

HoverTap™ MD M15A module

A board-level module of the HoverTap™ MD sensing technology enabling touch & touchless interactions with a screen

OVERVIEW

The HoverTap™ MD M15A is a board-level module of our 3D Touch™ next-generation touchscreen + touchless interface technology. The module is designed for seamless integration with HMI displays, kiosks, or control panels. This advanced module redefines human-machine interaction by combining traditional touch functionality with simple and intuitive touchless controls. Engineered for versatility, the M15A is compatible with all types of gloves and drape coverings, and can be installed under thick protective glass layers, ensuring reliable performance in sterile or rugged environments. It operates flawlessly in the presence of liquids, thanks to Adaptive AI algorithms that dynamically adjust to environmental factors. These features make the M15A ideal for demanding applications in industrial, rugged, and healthcare spaces.

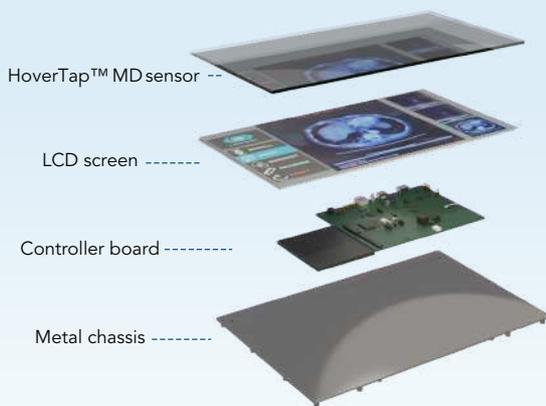


HoverTap™ MD M15A 15.6" module

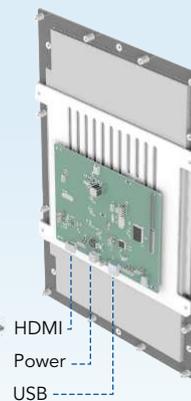
Larger displays and custom sizes are available



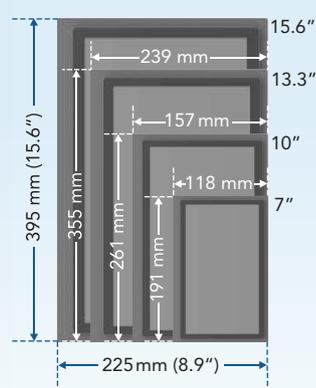
COMPONENTS



BACK VIEW



FRONT VIEW

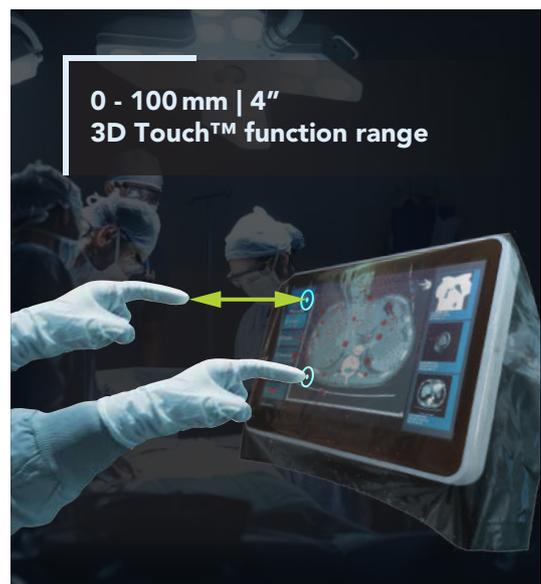


SIDE VIEW



FEATURES

- Intuitive 3D Touch™ User Experience**
Touch & Touchless interactions provide flexibility and control
- Industrial Enclosure Compatible**
Fully functional in IP-rated enclosures with thick protective glass.
- Works with Thick Gloves**
Seamless operation with any types of gloves and coverings.
- Retrofittable 3D Touch™ Display Module**
Simple integration with existing systems.
- Works through liquids**
HoverTap™ MD operates flawlessly despite liquids on the screen, while its touchless design reduces the transfer of dirt, grease, and grime from users.



