# **Specifications**

# SMART Board™ Interactive Whiteboard System

# Model 685ix

# **Physical Specifications**

#### SMART Board™ 685 Interactive Whiteboard

**Size** 77 1/2" W × 49 1/2" H × 5 1/8" D

 $(196.9 \text{ cm} \times 125.7 \text{ cm} \times 13 \text{ cm})$ 

**Active Screen Area** 74" W × 46 1/8" H (188 cm × 117.2 cm)

(maximum interactive, 87 1/8" (221.3 cm) diagonal

projected image) 16:10 aspect ratio

Weight 42 lb. (19.1 kg)

**Shipping Size** 54" W × 86 1/4" H × 5 1/2" D

(137.2 cm × 219.1 cm × 14 cm)

Shipping Weight 63 lb. (28.6 kg)

**UX60 Projector System** 

**Projector Size** 17 2/5" W × 10 3/5" H × 16 1/2" D

 $(44.2 \text{ cm} \times 26.9 \text{ cm} \times 41.9 \text{ cm})$ 

Projector Weight 22 lb. (10 kg)

**Extended Control Panel** 6" W × 2 5/8" H × 2 2/8" D

 $(15.2 \text{ cm} \times 6.6 \text{ cm} \times 5.8 \text{ cm})$ 

**Remote Control** 1 5/8" W × 3 3/8" H × 1/4" D

 $(4 \text{ cm} \times 8.6 \text{ cm} \times 0.7 \text{ cm})$ 

**Shipping Size** 

Projector Box 18 6/8" W × 18 1/8" H × 22 5/8" D

 $(47.5 \text{ cm} \times 47.1 \text{ cm} \times 57.5 \text{ cm})$ 

Shipping Weight 39 lb. (17.7 kg)

All dimensions +/- 1/8" (0.3 cm). All weights +/- 2 lb. (0.9 kg).



#### **Standard Features**

**Software** Includes SMART Notebook software. See the <u>SMART Notebook software</u>

specifications for a complete list of system requirements. Software upgrades are

available from <a href="https://www2.smarttech.com/st/en-US/Support/SBS/">www2.smarttech.com/st/en-US/Support/SBS/</a>.

Certifications and UL (U.S./Canada), CB, CE, FCC, China EIP, RoHS (Europe), WEEE,

**Compliance** VCCI (Japan) and C-Tick (Australia)

Warranty The projector and extended control panel (ECP) have a three-year limited equipment

warranty. The UX60 projector lamp has a 500 hour/90 day warranty. Your interactive

whiteboard has a two-year limited equipment warranty or a five-year limited

equipment warranty upon registration. See included warranty documents for details.

**Cables** Includes the necessary cables to connect the projector to the extended control panel.

A 4.5 m power cable, 2 m ECP harness cable, 2.8 m wire management bundle and 1.8 m SC9 connector cable are included. However, you must supply the appropriate

input cables for additional computers and devices.

Wire Management A wire management bundle is included to connect secondary computers to the

extended control panel and the UX60 projector.

Interactive Whiteboard Features

**Pen Tray** Optical sensors in the pen tray detect when you lift a pen or the eraser from the tray.

LED lights indicate the active tool.

**Pens and Eraser** Black, blue, red and green pens and a rectangular eraser.

**Resolution** Touch resolution is approximately 4000 × 4000.

**Screen Surface** The hard-coated surface is tear proof, optimized for projection, compatible with

dry-erase markers and easily cleaned with whiteboard cleaner.

Digitizing Technology Resistive technology

**Bundle** 

Frame Finish Dark gray (approximates Pantone® Charcoal Gray 18-0601 TPX) and

Ultrasonic Chrome (approximates metallic Pantone 877C)

Wall-Mount Bracket Includes two 32" (81.3 cm) wide brackets, 10 screws and 10 drywall anchors to

support your wall-mounted interactive whiteboard.

