

# Crestron TPMC-8X

## Isys i/O™ 8.4" WiFi Touchpanel

w/Windows® XP Embedded



Crestron's Isys i/O TPMC-8X is a compact, stylish Wi-Fi touchpanel featuring the Windows® XP Embedded OS to deliver a 2-way wireless control solution with blazingly fast performance and native capabilities for browsing the Internet, streaming multimedia, and much more. A brilliant 8.4" active-matrix SVGA display and 16-bit color depth combine to produce stunning 3D graphics using new dynamic menu objects, dynamic graphics, animations, multimode objects, PNG translucency, and exclusive Synapse™ image rendering – all with astonishing speed.

**Advanced Ergonomics**—Incredibly thin and compact, the TPMC-8X is brilliantly designed to provide a powerful mobile control solution that's easy to hold and intuitive to use. Its magnesium alloy enclosure presents a sleek, modern appearance that is both rugged and lightweight.

**Tactile Controls**—An integrated 5-way thumbpad and up/down arrow buttons add quick-access and tactile response for controlling functions ranging from simple volume adjustment and channel selection to on-screen menu navigation or even pan/tilt camera control. Four additional "softkeys" are positioned below the touchscreen, programmable for context-sensitive menu functions. A stylus is even included for use with the on-screen keyboard, conveniently stowed in its own storage slot.

**Bluetooth® Technology**—Built-in Bluetooth enables the use of a wireless mouse, keyboard, and other devices. A USB 2.0 port is also provided for connecting wired devices.

**Biometric Scanner**—The built-in fingerprint scanner unleashes a whole new level of convenience and security, allowing individual users to be identified instantly and logged on automatically. With just the touch of a fingertip, each user can be presented with a unique graphical interface with its own set of preferences, access privileges, and even its own look through the use of touchpanel "skins".

**Wi-Fi Wireless**—Integrated 802.11a/b/g Wi-Fi technology with WEP encryption delivers secure, high-speed 2-way wireless performance across wireless LAN's, affording mobile freedom and seamless communications with Crestron control systems, computers, digital media servers, and other IP-based devices.

**Embedded PC**—The power of Isys i/O is in its embedded PC engine, combining rock solid touchpanel performance with built-in Windows Media® Player and RealPlayer®, Internet Explorer, Adobe® Acrobat® Reader, and Microsoft Word, Excel, and PowerPoint® document viewers. While simultaneously controlling your home theater or boardroom, the TPMC-8X provides everything needed for enjoying online music and movies, and viewing Web pages and other documents without necessitating a separate computer.

The TPMC-8X also lets you access data and run applications on other computers via Remote Desktop, and use NetMeeting® and Skype™ for interactive conferencing and voice-over-IP (VoIP) communications – right on the touchpanel.

Built on the Windows XP Embedded operating system, the TPMC-8X delivers a powerful and secure platform for touchpanel control with integrated PC capabilities. Programmatic control erases the lines between control system and PC, allowing programmers to customize each application's behavior within the touchpanel environment to create a truly powerful and user-friendly interface.

**Wireless Video**—For presentation preview, surveillance, or pure entertainment, the TPMC-8X makes it easy to view security cameras, movies, and other video sources right on the touchscreen. In addition to the wide range of streaming video formats

supported by its onboard media player applications, the TPMC-8X also features native support for video over IP from a variety of 3rd-party Web cameras and servers using the motion-JPEG format.

**Audio Features**—Its built-in microphones, stereo speakers, and headphone output support clear voice communications for VoIP and conferencing applications, or just listening to online music and videos. Customized WAV files can be loaded on the touchpanel to add dimension to the touchscreen graphics with personalized sounds, button feedback, and voice prompts.

**Li-Ion Rechargeable Batteries**—A field-replaceable Lithium Ion battery pack onboard the TPMC-8X provides fast-charging, long-lasting wireless operation without the "memory" issues typical of other rechargeable batteries. An external "booster" battery pack is also available, providing up to 20 hours of typical use between charges. The optional external battery pack clips neatly to the rear of the touchpanel without tools, adding 0.75 inch depth and non-slip rubber feet resulting in a fixed tilt angle of 7 degrees.

**Docking Station Options**—Optional desktop or wall mount docking stations afford a choice of convenient charging solutions, adding 10/100 Ethernet for direct connection to a wired LAN, plus two USB ports for mouse and keyboard. The desktop dock allows the touchpanel to be operated upright at a 37 degree angle, while the wall mount model provides a secure, flush look.

> *Stylish and compact ergonomic design*

> *8.4" active matrix display | 800 x 600 resolution*

> *16-bit Isys i/O graphics | Synapse image rendering algorithm*

> *802.11a/b/g Wi-Fi 2-way wireless communications*

> *Windows XP Embedded operating system*

> *Onboard PC applications for Web browsing, streaming media, conferencing, VoIP, and remote desktop*

