Specifications

SMART Board® 7086 interactive display with iQ

Model SBID-7286

Overview

The SMART Board® 7086 interactive display with iQ is the hub of your classroom. iQ technology connects devices, lesson content and pedagogically relevant software to create a cohesive educational experience. PC-free embedded computing provides one-touch access to a diverse suite of SMART applications—Notebook lessons, workspaces, gamification activities and whiteboard—and collaborative tools, such as wireless screen sharing and a web browser. With minimal network integration, there’s no need for wires, cables or manual software and firmware updates.

The 86” 4K ultra-high-definition LED display provides optimal image clarity and wide viewing angles. With the Pen ID™ feature, you can assign different appearances to the four pens and write or draw over any application in digital ink.

Object Awareness™ allows you to perform mouse functions with your finger, write in digital ink with the pen, and erase with your palm or eraser—all without switching tools or modes. You can use a variety of gestures in applications, and four users can write or draw at the same time.

See education.smarttech.com for more information.

Dimensions and weights

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>205 lb. (91 kg)</td>
</tr>
<tr>
<td>Shipping dimensions (including pallet)</td>
<td>86 1/2” × 60” × 14” (220 cm × 163 cm × 35.5 cm)</td>
</tr>
<tr>
<td>Shipping weight</td>
<td>258 lb. (117 kg)</td>
</tr>
</tbody>
</table>

As an ENERGY STAR® certified signage display, the SMART Board 7086 interactive display meets strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and Department of Energy.

1All dimensions ± 1/8” (0.3 cm). All weights ± 2 lb. (0.9 kg).
## Hardware

### Interaction

<table>
<thead>
<tr>
<th>Touch technology</th>
<th>HyPr Touch™ (Hybrid Precision Touch) proprietary hybrid system, which greatly improves upon its InGlass™ core by optimizing both touch and pen performance, resulting in virtually no lag and zero contact detect height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multitouch capabilities</td>
<td>Up to 16 simultaneous interaction points (combination of 10 finger touch points, four pen touch points and two eraser touch points)(^2)</td>
</tr>
<tr>
<td>Object Awareness</td>
<td>Behavior adjusts automatically to the tool or object you’re using, whether it’s a pen, finger, eraser, or palm.</td>
</tr>
<tr>
<td>Pen ID</td>
<td>Four people can write independently and simultaneously, using different colored ink.</td>
</tr>
</tbody>
</table>

### Display

<table>
<thead>
<tr>
<th>Type</th>
<th>LED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect ratio</td>
<td>16:9</td>
</tr>
<tr>
<td>Optimal resolution (&quot;HDMI 1&quot; input)</td>
<td>4K UHD (3840 × 2160) at 60 Hz</td>
</tr>
<tr>
<td>Horizontal frequency (typical)</td>
<td>135 kHz</td>
</tr>
<tr>
<td>Vertical frequency (typical)</td>
<td>60 Hz</td>
</tr>
<tr>
<td>Contrast ratio (typical)</td>
<td>5000:1</td>
</tr>
<tr>
<td>Brightness (maximum)</td>
<td>360 cd/m(^2)</td>
</tr>
<tr>
<td>Pixel dimensions</td>
<td>0.429 mm × 0.429 mm</td>
</tr>
<tr>
<td>Gamut</td>
<td>72% of NTSC</td>
</tr>
<tr>
<td>Viewing angle</td>
<td>178°</td>
</tr>
<tr>
<td>Response time (typical)</td>
<td>8 ms</td>
</tr>
</tbody>
</table>

### 100BASE-T Ethernet

| Two external ports for a four-port Fast Ethernet switched network connecting the interactive display and the iQ appliance to an external network and an external device, such as a computer |

### Presence detection

| Dual sensors that reduce startup time and power consumption during inactivity |

### Audio

| 10 W integrated speakers (×2) |

### Noise level

| <30 dBA |

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\(^2\)Only up to 10 touch points and no pen or eraser support on Chrome OS™ operating system
### Included cables and accessories
- iQ appliance
- AM50 appliance
- Country-specific power cable
- USB cable
- Pen (×4)
- Eraser

### iQ appliance
- **Wi-Fi**: IEEE 802.11A/B/G/N/AC with 2 × 2 MIMO (both 2.4 and 5 GHz bands)
- **Bluetooth**: Bluetooth 4.2 dual mode (backwards compatible with Bluetooth 2.1 + EDR)
- **Capture options**: Establish a Bluetooth wireless connection with a supported mobile device (see below) by scanning the interactive display’s unique QR code

### Supported languages
- Danish
- Dutch
- English
- Finnish
- French
- German
- Italian
- Korean
- Norwegian
- Portuguese
- Russian
- Simplified Chinese
- Spanish
- Swedish
- Traditional Chinese
- Ukrainian
- Vietnamese

### Mounting holes
- For a standard VESA 600 mm × 400 mm mounting plate
- Lower mounting holes 17 1/8" (43.4 cm) from the bottom of the interactive display

### Mounting bracket depth
- Minimum depth of 2" (5.1 cm) for all components on the back of the interactive display for airflow
Connectors