**Projector Mounting** This template ensures simple installation and accurate alignment between the UX60

**Template** projector and your SMART Board 685 interactive whiteboard.

**Installation Instructions** Don't use the installation instructions included in your SMART Board interactive

whiteboard box when installing your SMART Board 685ix interactive whiteboard system. The installation instructions for your SMART Board 685ix interactive

whiteboard system are included with the UX60 projector.

#### Theft Prevention

The SMART Board 685 interactive whiteboard features a pen tray locking feature and a Kensington® security slot on the pen tray.

# **UX60 Projector System Features**

#### **System Components**

Ultra-short-throw UX60 projector, mounting bracket, extended control panel (ECP), remote control, cleaning cloth and all necessary input cables from the ECP to the projector.

#### **Image Adjustment**

The adjustment module includes five mechanical adjustments for aligning the projector image with your interactive whiteboard. The projector also has a focus dial and a digital on-screen menu for brightness, contrast and other image-related attributes.

#### **Display Type**

Native resolution WXGA 1280 × 800 projector

#### **Display Technology**

The projection engine uses single chip DLP® technology by Texas Instruments®, providing Brilliant Color™ performance, High Contrast, and Gamma 2.1 correction with Bright Classroom, Dark Classroom, sRGB, User or SMART Presentation modes and a six segment color wheel.

#### **Brightness**

Estimated at 2000 lumens (typical) at a CCT of 6500 K by the IEC method

#### Lamp Life

2500 hours (Standard 230 W mode) or 4000 hours (Economy 190 W mode)

#### **Aspect Ratio**

Native aspect ratio of 16:10 and support for 16:9, 5:4 and 4:3 ratios

#### **Contrast Ratio**

2000:1

# Video System

HDTV (720p and 1080i) video system compatibility and HD-Ready

#### Compatibility

(HDMI  $^{\mbox{\scriptsize M}}$  technology and 720p) available, NTSC, NTSC 4.43, PAL, PAL-N, PAL-M,

#### SDTV (480i/p and 576i/p) and SECAM

# Video Interface Compatibility

VGA (RGB or Component), S-video, Composite Video and HDMI

#### **Synchronization**

Auto image synchronization (auto tracking, frequency, position adjustment, source detect and phase detect)

#### **Mounting Hardware**

Includes safety tether, limit strap, hardware for mounting the UX60 projector to framed, hollow and solid walls and the hardware for mounting the ECP to the interactive whiteboard.

#### **Input/Output Connections**

- 3-pin mini-DIN 5V/1A output connector
- 4-pin power mini-DIN 5V/2A output connector (reserved for ECP harness cable)
- 7 pin mini-DIN connector (reserved for ECP harness cable)
- S-video input and associated dual channel audio input (two RCA jacks)
- RJ45 jack for network connections
- USB B receptacle (reserved for service access)
- Power socket
- RGB output and associated audio output (3.5 mm jack)

4 | SPECIFICATIONS - SMART BOARD INTERACTIVE WHITEBOARD SYSTEM - MODEL 685ix

- Two RGB inputs and associated audio input (3.5 mm jack)
- RS-232-F connector (DB9 receptacle)
- RCA jack composite video input and associated audio input (two RCA jacks)

HDMI input port

**Projector Fan** 

- Standard speed–0 to 6000' (0 m to 1829 m): 5° C to 35° C
- High speed–6000' to 6800' (1829 m to 2073 m): 5° C to 30° C

**Projector Noise** 

36 dBA (high fan speed) or 31 dBA (standard fan speed), measured using JIS method

**Power Requirements** 

100V AC to 240V AC, at 50 Hz to 60 Hz

**Power Cable** 

Includes one 14' 9" (4.5 m) power cable

**External Control** 

RJ45 connector for ethernet connections (cable not supplied) and RS-232 serial for room control systems

**Power Consumption** 

310 W (Standard mode), 2 W (Standby mode) and 260 W (Economy mode)

**Remote Control** 

Provides the primary method of controlling the UX60 projector settings

**Theft Protection** 

The UX60 projector system features optional security screws on the projector plate to safeguard the adjustment knobs and two optional padlocked rings to secure the system to the mounting bracket. The projector will function if it's separated from the ECP, but only if the remote is available. The projector will function if it's separated from the remote, but only if the ECP is connected. A Kensington security lock slot is provided to secure the system to a wall as a visual and physical theft deterrent.

