you can export the data for further analysis by 3rd party tools. Power Manager also keeps track of the last two wireless access points used by each cart to "call home" thus providing a simple way to track recent movement of carts and to determine the last known location of carts that have gone offline. Power Manager can be used with all Howard carts.

POWER DISPLAY

Power Display is a web based tool that runs on the local computing device on each cart providing direct access to power supply data as well as communication with Power Manager. Power Display also provides a small on-screen battery fuel gauge that displays real time battery capacity and charging state. The web interface provided by Power Display allows you to view the cart’s real time power data, power data logs, and event data logs from a browser either locally at the cart or from any location on the network. The Power Display background service, which is transparent to local users, handles communication with Power Manager to periodically "call home" and report power system data.
**MED MANAGER**

Med Manager is a powerful web based tool for remote management of cart settings and med drawer access permissions on your entire fleet of Howard Medical carts. The application runs as a web service allowing easy access by an administrator anywhere on your network via a web browser. Carts on your network will automatically “call home” to Med Manager, announce themselves and request to be managed and then periodically “call home” to check for new data. Med Manager provides administrators detailed control over cart behavior and user permissions individually or in groups. Data from carts throughout your fleet is continuously pushed up to and stored in Med Manager for later review including general cart configuration data and detailed information about who accessed which drawers and when. Robust data mining and reporting tools are available to analyze cart, user, and med drawer access data or you can export the data for further analysis by 3rd party tools. Med Manager also keeps track of the last two wireless access points used by each cart to “call home” thus providing a simple way to track recent movement of carts and to determine the last known location of carts that have gone offline. Med Manager can be used with all Howard carts that include electronic locking storage and can be used with X series carts with or without storage.

**MED DISPLAY**

Med Display is a Windows application that runs on the local computing device on each cart providing direct access to local med drawer cabinets, cart settings, audit records, and drawer calibration. The Med Display background service, which is transparent to local users, handles communication with Med Manager and periodically “calls home” to report any new audit data and retrieve any pending cart updates.
Howard Medical’s commitment to providing unmatched customer service and support continues long after a sale is final. Our technology staff provides 24/7 technical support (excluding US holidays) for as long as you own your Howard product. Our friendly, US-based team of experts will answer your questions about the product, hardware setup, or installation, and with telephone hold times of typically less than a minute.

**Standard Limited Warranty on Powered Medical Carts:**
- 3-year standard warranty
- 3-year mechanical
- 3-year electrical
- 3-year lithium phosphate battery defect
- 3-year lithium phosphate battery performance

**Upgraded Limited Warranty on Powered Medical Carts:**
- 5-year mechanical
- 5-year electrical
- 5-year lithium phosphate battery defect
- 5-year lithium phosphate battery performance

**Fixed Solutions:**
- 5-years on wall-mounted arms
- 3-years on wall-mounted cabinet

**Computers and Other Peripheral Devices:**
- See manufacturer’s warranty

For our full warranty information, please visit howard-medical.com/warranty
PROFESSIONAL SERVICES

The Howard Medical Professional Services Team has technical specialists nationwide and is known as one of the industry’s premier service providers, with a history of successfully serving clients for more than a decade. Our dedicated employees are completely focused on customer satisfaction, giving Howard Medical the resources to provide a solution that is just right for you. Whether your project is large or small, single-site or across multiple facilities, you can trust our experience to work for you!

We Also Offer:

- Complete In-Factory Integration
- Technical Training
- Equipment Cleaning With Disinfectants
- Service Level Agreement
- Battery Replacement Program
- Product Removal and Recycling
- Technology Installation
- Annual Fleet Audit
- In-Factory Imaging
- White-Glove Delivery With Trash Removal

for our full services information, please visit howard-medical.com/professionalservices