**Connector panel**
- OPS slot (for the iQ appliance)
- Stereo 3.5 mm out
- S/PDIF out
- "VGA" input connectors
  - Video: VGA in (1080p)
  - Audio: Stereo 3.5 mm in
  - Touch: USB Type-B
- "HDMI 1" input connectors
  - Video/audio: HDMI 2.0 in (4K UHD at 60 Hz)
  - Touch: USB Type-B
- "Display Port" input connectors
  - Video/audio: in (4K UHD at 30 Hz)
  - Touch: USB Type-B
- USB Type-A\(^3\)
- RJ45 (>2)

**Convenience panel**
- "HDMI 2" input connectors
  - Video/audio: HDMI 1.4 in (4K UHD at 30 Hz)
  - Touch: USB Type-B
- USB Type-A (>2)

**Bottom**
- AC power in
- AC power out
- RS-232 in
- RS-232 out

**HDCP support**
- Version 1.4/2.2

Installation requirements

**Interactive display**
See the [SMART Board 7000 and 7000 Pro series interactive displays installation and maintenance guide](smarttech.com/kb/171164)

1 **IMPORTANT**

The display needs an internet connection for downloading and installing important updates. Ask the network administrator to confirm that the network has been correctly configured for the iQ experience. For more information about network configuration, see Connecting a SMART display with the iQ experience to a network.

**SMART Notebook Player mobile app**
- iOS 10 or later operating system software

\(^3\)For service use only
SMART kapp® app

Apple devices
- iOS 9 or later operating system software
- 50 MB of storage
- iPhone 4S or later
- Third-generation iPad or later
- First-generation iPad mini or later
- Fifth-generation iPod touch or later

Android™ devices
- Android 4.4.4 (KitKat) or later operating system
- 50 MB of storage (internal or SD card)
- 1024 MB of RAM
- 720p or better screen resolution
- Bluetooth 2.1 + EDR
- 3 megapixel or better rear-facing camera (recommended)

SMART kapp viewer

Mobile
- Safari for iOS 9 or later operating system software
- Chrome™ for Android 39.0.2171.93 or later

Desktop
- Internet Explorer® 10 or later
- Chrome 39.0.2171.95 or later
- Firefox® 34.0.5 or later
- Safari 8.0 or later

Room computers and guest laptops

General requirements
- See SMART Notebook software release notes

4K UHD
- Video card that can support 3840 × 2160 resolution at 60 Hz and that has 1 GB DDR 5 memory
- See Minimum requirements for Ultra High Definition or 4K on your interactive flat panel

Mini-computers

General requirements
- See SMART Notebook software release notes

Dimensions
- Smaller than 10" × 10" × 2" (25.4 cm × 25.4 cm × 5.1 cm)

Weight
- Less than 10 lb. (4.5 kg)

Mounting
- VESA 75 mm × 75 mm or 100 mm × 100 mm mounting pattern

Cable requirements

HDMI
- Maximum length: 23'(7 m)

NOTES
- Use only certified HDMI cables that have been tested to support the performance standard you require.
- The performance of cables longer than 23'(7 m) is highly dependent on the cable’s quality.
## Display Port
Display Port 1.2 compliant or better  
Maximum length: 23’ (7 m)

## USB 2.0
USB 2.0 certified  
Hi-Speed (480 Mbps) support  
Maximum length: 16’ (5 m)

### Important
Using cables that exceed these maximum lengths can produce unexpected results, such as degraded picture quality or USB connectivity. Refer to Installation best practices for SMART products (smarttech.com/kb/171035) for comprehensive information about cables and extensions for SMART hardware products.

## Storage and operating requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power requirements</strong></td>
<td>100V to 240V AC, 50 Hz to 60 Hz</td>
</tr>
<tr>
<td><strong>Interactive display and iQ appliance power consumption at 77°F (25°C)</strong></td>
<td></td>
</tr>
<tr>
<td>Standby mode</td>
<td>&lt;8 W</td>
</tr>
<tr>
<td>Normal operating</td>
<td>165 W</td>
</tr>
<tr>
<td><strong>Standalone interactive display power consumption at 77°F (25°C)</strong></td>
<td></td>
</tr>
<tr>
<td>Standby mode</td>
<td>&lt;2 W</td>
</tr>
<tr>
<td>Normal operating</td>
<td>159 W</td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td>41–95°F (5–35°C)</td>
</tr>
<tr>
<td><strong>Storage temperature</strong></td>
<td>-4–140°F (-20–60°C)</td>
</tr>
<tr>
<td><strong>Humidity</strong></td>
<td>5–80% relative humidity, non-condensing</td>
</tr>
</tbody>
</table>

## Certification and compliance

### Regulatory certification
EU RED and LV Directives, ISED, cUL, FCC, UL, RCM, CITIC, TRA

### Environmental compliance

<table>
<thead>
<tr>
<th>Region</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>REACH, RoHS, WEEE, Battery and Packaging</td>
</tr>
<tr>
<td>U.S.</td>
<td>CONEG Packaging, California Prop 65</td>
</tr>
</tbody>
</table>

## Purchasing information

### Order number
SBID-7286  
SMART Board 7086 interactive display with iQ and SMART Learning Suite

### Optional accessories
See smarttech.com/accessories

### Warranty
Three-year limited equipment warranty
### Extended warranty

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWY1-SBID-7286</td>
<td>One-year warranty extension</td>
</tr>
<tr>
<td>EWY2-SBID-7286</td>
<td>Two-year warranty extension</td>
</tr>
</tbody>
</table>