

TPMC-8X-GA

Isys® 8.4" WiFi Touch Screen

- > Stylish and compact ergonomic design
- > 8.4" active matrix touch screen display
- > 800 x 600 SVGA display resolution
- > 16-bit color graphics powered by Core 3™
- > Automatic display brightness control
- > High-performance 802.11a/b/g Wi-Fi wireless communications
- > Up to 80 feet omnidirectional RF range^[1]
- > Onboard PC applications for Web browsing, playing digital media, and viewing digital documents
- > VNC viewer for remotely accessing and controlling external computers
- > Multi-format streaming video and audio
- > WAV file customizable audio feedback
- > Crestron® wireless IP intercom capability
- > High-powered speakers, headphone jack, and microphone
- > 5-way thumbpad, up/down arrow buttons, and 4 "hard keys"
- > Stylus with built-in storage slot
- > On-screen mouse and keyboard capability
- > USB port for external mouse and keyboard^[4]
- > Intelligent power management with "wake on touch"
- > Internal Li-Ion battery pack included
- > External "booster" battery pack available^[2]
- > Optional desktop and wall mount docking stations^[2]

The Isys TPMC-8X-GA from Crestron® delivers a stylish Wi-Fi touch screen controller offering enhanced 2-way wireless performance, multimedia and Web browsing capabilities, IP intercom, and the latest advanced touch screen technology powered by our groundbreaking Core 3 UI™. Its brilliant 8.4" SVGA touch screen display and high-powered onboard speakers produce amazing graphics, video, and audio for an incredible personal media experience. Sleek, rugged, and lightweight, the TPMC-8X-GA is brilliantly designed to provide a powerful mobile control solution that's easy to hold and intuitive to use.

Wi-Fi Performance—Redefined!

Crestron has redefined Wi-Fi wireless performance with the TPMC-8X-GA, achieving a remarkable 80 feet omnidirectional range^[1] for exceptional freedom of movement. The choice of 802.11 a, b, and g protocols affords reliable, high-speed 2-way wireless performance in virtually any RF environment. It takes mere minutes to configure the TPMC-8X-GA for use with a Crestron [CEN-WAP-ABG](#) Wireless Access Point^[2] for a simple, secure Wi-Fi touch screen network solution.

Advanced Touch Screen Control

Crestron touch screens offer an ideal user-interface for multimedia presentation, home automation, and much more, providing a wide-open canvas for the creation of custom control screens tailored to the needs of the end-user. Touch screens do away with piles of remote controls, cryptic control screens and cluttered wall switches, simultaneously expanding and simplifying control over a broad range of complex devices and systems.



Fully custom touch screen control is afforded through the TPMC-8X-GA's ample 8.4" touch screen. Dynamic graphics and text capabilities enable the display of all kinds of useful data and alluring eye candy—from AV controls and icons—to room temperature and lighting levels—to photos and video—to digital media playlists complete with metadata and cover art. Advanced gestures navigation, animated objects, multi-mode buttons, PNG translucency, and page transition effects enhance the palette for creating interactive GUIs that are both eye-catching and easy to use.

Powered by Core 3™^[3]

The Crestron Core 3 UI framework enables the generation of dynamically rich user interfaces with greater power and ease than ever. Core 3 lets touch screen designers merge multiple objects and apps on screen leveraging the power of Adobe® Flash®^[3], streaming video, Web browsing, IP intercom, and other technologies to deliver an engaging and ultra-intuitive touch screen experience. Use gestures navigation to effortlessly browse through music and movie libraries, scroll through TV channels and radio stations, and select any desired control app from an intuitive menu of colorful 3D icons. Personalize the touch screen desktop with animated clocks, calendars, weather widgets, news feeds, and other informative objects. Even apply themes and backgrounds that change on the fly with each user, event, or season.

But, the power of Core 3 extends beyond impressive graphics and animated objects, unleashing tremendous new capabilities for controlling devices and managing complete integrated systems. Using the Core 3 SDK, programmers can develop fully functioning "device apps" that can be dropped into each touch screen project without additional programming or resizing. Or, choose from an expanding library of fully developed device apps to instantly add controls for security systems and HVAC, provide sophisticated navigation for media servers and tuners, and enable user-friendly editing of lighting scenes and channel presets. With Core 3, the possibilities are virtually limitless.

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Tactile Controls

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 "hard key" buttons are positioned below the touch screen, 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.

