



## Laser Sky

### Significant value for touchscreen fundamentals

The new Laser Sky focuses on the fundamentals of an interactive touchscreen; everything you need to bring the benefits of interactivity in a classroom setting. Slide-in an OPS PC and enjoy the flexibility of working in Windows or other working environments. The adaptive touch technology, low total ownership cost and the up to 7 year warranty make it an appealing solution.

- ✓ Barco MirrorOp licence - for wireless multiplatform screen sharing with two-way touch functionality (up to 64 users)
- ✓ Specially designed OPS slot - for faster image processing (UHD @ 60Hz)
- ✓ Versatile annotation app – annotate over any software
- ✓ Adaptive Touch - simulates natural handwriting
- ✓ Built-in JBL(R) 80 watts speakers - for impressive Live Stage (virtual) surround sound
- ✓ Low power consumption - certified with Energy Star
- ✓ Wake-on-LAN – control the display over distance
- ✓ Remote control over IP - for easy adjustment of the display settings over distance
- ✓ Over-the-air updates – your display will always be up-to-date
- ✓ Optional: Connectivity pack (wifi module, dynamic pen, unlimited Barco MirrorOp streaming licence)
- ✓ Optional: Extended Connectivity Pack - Stream your content by using Airplay and/or Google Cast



Building further on the successes of the Laser air+, we proudly present the new Laser Sky, a versatile touchscreen with a powerful built-in OPS PC slot. Laser Sky is ideal for users that prefer to use a PC as part of the learning process. You can now easily slide in your existing OPS PC or a brand new one.

### Increased student and teacher participation

The integrated wireless presentation and collaboration solution allows for sharing with any device and all operating systems: Windows/Mac, tablet or smartphone. CTOUCH uses Barco's MirrorOp app to ensure easy and fast wireless sharing. This app has a 5 minute streaming time limitation. For an unlimited streaming time licence, please look at the Connectivity Pack below.

### Easy and efficient use

#### Controlling the display with just one button

When pressing the button on the front of the display, an on-screen Float Bar will appear. This Float Bar gives you access to the display menu, allows you to change source or to adjust the volume. It also gives access to the annotation app. This versatile annotation app enables you to easily annotate over any software.

### Improve communication

#### JBL® 80 Live Stage (Virtual) Surround Sound

The CTOUCH Laser Sky is equipped with a built-in JBL® speaker system. This audio system offers 80 watts of sound, enabling you to fully captivate your audience. Experience clear high and mids, plus exceptional bass tones. The integrated 80W JBL® speakers offers Live Stage (virtual) Surround sound, which widens the sound stage and sharpens the location of sound.

### Adaptive Touch

The Adaptive Touch simulates natural handwriting, as it has the power to adjust to the writing speed. When increasing the speed of writing, the touch frame will accelerate the speed of data processing. This creates a fluent line, even when writing fast, with an accuracy of less than 2 mm.

### 2 free slim passive pens included

2 free slim passive pens are included for easy and steady writing.

### Always up to date technology

CTOUCH offers free over-the-air-updates for the latest firmware, so that you can always count on the latest updates. Updates are just one click away.

### Low cost of ownership

#### Mobile Device Management (MDM) ready

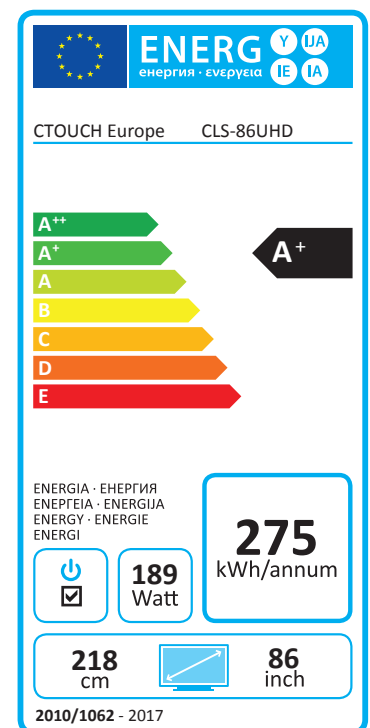
With the Wake-on-LAN, the Laser Sky is ready for any Windows based MDM software you want to install on the Windows OS of the OPS PC.