# Extended Control Panel (ECP) Features

#### **Input/Output Connections**

- Three USB A receptacles (for peripheral devices)
- Three RCA jacks (composite video input) and associated audio input (3.5 mm jack)
- USB B receptacle (primary computer)
- DB15-M socket (ECP harness cable only)
- USB B receptacle (secondary computer)
- RJ11 6-wire jack for SC9 connector cable
- USB B receptacle (primary computer)
- USB A receptacle (SMART Board interactive whiteboard only)

**Volume Control** 

Controls sound range

**Power Button** 

Turns the projector on and off

**Input Selection Buttons** 

Selects the projector video and audio inputs through the available input sources: VGA1, VGA2, Composite, S-video and HDMI. The USB Hub recognizes dual PC switching, and allows the USB A ports to be disabled.

5 | SPECIFICATIONS - SMART BOARD INTERACTIVE WHITEBOARD SYSTEM - MODEL 685ix

# Storage and Operating Specifications

• Maximum storage temperature: 104°F (40°C)

Minimum storage temperature: -4°F (-20°C)

Operation • 41°F to 95°F (5°C to 35°C) from sea level to an altitude up to 6000'

(0 m to 1829 m)

• 41°F to 86°F (5°C to 30°C) from 6000' to 9800' (1829 m to 2987 m)

**SMART Order Numbers** 

SB685ix 87 1/8" (221.3 cm) diagonal SMART Board 685 interactive whiteboard with a UX60

projector system

20-01175-20 Replacement projector lamp

**Optional Accessories** 

RPEN-ER Replacement set of four pen tray pens (black, red, blue and green) and a

rectangular eraser

**RPEN** Replacement set of four pen tray pens (black, red, blue and green)

SBA USB Audio system for SMART Board 600i interactive whiteboard systems

# **Physical Dimensions**

### **Right Side View Front View** 77 1/2" (196.9 cm) 16 1/2" 17 2/5" (41.9 cm) (44.2 cm) 10 3/5" (26.9 cm) 3 3/8" (9.4 cm) 18 1/2" (47 cm) 85" (215.9 cm) 1/8" (117.2 cm) 96" (243.8 cm) 87 118" (22<sup>1,3</sup> cm) (Recommended Height) 78" (198.1 cm) (125.7 cm) 74" (188.0 cm) 38 1/4 Alternate ECP Mounting Location **ECP Right Side View ECP Front View Projector Mounting Bracket** ĺΨΛ 1 1/8" (2.8 cm) 8 7/8" (22.6 cm) (6.6 cm) 2 2/8" 6" (15.2 cm) (5.8 cm) 12" (30.5 cm)

www.smarttech.com/support www.smarttech.com/contactsupport Support +1.403.228.5940 or Toll Free 1.866.518.6791 (U.S./Canada)



©2009 SMART Technologies ULC. All rights reserved. The SMART logo, SMART Board and smarttech are trademarks or registered trademarks of SMART Technologies ULC in the U.S. and/or other countries. HDMI and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC. All other third-party product and company names may be trademarks of their respective owners. SMART Board 685ix interactive whiteboard system Patent No. US5448263; US6141000; US6320597; US6326954; US6337681; US6540366; US747636; US7151533; US7289113; US7499033; CA2058219; and CA2252302. Other patents pending. UX60 projector system Patent No. US6540366. Other patents pending. Contents subject to change without notice. 08/2009.