Embedded PC & HD Streaming Media

While simultaneously controlling the home theater or boardroom, the TPMC-8X-GA provides everything you need to enjoy online music and videos, browse Web pages, and access most types of digital media without necessitating a separate computer. Embedded PC applications include Internet Explorer®, Windows Media® Player, Adobe Acrobat® Reader, and Microsoft® PowerPoint®, Word, and Excel® document viewers. In addition, VNC Viewer support delivers enhanced cross-platform interaction with computers over the network or Internet, allowing remote access and control of desktop applications to unleash all kinds of new system integration and presentation possibilities.

Wireless Video

Embedded video capability makes it possible to monitor a security camera, preview a DVD or TV channel, and enjoy YouTube®, Netflix®, and other online media, right on the touch screen display. Over a wireless or wired LAN connection, the TPMC-8X-GA supports a wide range of streaming and downloadable file formats, including live video from a Web camera or network video streamer (Crestron [CEN-NVS100](#)^[2] or equivalent). Video images can be displayed full screen, or in a fully-scalable window positioned anywhere on the screen.

Speakers and Microphone

High-powered built-in speakers and headphone output provide for an enhanced multimedia experience, reproducing loud and clear audio for streaming media and internal PC applications, and enabling 2-way IP intercom in combination with the integrated microphone. Customized WAV files can also be loaded on the TPMC-8X-GA to add dimension to the touch screen graphics with personalized sounds, button feedback, and voice prompts.

IP Intercom

Crestron IP intercom enables 2-way voice communication and room monitoring over WiFi or Ethernet between the TPMC-8X-GA and other compatible Crestron touch screens.

Keyboard/Mouse Options

On-screen keyboard and mouse capabilities enable complete control of the TPMC-8X-GA's embedded Web browser and other applications, and can also be used to control external network devices like the Crestron [ADMS](#) Intermedia Delivery System™^[2] as well as computers running TouchPoint™ Virtual Mouse & Keyboard Software ([VMK-WIN](#)^[2]). A USB port is also provided for the connection of a physical keyboard and mouse^[4].

Battery-Saving Enhancements

Fast-charging, long-lasting wireless operation is afforded by an internal field-replaceable Lithium Ion battery pack ([TPMC-8X-BTP](#)^[5]). Over 9 hours of typical use is possible between charges thanks to intelligent onboard power management and auto-brightness control.

- Auto-Brightness - smoothly maintains optimal visibility under varying lighting conditions while preserving precious battery life.
- Standby Mode - turns off the touch screen display to save power while the hard buttons remain active. Lets you adjust volume or change channels by pressing a hard button without waking the screen.
- Power Down Mode - suspends the touch screen during prolonged periods of non-use. Lets you wake the touch screen by simply touching the screen or pressing the side "Power" button.
- Class D Amplifier - provides loud and clear audio without draining the battery.

An external "booster" battery pack is also available, providing up to 20 hours of typical use between charges.^[6] The optional external battery pack ([TPMC-8X-BTPE](#)^[2]) clips neatly to the rear of the touch screen without tools, providing non-slip rubber feet and a 7 degree tilt for enhanced tabletop operation.

Docking Station Options

Optional desktop and wall mount docking stations are offered, each designed to enable full use of the touch screen while charging its battery (or batteries). The Desktop Docking Station ([TPMC-8X-DS](#)^[2]) allows the touch screen to be operated upright at a 37 degree angle, while the Wall Mount Docking Station ([TPMC-8X-DSW](#)^[2]) achieves a flush in-wall appearance. Both options afford wired Ethernet and expanded USB connectivity. The wall mount option also includes an audio output for integration with an external sound system.

SPECIFICATIONS

Touch Screen Display

Display Type: TFT active matrix color LCD
Size: 8.4 inch (213 mm) diagonal
Aspect Ratio: 4:3 SVGA
Resolution: 800 x 600 pixels
Brightness: 200 nits (cd/m²)
Contrast: 500:1
Color Depth: 18-bit, 262k colors
Illumination: Edgelit fluorescent w/auto-brightness control
Viewing Angle: ±65° horizontal, +65°/-45° vertical
Touch Screen: Resistive membrane

Buttons & Switches

Hard Keys: (4) programmable pushbuttons below touch screen
Thumbpad: (1) programmable 5-way thumbpad (4-way navigation plus center "ENTER" button)
Arrows: (2) programmable up/down pushbuttons

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Power (left side): (1) pushbutton, initiates "Power On" and "Power Down"
Battery: (1) Recessed slide switch inside battery compartment, shuts off battery for long-term storage