### Control your display over distance

Change settings of the display such as switching sources, turning on and off the display, changing sound and image settings from a remote location.

### Energy Star

The Laser Sky is certified with the Energy Star certificate, making it a perfect choice for environmentally conscious customers. Topped off by the free Priority Care service programme and the up to 7 year warranty\*, CTOUCH reduces the cost of ownership to one of the lowest in the market.



\* go to <http://support.ctouch.eu> for detailed warranty conditions



## Extra features

### Cable Management

The Laser Sky is equipped with a Cable Management System. This easy to use system will allow you to stash unwanted cables from underneath the display out of sight.

### Intelligent Connectivity Platform (ICP)

Intelligent connectivity platform (ICP) enables easy USB switching between internal and external display sources. No need to manually switch USB devices to connected display sources. The Laser Sky also includes three internal ethernet to USB adapters to ensure all internal modules are able to reach the connected network simultaneously.

### OPS-slot UHD 60 Hz ready

The specially designed modular OPS slot allows for faster image processing (supports UHD@60Hz) and brings a highly flexible solution for learning institutions.

## Optional accessories

Upgrade your Laser Sky touchscreen with convenient accessories:

### 1. Collaboration pack

- **Wifi module**

The 2.4/5 GHz AC wifi module enables wireless connection to your display.

- **Connectivity licence (Barco MirrorOp)**

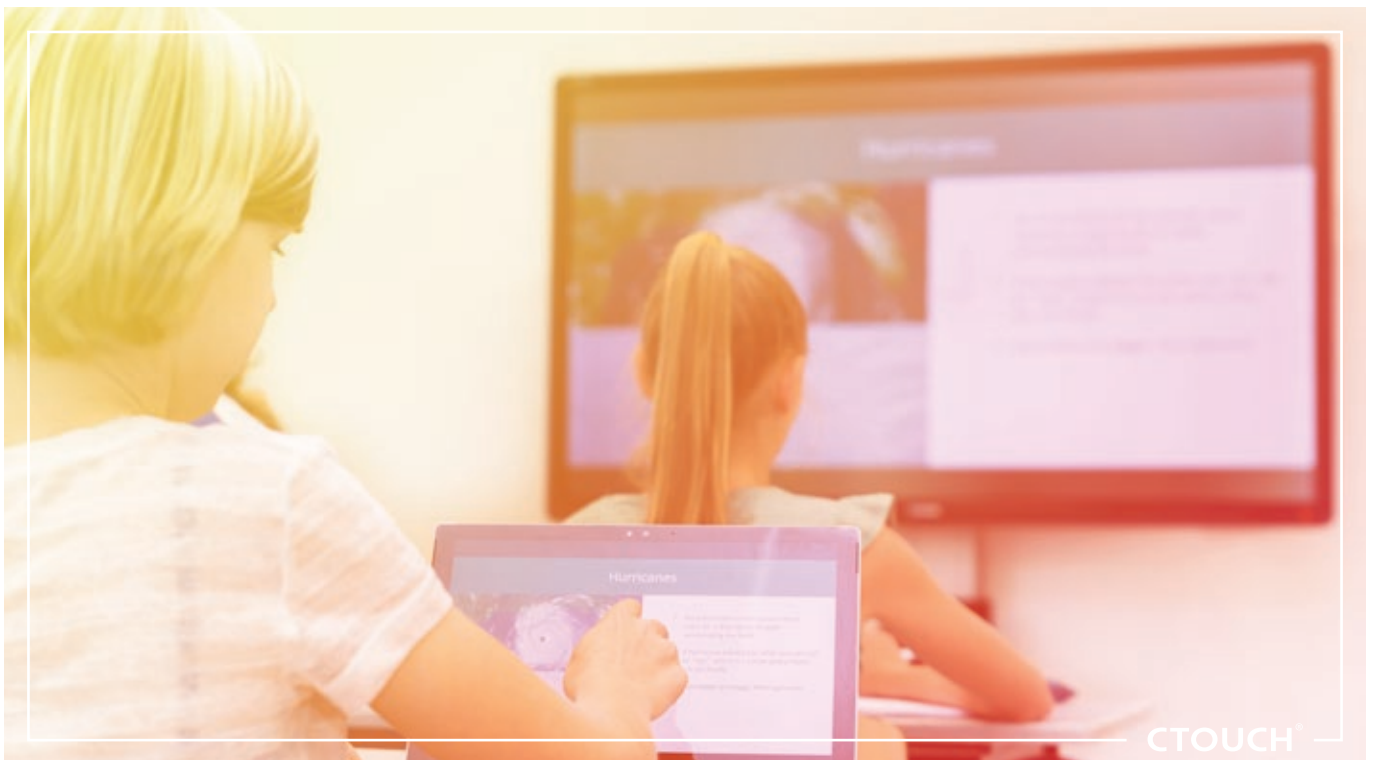
It allows you to connect the entire classroom to the display. Works with Android, Apple and Windows.

