

# FT-TS600

## FlipTop™ Touch Screen

- > Flush mount tabletop control and connectivity in one stylish FlipTop™ design
- > Integrated 5" capacitive color touch screen with Smart Graphics™ support [4]
- > High-performance H.264 streaming video over Ethernet
- > Seamless integration with Crestron® DigitalMedia™
- > Five soft-touch capacitive buttons for common functions
- > Hands-free audio conferencing using Rava® SIP Intercom Technology [1]
- > Customizable audio feedback
- > Built-in microphone and speaker
- > Balanced line output for amplification of the speaker signal
- > PoE or PoE+ network powered
- > Configurable connection compartment allows versatile combinations of pullout cables, cable retractors, connector plates, and AC power outlets [2]
- > Tapered cable notch allows lid to be closed with cables plugged in
- > Lacing bar for under table cable management
- > Universal cutout size fits all new and future FlipTops™
- > Black anodized or brushed aluminum finish

The FT-TS600 FlipTop™ Touch Screen by Crestron® provides a configurable control and connectivity solution in a stylish, flush mount tabletop design. Flipping open the “FlipTop” lid exposes a brilliant 5” color touch screen, gracefully angled for easy operation and viewing. The built-in connection compartment keeps interface cables and connectors at the ready for plugging in laptop computers, mobile devices, AV sources, and other equipment.

A FlipTop Touch Screen is an ideal complement to a DigitalMedia™ transmitter or any other AV interface device. It provides an intuitive and inviting “front end” for the more complex and mundane technology hidden away beneath the tabletop. The integrated touch screen can provide control for an entire room, offering a fully-customizable user interface for selecting presentation sources, adjusting audio levels, dimming the lights, and even calling for lunch service. Advanced capabilities include displaying full-motion video and hands-free audio conferencing [1].

### FlipTop Design

Handsomely finished in a choice of black anodized or brushed aluminum, Crestron FlipTops™ lend a contemporary metallic accent to conference tables and podiums. The FT-TS600 installs cleanly in virtually any flat, horizontal surface up to 1-3/4 inch (44 mm) thick. Beveled edges provide for a nearly flush appearance.

The FlipTop lid flips open with just the tip of a finger to access the touch screen and connection compartment. Once connections and touch screen settings are made, the lid can be closed. A generous, tapered notch at the front of the lid opening allows interface cables to remain connected even when the lid is closed.



Shown in Brushed Aluminum Finish with Optional Cable Retractors, Power Outlet Module, and Connector Plates

### Connection Compartment

The FT-TS600 is highly configurable to provide a well-organized connectivity solution tailored to each unique application. It provides options for both pullout cables and panel-mounted connectors, with or without AC power outlets. It comes standard with two cable pass-through plates and four blank plates, all of which can be swapped out for your choice of cable retractors, connector plates, and AC power outlet modules.

- **Cable Pass-Through Plates** - Each cable pass-through plate provides four grommets to accommodate Crestron Certified Interface Cables [2] and other AV, data, and communication cables. The user end of each cable stows neatly within the connection compartment ready for use while excess cable simply drops out-of-sight below the cable pass-through plate. The grommets provide a smooth, slippery surface for easy pullout of each cable. Blank caps are also provided to cover any unused holes. The cable pass-through plates are positioned at the left and right sides of the connection compartment. The FT-TS600 supports one or two cable pass-through plates. Two are included.
- **Cable Retractors** - For an even more refined cable management solution, the FT-TS600 accommodates up to six Crestron CBLR2 Cable Retractors. [2] Crestron cable retractors feature a patented mechanism that ensures smooth operation while eliminating hanging cable loops beneath the table. Up to three cable retractors can be installed in place of each cable pass-through plate, allowing for a total of six cable retractors.