> *Wireless video from network cameras and servers*

> *Built-in microphone and stereo speakers*

> *5-way thumbpad and 4 "Softkey" buttons*

> *Includes stylus with onboard storage slot*

> *Built-in biometric fingerprint scanner | Bluetooth technology*

> *External "booster" battery pack available*

> *Optional desktop and wall mount docking stations*

# Crestron TPMC-8X Isys i/O™ 8.4" WiFi Touchpanel

## SPECIFICATIONS

### Touchscreen Display

**Display Type:** TFT Active matrix color LCD

**Size:** 8.4 inch (21.3 cm) diagonal

**Aspect Ratio:** 4:3 SVGA

**Resolution:** 800 x 600 pixels

**Brightness:** 200 nits (cd/m<sup>2</sup>)

**Contrast:** 500:1

**Color Depth:** 18-bit, 262k colors

**Illumination:** Edgelit fluorescent

**Viewing Angle:** ±65° horizontal, +65°/-45° vertical

**Touchscreen:** Resistive membrane

### Buttons & Switches

**Softkeys:** (4) programmable "softkey" buttons below touchscreen

**Thumbpad:** (1) programmable 5-way thumbpad (4-way navigation plus center "ENTER" button)

**Arrows:** (2) programmable up/down pushbuttons

**Power:** (1) pushbutton, initiates "Power On" and "Power Down"

**Battery:** (1) Recessed slide switch inside battery compartment, shuts off battery for long-term storage

### Biometric Scanner

AuthenTec EntrePad® 1610 fingerprint scanner, identifies up to 30 users by fingerprint

### LED Indicators

**Power:** (1) Green LED, indicates touchpanel power status

**Battery:** (1) Green/yellow dual-color LED, indicates battery condition and charging status

**WiFi:** (1) Green LED, indicates wireless network connection status

### Memory

**DDR SDRAM:** 512 MB

**Flash:** 1 GB

**Compact Flash:** Accepts up to 4GB Type II CF+ (not included)

**Maximum Project Size:** 190 MB

### Operating System

Microsoft® Windows® XP Embedded

### Graphic Engine

Isys i/O engine, 16-bit non-palette graphics; 65,536 colors; Synapse image rendering algorithm; multi-mode objects; dynamic menu objects; dynamic graphics; PNG translucency; 24 fps animation; transition effects

### Embedded PC Applications<sup>1</sup>

Microsoft Internet Explorer w/Macromedia® Flash® plug-in, Windows Media® Player, RealPlayer®, Axis® Media Control, Crestron MJPEG Viewer, Remote Desktop, NetMeeting®, Skype™, VNC Viewer, Java™ Runtime, DirectX®, Adobe® Acrobat® Reader, WordPad, and viewers for MS Word, Excel, and PowerPoint®

### Wireless<sup>1</sup>

**RF Transceiver:** IEEE 802.11a/b/g Wi-Fi, 5 or 2.4 GHz 2-way RF, static IP or dynamic IP via DHCP, 64 and 128-bit WEP encryption, requires third-party 802.11a/b/g wireless access point and Ethernet-enabled Crestron 2-Series control system

**Range:** 30 feet (10m) @54Mbps; range and speed vary based upon environmental conditions

**Bluetooth:** Bluetooth® V1.2 Class 1 built in

### Video

**Streaming/File Formats:** MPEG4 & MJPEG via Axis Media Control or Crestron MJPEG Viewer, plus all formats supported by the embedded media player applications<sup>1</sup>

## AVAILABLE ACCESSORIES

### TPMC-8X-DS

Desktop Docking Station

### TPMC-8X-DSW

Wall Mount Docking Station

### TPMC-8X-BTP

Internal Battery Pack

### TPMC-8X-BTPE

External Battery Pack

## Audio

**Hardware Features:** Dual onboard microphones, built-in stereo speakers, stereo headphone output

**Streaming/File Formats:** As supported by the embedded media player applications

**Audio Feedback (WAV):** 8 & 16 bit PCM, mono & stereo, 8 – 44.1 kHz sampling rates

**Amplification:** Stereo, 1.1 Watts per channel

## Connectors

**HEADPHONES:** (1) 3.5 mm TRS mini phone jack

Stereo headphone output, 12mW per channel

Minimum Impedance: 32 ohms

**USB:** (1) USB Type A female

USB 2.0 port for keyboard, mouse, and computer console<sup>1</sup>

**MEMORY CARD:** (1) Type II CF+ Card slot<sup>1</sup>

**12V 3.5A:** (1) DC power input jack (power supply included)

## Battery

**Internal Battery:** Lithium Ion, 7.4 Volt, 2000 mAh, model TPMC-8X-BTP included

**Usage per Charge:** ~1.5 hours continuous, 9+ hours under normal use with standby/powerdown activated<sup>2</sup>

**Charging Time:** ~2 hours (~2.5 to 3 hours when in use)

## Power Requirements

**Touchpanel:** 42 Watts (3.5 Amps) @ 12 Volts DC

**Universal Power Supply/Charger (included):** 100-240V AC 50/60Hz

## Environmental

**Operating Temperature:** 32° to 104°F (0° to 40°C)

**Storage Temperature:** 14° to 140°F (-10° to 60°C)

**Humidity:** 10% to 90% RH (non-condensing)

## Enclosure

**Construction:** Magnesium alloy case with plastic buttons, stylus storage slot (stylus included), integral docking station port

## Dimensions

**Height:** 8.21 in (20.85 cm)

**Width:** 9.69 in (24.61 cm)

**Depth:** 0.92 in (2.32 cm)

## Weight

1.98 lbs (0.90 kg)

<sup>1</sup> See Website or contact Crestron for a current list of compatible devices and embedded applications. To ensure reliable performance, new device drivers and applications are available only from Crestron through firmware updates.

<sup>2</sup> External battery pack allows ~3.5 hours continuous, 20+ hours under normal use.



TPMC-8X shown with optional TPMC-8X-DS Desktop Docking Station