- **Dynamic Pen**

The dynamic pen allows you to easily adjust volume, open programs or simply use it as an air mouse.

### 2. Extra Connectivity Pack (AirPlay/Google Cast)

Stream your content by using AirPlay and/or google Cast, without having to install the Barco MirrorOp Sender on your device (only in combination with the Connectivity Pack)..





## Product number

- Laser Sky 86 inch: **10052086**

## Touch system

- Touch System: Adaptive touch
- Touch Point: 32 Point
- Touch tools: Hands or other solid (soft tip) object
- Accuracy: ±2mm
- Touch Resolution: 32768 x 32768 (pixels)
- Interface: USB 2.0 compatible (full speed) HID compliant, Plug & Play compatible. Backwards compatible with USB 1.1
- Supported OS: Windows, Mac, Android and Chrome
- Touch driver: Not required for 32 touch points (under Windows); OSX and macOS need drivers.

## Panel

- Diagonal size: 85,6" (2174 mm)
- Panel technology: TFT LCD
- Panel resolution: 3840 x 2160
- Frame rate: 60 Hz
- Brightness: 350 cd/m<sup>2</sup>
- Aspect Ratio: 16:9
- Contrast Ratio (Static): 1200:1
- Contrast Ratio (Dynamic): 5000:1
- Response time: 8 ms
- Display Colours: 1.07 Billion (10 bits)
- Pixel pitch (W x H): 0.494 x 0.494 mm
- Viewing Angle: 178° / 178°
- Backlight type: Direct LED
- Service Life: > 30.000 Hours
- Orientation: Landscape

## Connectivity

- Video input (digital): 3x HDMI 2.0 (1x ARC), 1x DP 1.2
- Video input (analog): 1x VGA
- Audio input: 1x Mini Jack
- Audio output: 1x S/PDIF Optical, 1x Mini Jack
- USB: 4x USB 2.0
- Touch: 2x USB-B
- RS232C: 1x DB-9
- LAN port: 1x RJ45 10/100/1000 BaseT

## Video

- PSM: Warm / Cool / Normal
- Picture Mode: Dynamic / Standard / Soft / User
- Freeze function: Yes
- Backlight mute function: Yes

## Sound - Designed, tuned and built by HARMAN

- Transducers: 2 Stereo JBL<sup>®</sup> 3-Way Speakers (tweeter, mid-range and woofer)
- Amplifier power: 80 watts
- Frequency range: 60Hz - 20kHz
- JBL<sup>®</sup> LiveStage (Virtual) surround sound

## Features

- Internal OPS slot: Yes, supports UHD@60Hz
- Annotation: Yes, annotate over any software application
- Gesture recognition: Yes, refer to the CTOUCH manual
- HDCP compliance 2.2
- Thickness of safety glass: 4 mm (hardness Mohs 7)
- Network controllable input: 1x RS232C & 1x LAN IN

## OSD

- Touch OSD: Yes
- OSD Language Function: Danish, Dutch, English, French, German, Spanish

## Power

- Power Supply: AC 100-240 V 50 / 60Hz
- Power Consumption (in Operation): 189W
- Power Consumption (in Standby): ≤ 0.5 W
- Ambient light sensor: Yes

## Quality approvals

- Regulatory approvals: CE, FCC
- Green approval: Energy Star, RoHS complaint, WEEE
- ISO Standard: ISO9001 and ISO14001

## Dimensions & Weight

- Product dimensions (WxHxD): 1990.4 x 1173 x 113 (mm)
- Product weight: 100 kg
- Vesa Mount (WxH): 800 x 600 (mm), M8 screw