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- **Connector Plates** - If panel-mounted connectors are preferred, the FT-TS600 can accommodate up to four [FTA-CP](#) Connector Plates.<sup>[2]</sup> Connector plates are offered with a variety of common AV and data connector types. Custom connector plates may also be fabricated by the installer using the blank plates provided. All four connector plates are positioned at the center of the connection compartment.
- **AC Power Outlet Modules** - To provide power for laptops and other portable devices, the FT-TS600 can be equipped with up to four 120 Volt AC (NEMA 5) outlets, or up to two international AC outlets, using your choice of [FTA-PWR](#) series AC Power Outlet Modules.<sup>[2]</sup> Each FTA-PWR module occupies either two or three connector plate spaces. Modules containing two international outlets additionally require one adjacent cable pass-through plate space.

## Integrated 5" Touch Screen

The FT-TS600 features a large 5 inch capacitive touch screen display. Smart Graphics™ technology provides a stunning custom user interface with fluid gesture-driven controls, animated feedback, metadata, embedded apps, and high-performance H.264 video. Five soft-touch capacitive buttons are also provided for quick access to commonly used functions.

## Streaming Video

High-performance streaming video capability makes it possible to preview a video source during a presentation or see a live camera image while video conferencing — right on the FlipTop touch screen! Support for H.264 and MJPEG formats allows the FT-TS600 to display streaming video from an IP camera, a streaming server (Crestron [CEN-NVS200](#), [DM-TXRX-100-STR](#), or similar<sup>[2]</sup>), or a DigitalMedia switcher. Video is delivered to the touch screen over Ethernet, eliminating the need for any extra video wiring.

## Hands-Free Audio Conferencing

Using [Rava](#)® SIP Intercom Technology, the FT-TS600 enables hands-free VoIP communication between any two Rava-enabled Crestron touch screens. Rava works over Ethernet, supporting audio conferencing<sup>[1]</sup>, intercom, video intercom<sup>[3]</sup>, and paging without any special wiring. VoIP phone capability is also possible through integration with an SIP-compatible IP phone system or SIP server, allowing hands-free telephone and teleconferencing functionality complete with speed-dialing, caller ID, custom ringers, and other enhancements. Built-in echo cancellation affords full-duplex performance for clear, seamless voice communication using the FT-TS600's integrated microphone and speaker.

## Line Output

In addition to its onboard speaker, the FT-TS600 includes a balanced line-level audio output, allowing the speaker signal to be routed to the room's audio system. Amplifying the FlipTop's audio signal through the room speakers enhances its audio conferencing capabilities, allowing a small group of individuals to participate in a conference call using a single FT-TS600.<sup>[1]</sup>

## Power over Ethernet

Using PoE+ technology, the FT-TS600 gets its operating power right through the LAN wiring. PoE (Power over Ethernet) eliminates the need for a local power supply or any dedicated power wiring. The FT-TS600 supports LLDP advanced power management, requiring only 9.4 Watts



All cables, power outlet module, & connector plates sold separately

**FT-TS600-BALUM - Shown in Brushed Aluminum Finish with Standard Cable Pass-Through Plates, Optional Power Outlet Module, and Optional Connector Plates**



All cable retractors, power outlet module, & connector plate sold separately

**FT-TS600-B - Shown in Black Anodized Finish with Optional Cable Retractors, UK Power Outlet Module, and Connector Plate**

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from the PoE power budget when powered by a compatible PoE+ switch such as the Crestron [CEN-SWPOE-16](#)<sup>[2]</sup> (see specifications for more information).

## Build Yours Now

Your custom FlipTops are waiting. Simply use the [Crestron FlipTop Configuration Tool](#) to build and order yours in just minutes! The drag-and-drop user interface makes it easy to select your choice of finishes, cables, cable retractors, connector plates, and power outlets.

## SPECIFICATIONS

### Touch Screen Display

**Display Type:** TFT active matrix color LCD  
**Size:** 5 inch (127 mm) diagonal  
**Aspect Ratio:** 15:9 WVGA  
**Resolution:** 800 x 480 pixels  
**Brightness:** 300 nits (cd/m<sup>2</sup>)  
**Contrast:** 450:1  
**Color Depth:** 24-bit, 16.7M colors  
**Illumination:** Edgelit LED  
**Viewing Angle:** ±69° horizontal, +62°/-64° vertical  
**Touch Screen:** Projected capacitive