HoverTap™ MD M15A module

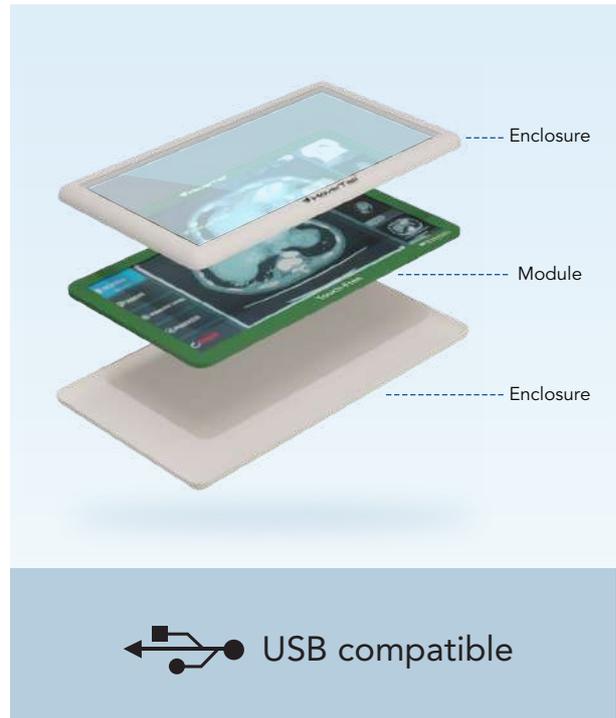
A board-level module of the HoverTap™ MD sensing technology enabling touch & touchless interactions with a screen

INTEGRATION MADE SIMPLE

The M15A is designed for seamless hardware integration. It includes an optional chassis and serves as a 1:1 replacement for existing touchscreen modules, simplifying upgrades to the latest technology.

Customers can integrate the M15A into any enclosure of their choice, including IP65-rated enclosures, ensuring compatibility with a wide range of applications and environments. For those requiring different sizes, HoverTap™ MD modules can be customized beyond the standard 15.6" to suit smaller or larger screens.

Regarding software integration, HoverTap™ MD connects via USB and HDMI, offering plug-and-play capability with its built-in USB HID protocol. This enables customers to use their existing GUI applications as-is and make minor modifications to enable touchless interactions (i.e., in-air swipes and taps). For deeper integration, the HoverTap™ MD API provides developers full control over both touch and touchless features, unlocking the potential for fully customized interfaces.



SPECIFICATIONS

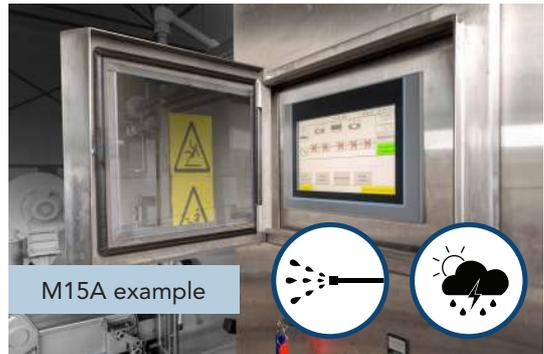
Components	HoverTap™ MD sensor, Controller board, LCD screen, protective glass (for damage protection), chassis (optional)
Power rating	15V, 0.8A (12W)
Power connector	2.1mm I.D. x 5.5mm O.D. x 9.5mm Barrel Plug
LCD screen size	15.6" (Other options include: 7", 10", 13.3", 24" or a custom size)
Screen resolution	1920 x 1080; 16:9 Aspect Ratio
Connectivity	1 HDMI port for display input and 1 USB port for sensor output (feasible to support DVI-D and VGA)
Sensor interface	USB HID via USB connection (USB Serial (COM port) also available upon request)
Software integration	Simple modification of UI to match USB HID outputs (instructions provided) or Windows API available upon request
Mounting	Included chassis has 12 M4 studs to mount from the rear and adhesive mounting gasket on the front of the chassis ■ Note: the chassis can be excluded upon request to allow for direct integration of the HoverTap™ MD sensor and LCD
3D CAD Model	Can be provided upon request
Testing & certifications	Certified under the UL 62368-1 standard under Component Level Certification ■ Technology has been successfully tested under water, dust, temperature, and other environmental conditions
Touchless	Proximity detection range: up to 100mm ■ Gestures: Tapping, Swiping (up, down, left, right), airwheel (clockwise, counterclockwise)