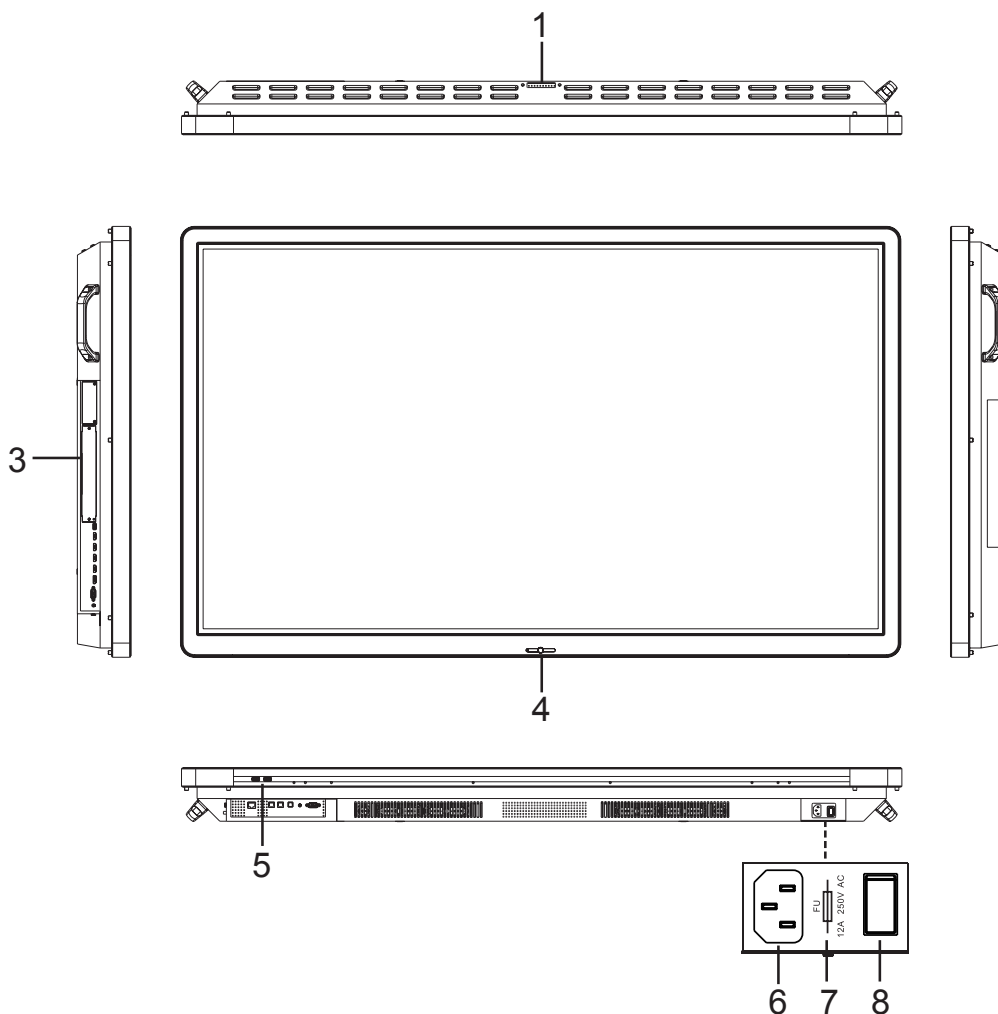
## Product accessories included

- Accessories pack: power cable, USB cable, HDMI cable, remote control, 2 passive pens, Quick Start Guide & Warranty card