LED Indicators

Power: (1) Green LED, indicates touch screen power status
Battery: (1) Green/yellow dual-color LED, indicates battery condition and charging status
Wi-Fi: (1) Green LED, indicates wireless network connection status

Memory

DDR2 SDRAM: 1 GB
Flash: 4 GB
Memory Card: Accepts up to 4 GB MMC compatible card (not included)
Maximum Project Size: 190 MB

Graphic Engine

16-bit non-palette graphics, 65,536 colors, Crestron Core 3 UI™^[3], swipe gestures, multi-mode objects, dynamic graphics and text, PNG translucency, full-motion (60 fps) animation, transition effects

Embedded Applications

Microsoft Internet Explorer® w/Adobe® Flash® plug-in and Java™ Runtime plug-in, Windows Media® Player, Crestron MJPEG Viewer, VNC Viewer, Remote Desktop, Crestron Keyboard, Adobe® Acrobat® Reader, WordPad, MS Word Viewer 2003, Excel® Viewer 2003, PowerPoint® Viewer 2003

Wireless Communication

Transceiver: IEEE 802.11a/b/g Wi-Fi (5.8 or 2.4 GHz 2-way RF), static IP or dynamic IP via DHCP, 64 and 128-bit WEP encryption
Range: Up to 80 feet (24.4 m) omnidirectional using 802.11 b/g, 35 feet (10.7 m) omnidirectional using 802.11 a, @54Mbps; range and speed vary based upon environmental conditions
Gateway: Requires a CEN-WAP-ABG-1G, CEN-WAP-ABG-CM, or similar 802.11a/b/g wireless access point and Ethernet-enabled Crestron control system
Roaming: Requires a Cisco® controller solution to be installed and commissioned by a Cisco certified technician.

Wired Communication

Ethernet: (Via optional docking station) 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP
USB: USB 2.0 host for mouse, keyboard, and USB storage devices

Video

Streaming/File Formats: MJPEG via Crestron MJPEG Viewer, plus all formats supported by the embedded media player application

Audio

Features: Built-in microphone and speakers, headphone output, Crestron IP Intercom

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

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

Amplification: High-efficiency Class-D stereo 2.1 Watts per channel

Connectors

HEADPHONES: (1) 3.5 mm TRS mini phone jack; Stereo headphone output

USB: (1) USB Type A female; USB 2.0 port for keyboard, mouse, and storage devices

12V 3.5A: (1) 2.5mm barrel DC power jack; 12 Volt DC power input (power pack included)

MEMORY CARD: (1) MMC compatible card slot inside battery compartment; accepts up to 4 GB MMC (not included)

Battery

Internal Battery: Lithium Ion, 7.4 Volt, 2200 mAh, Crestron model TPMC-8X-BTP included

Usage per Charge: ~1.5 hours continuous, 9+ hours under normal use with Standby/Power Down activated^[6]

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

Power Requirements

Power Pack: 3.5 Amps @ 12 Volts DC; 100-240 Volts AC, 50/60 Hz power pack included

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)

Heat Dissipation: 143 BTU/Hr

Enclosure

Construction: Plastic front and metal back, stylus storage slot (stylus included), integral docking station port

Dimensions

Height: 8.21 in (209 mm)

Width: 9.69 in (247 mm)

Depth: 1.13 in (29 mm), 1.67 in (43 mm) with external battery pack^[2]

Weight

1.98 lb (0.90 kg)

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MODELS & ACCESSORIES

Available Models

TPMC-8X-GA: Isys® 8.4" WiFi Touch Screen

Included Accessories

TPMC-8X-BTP: Internal Battery Pack

Available Accessories

TPMC-8X-DS: Desktop Docking Station

TPMC-8X-DSW: Wall Mount Docking Station

TPMC-8X-BTPE: External Battery Pack

CEN-NVS100: Network Video Streamer

CEN-WAP-ABG-1G: Wall Mount 802.11a/b/g Wireless Access Point

CEN-WAP-ABG-CM: Ceiling Mount 802.11a/b/g Wireless Access Point

CEN-NVS100: Network Video Streamer

SW-VMK-WIN: TouchPoint™ Virtual Mouse & Keyboard Software for Windows®

Notes:

1. See specifications for full wireless range details.
2. Item(s) sold separately.
3. Future feature enabled through a future firmware release.
4. USB mouse/keyboard not included.
5. Item included; see individual product specifications for complete details.
6. External battery pack allows ~3.5 hours continuous, 20+ hours under normal use.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

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