MEDICAL USE CASES

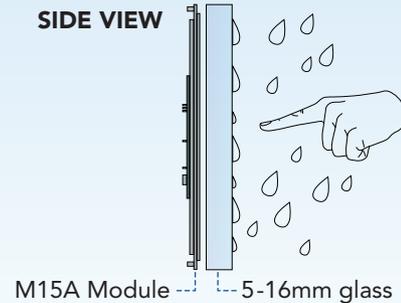
Perfect Display Solution for Industrial Use

- Designed for ultimate flexibility and seamless functionality, HoverTap™ MD M Series display modules are perfect for installation inside IP-rated, hazardous zone, or washdown enclosures.
- 3D Touch™ technology extends the interactive distance of the display by 100 mm, providing unmatched accessibility, contact reduction, and reduce cleaning.
- Engineered to perform under variable light, moisture, and temperature conditions.



M15A example

SIDE VIEW



Ideal for Installation with Thick Protective Glass

- HoverTap™ MD 3D Touch™ modules provide seamless functionality, even under 16 mm thick glass, which makes it an ideal solution for installations where accidental damage from workers, tools, debris, or equipment can happen.
- Extending the distance between the user and the display surface reduces the risk of damage from vandalism and harsh conditions, making it an ideal solution for outdoor applications.



Damaged touchscreen example

M15A

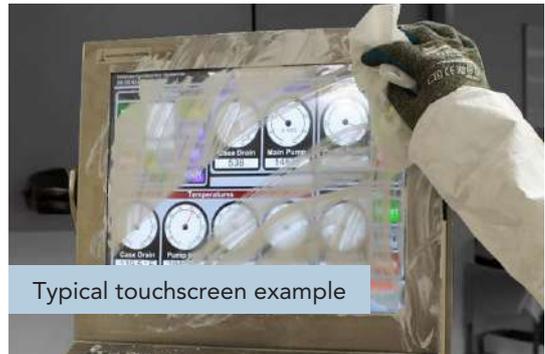


Protective glass or plastic to prevent damage

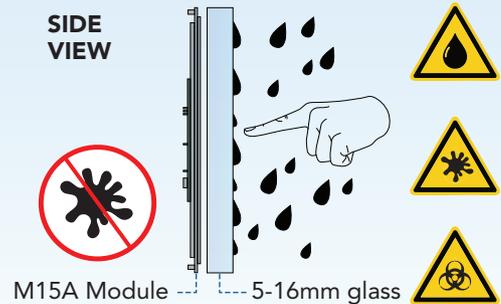
MEDICAL USE CASES

Touchless Precision with Protective Gloves

- Operating a display with HoverTap™ MD 3D Touch™ provides uninterrupted productivity in demanding environments, even while wearing thick protective gloves.
- This capability allows workers to keep their protective gloves on while operating displays and significantly reduces cleaning and maintenance.
- HoverTap™ MD helps minimize contamination of the display surfaces from dirt, grease, organic matter, and chemicals to reduce damage and wear.



Typical touchscreen example



Easily Integrate Display Functions which Includes API

- HoverTap™ MD M Series Display modules include an easy-to-use API tool to help design and implement touch functionality to suit your needs which includes AI-driven touch, multi-touch, and gesture functions.
- Simplify interactive design by integrating physical functions directly into the display, reducing costs on wiring, wear and tear, and programming.
- Minimize cleaning, maintenance, and overall expenses with fewer physical components.



M15A button integration onto the screen