## Logistics information

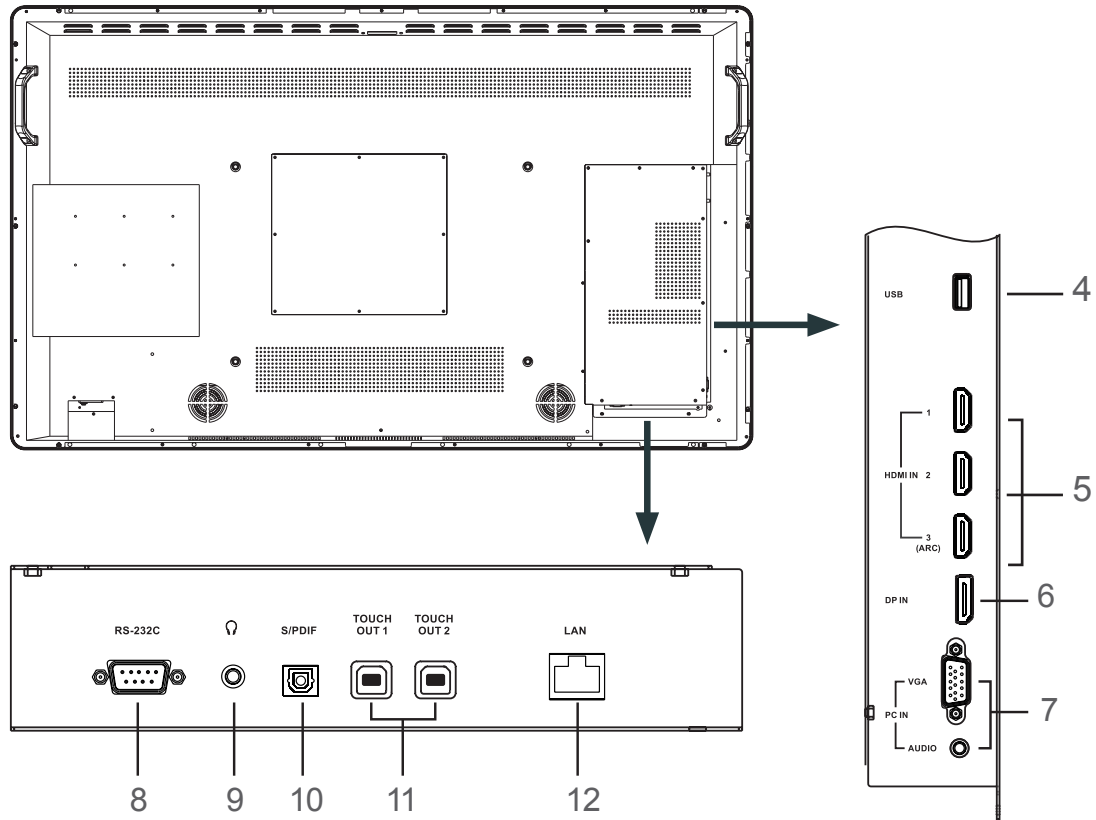
- Box size (WxHxD): 2118 x 1324 x 290 (mm)
- Gross weight: 112 kg
- EAN no.: 8719481480288


## Control panel



nr.	Description
1 <b>USB(2.0)(for camera)</b>	This port is for connecting a camera. <b>Notes:</b> 1. Please open the dust cover before being used. 2. It can perfectly support cameras up to 720p.
2 <b>N/A</b>	
3 <b>OPS module slot</b>	Insert an OPS module (Optional).
4 <b>Power LED</b> <b>Remote control sensor</b> <b>Power</b>	Red: In standby mode. Blue: In power on mode.  Aim the remote control towards this spot on the CTOUCH interactive display.  Press to switch the CTOUCH interactive display on or off. <b>Note:</b> When the CTOUCH interactive display is turned on, press the button in the middle to show the Float Bar. Press the button for about 2 seconds and the screen will go into stand-by mode.
5 <b>USB</b>	Connect USB devices to this port for OPS and Android.
6 <b>AC IN</b>	Plug the AC cord into this jack and into a power outlet. (AC 100-240V 50/60Hz)
7 <b>Fuse</b>	12A 250V
8 <b>Power Switch</b>	Push (I) to turn on the power, push (O) to cut off the power. <b>Note:</b> Don't cover the power switch.

