

XV-H40 HANDGESTURE SENSOR

XV Range

The Nexmosphere XV range offers intelligent vision-based sensors with powerful embedded AI engines to analyze what is happening in front of your display. Use this sensor-generated input to create engaging UIs for your audience. No driver, cloud connection, or recurring subscription is required; just connect the sensor and controller to a digital signage player and start designing your experience.



XV-H40

The XV HandGesture sensor facilitates touchless user input by detecting hand gestures such as swiping, pointing, and thumbs-up. The sensor works through glass, allowing customers to interact with onscreen content playing on digital signage in store windows. Next to gesture detection, the sensor can also track the position of a person's hand and send a command to the connected digital signage player when their hand enters one of the predefined and customizable Activation zones. This feature lets you create fun and easy-to-use digital interfaces for public spaces.

Features

- Detection of hand gestures
- Tracking of hand position
- Customizable Activation zones
- HDMI output for visual feedback

X-talk

The XV-H40 sensor connects to any of the Nexmosphere Xperience controllers using an X-talk cable. The settings of the XV-H40 are programmable on the controller, enabling a seamless integration in each application.

- Plug and smile interface
- Compatible with any Nexmosphere Xperience controller
- Powered by and configurable with Nexmosphere Xperience controllers.

HandGesture detection

Offers the option to implement touchless content navigation using well-known hand gestures. The XV-H40 can detect the following gestures:

- | | | |
|-------------|---------|-----------|
| - Open palm | - Point | - OK sign |
| - Thumb | - Fist | - V sign |
| - Swipe | - Tap | - Grab |

It also analyzes the direction of the gesture (left, right, up, down, or center) and indicates whether the gesture was executed by the left or right hand.

Position tracking and Activation zones

The sensor can track the position of a person's hand and send a trigger when it enters an Activation zone. Activation zones are customizable areas within the sensor's FoV. This feature can be used to create fun and easy-to-use digital interfaces in public spaces, for example 1-5 star ratings or interactive augmented reality.

HDMI output

The camera feed of the sensor can be extracted via a micro-HDMI connector. The video output has multiple modes varying from a full video feed to only showing the detected hands skeleton structure or indicating the hands position with a customizable icon. Therefore the video output can be used both for debugging purposes and as a second visual layer within the touchless UI of the application.

Benefits

- Works through exterior glazing such as storefront windows
- Detects 2 hands simultaneously
- Customizable background and hand icons on HDMI output
- Adjustable Field-of-View
- Auto-calibration and auto-startup for highly reliable applications (24/7)
- Status LED indicating gesture detection

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Mounting specifications

- Install the sensor at a height between 1.3 - 1.7 meter
- Make sure the camera lens has a clear view of the person in front of the sensor
- The sensor performs optimally in a well, and -evenly lit area
- The sensor should be installed with the mini-DisplayPort on the bottom or top

Field-of-View

Range Hand gestures: 20 -150cm
 Range Activation zones: 20 -180cm
 Angle: 90°

Thermal specifications

Operating temperature: +10°C...+40°C/ +50°F ... +104°F
 Storage temperature: -20°C...+50°C/ -4°F ... +122°F

Electrical specifications

- Operating voltage AI engine: 5V DC (via USB-C)
- Power consumption: 2000mA

- Operating voltage X-talk interface: 5V DC (via X-talk)
- Power consumption: 50mA

Miscellaneous

- Mounting holes for easy fixation
- 1-year warranty (optional 3-year extended warranty available)

Packaging

Netto Weight XV-H40: 400g
 Items per carton 1, 10 or 50 pcs

AI engine

The sensor utilizes the AI hand tracking algorithm from Motion Gestures. This algorithm is embedded into the sensor and does not need to be purchased or licensed separately.



Standards and Certifications



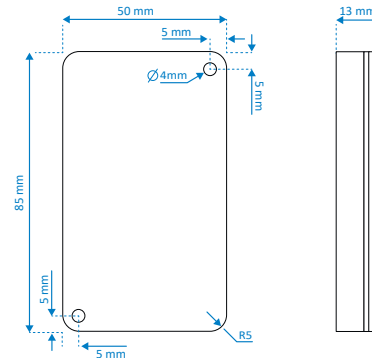
Ordering information

| Product ID | Description | Quantity |
|------------|---|----------|
| XV-H40 | HandGesture sensor, Mini DisplayPort input, micro HDMI output, USB-C power input, incl. Mini DisplayPort cable and universal USB power supply | 1 pc |
| S-CLA05 | Camera module, 90° FoV, 1.5m range, manual focus | 1 pc |

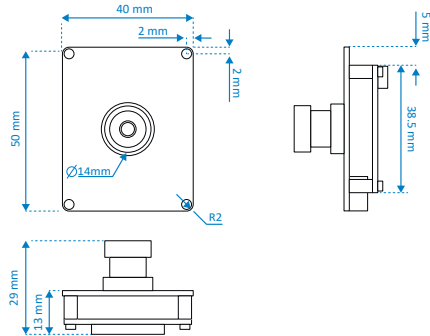
Mechanical dimensions

| | | |
|-----------------|----------|-----------------|
| LxWxH: | XV-H40: | 85 x 50 x 13 mm |
| | S-CLA05: | 40 x 50 x 29mm |
| Screw fixation: | XV-H40: | 75 x 50 mm |
| | S-CLA05: | 35 x 45 mm |

XV-H40



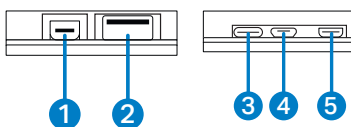
S-CLA05



Hardware interfaces

1. Mini-Displayport (connects to S-CLA05)
2. USB-A (updates)
3. USB-C (power)
4. X-talk interface (connects to Xper. Controller)
5. Micro-HDMI (camera feed output)
6. Mini-Displayport (connects to XV-H40)

XV-H40



S-CLA05