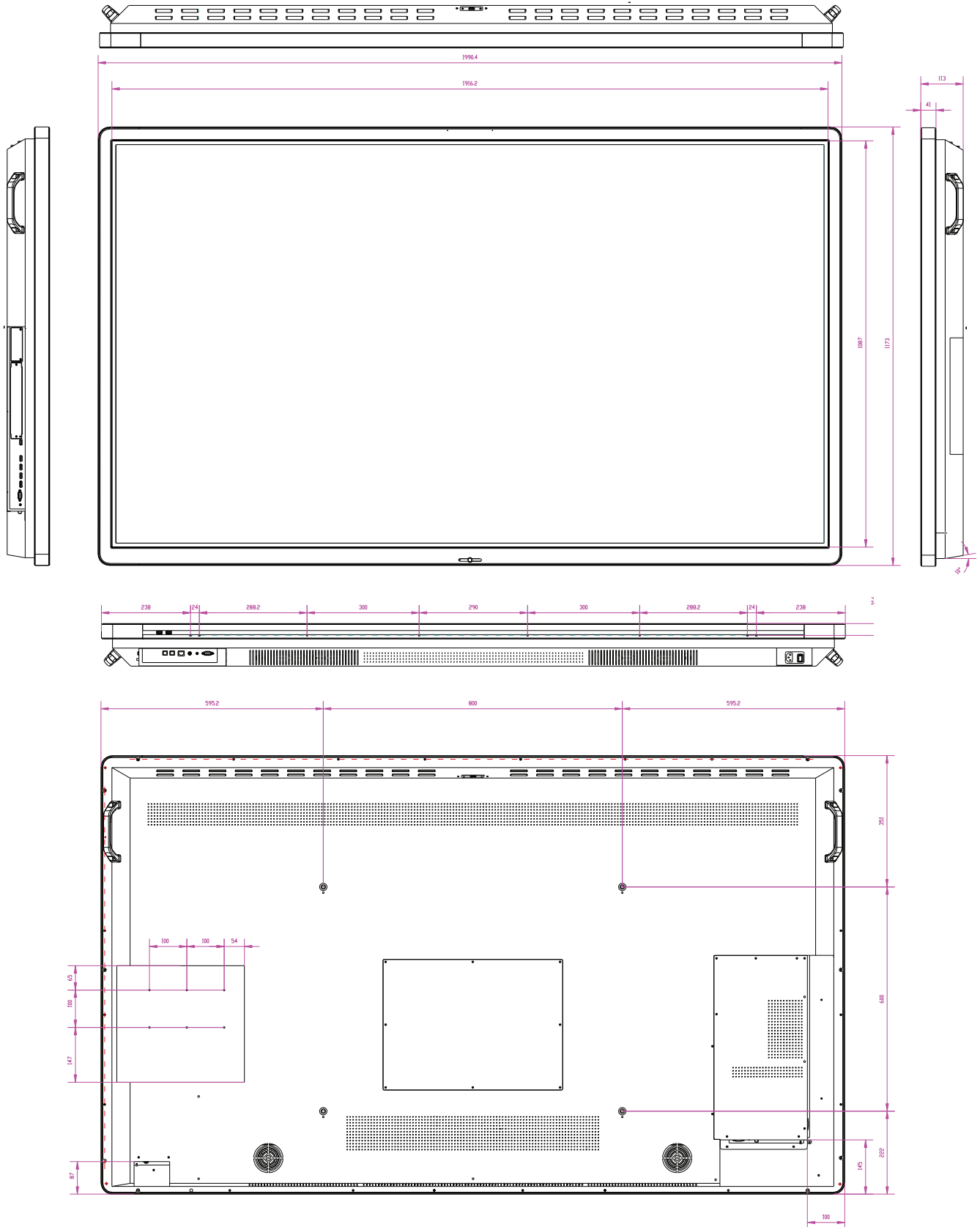
## Connection panel



nr.	Description
1	n/a
2	n/a
3	n/a
4 USB	Connect USB devices to this port for Android. <b>Note:</b> use this USB port for software updates.
5 HDMI1/2/3 IN	Connect an HDMI or DVI device to this HDMI port. HDMI 3 (ARC): Connect an ARC enabled home theatre receiver to this HDMI port.
6 DP(DisplayPort) IN	Connect a DP device to this DP port.
7 PC IN	Connect the video/audio of a computer to these ports.
8 RS-232C	For remote control, service and other uses.
9 	Connect headphones to this jack. The current selected source is audible.
10 S/PDIF digital audio OUT	Connect a digital sound system to this S/PDIF jack.
11 TOUCH OUT 1/2	Output for external devices connected to PCx, HDMIx or DP ports, which support touch systems.
12 LAN	Connects the external network or router.

**Note:** If the CTOUCH display is on the VGA source and does not get any signal, it will go into stand-by mode after two minutes. When the CTOUCH display is on other sources and does not get any signal, it will go into stand-by mode after 10 minutes.

Technical drawings



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