### Buttons

**Hardkeys:** (5) Projected capacitive pushbuttons, programmable, pre-labeled with icons for “Power”, “Home”, “Lights”, “Up”, and “Down”

### Memory

**DDR3 SDRAM:** 1 GB  
**Flash:** 4 GB  
**Maximum Project Size:** 512 MB

### Graphics Engine

Supports Smart Graphics™<sup>[4]</sup>

### Communications

**Ethernet:** 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP, IEEE 802.3at Type 2 compliant

### Video

**Streaming Formats:** H.264 (MPEG-4 part 10 AVC), MJPEG

### Audio

**Features:** Built-in microphone and speaker, Rava® SIP Intercom, line out (same signal as speaker)

**Audio Feedback Formats:** MP3

### Connectors – Connection Compartment

**Cable Pass-Through Plates:** Supports up to two cable pass-through plates (included). Each plate includes four grommets which may be selectively covered using blank caps provided. The cable pass-through plates are positioned at the left and right sides of the connection compartment.

**Cable Retractors:** Up to three CBLR2 Cable Retractors<sup>[2]</sup> can be installed in place of each pass-through plate, allowing for a total of six cable retractors.

**Connector Plates:** Supports up to four FTA-CP Connector Plates.<sup>[2]</sup> Four blank plates are included. The connector plates are positioned at the center of the connection compartment.

**AC Power Outlet Modules:** A single FTA-PWR-102 Dual AC Power Outlet Module<sup>[2]</sup> can be installed in place of any two adjacent connector plates, or two FTA-PWR-102 modules can be installed in place of all four connector plates. A single FTA-PWR-2\*1 series International AC Power Outlet Module<sup>[2]</sup> can be installed in place of any three contiguous connector plates. A single FTA-PWR-2\*2 series Dual International AC Power Outlet Module<sup>[2]</sup> can be installed in place of any three contiguous connector plates plus the adjacent cable pass-through plate.

### Connectors – Bottom Panel

**AUD OUT:** (1) 3-pin 3.5 mm detachable terminal block;  
Balanced mono line-level audio output;  
Output Impedance: 100 Ohms;  
Maximum Output Level: 4 Vrms

**COMPUTER:** (1) USB Type B female;  
USB computer console port (6 ft cable included)

**LAN PoE:** (1) 8-pin RJ45, female;  
10Base-T/100Base-TX Ethernet port, Power over Ethernet compliant

**G:** (1) 6-32 screw, chassis ground lug

### Controls & Indicators

**PWR:** (1) Dual-color LED, indicates operating power supplied via PoE, turns yellow while booting and green when operating

**HW-R:** (1) Recessed miniature pushbutton for hardware reset

**LAN PoE:** (2) LEDs, indicate Ethernet port status

### Power Requirements

**Power over Ethernet:** IEEE 802.3at Type 2 PoE+ Powered Device;

- 9.4 Watts if using an 802.3at Type 2 PSE with LLDP advanced power management
- Class 4 (25.5W) if using an 802.3at Type 2 PSE without LLDP
- Class 0 (12.95W) if using an 802.3af (or 802.3at Type 1) PSE

**Utility Power:** Dependent upon the AC power outlet module installed; refer to the FTA-PWR spec sheet for more information<sup>[2]</sup>

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## Environmental

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**Temperature:** 32° to 112° F (0° to 45° C)  
**Humidity:** 10% to 90% RH (non-condensing)  
**Heat Dissipation:** 51 BTU/hr

## Enclosure

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**Chassis:** Metal, black  
**Cover:** Aluminum, black anodized or brushed aluminum finish  
**Touch Screen Bezel:** Aluminum  
**Mounting:** Flush tabletop mount, 1-3/4 in (44 mm) maximum surface thickness, 6-1/4 in (159 mm) deep x 7-1/2 in (190 mm) wide cutout (template provided)

## Dimensions

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**Height:** 8.59 in (218 mm);  
12.34 in (314 mm) with lid open  
**Width:** 7.98 in (203 mm);  
9.19 in (234 mm) with mounting brackets  
**Depth:** 6.77 in (172 mm);  
7.88 in (200 mm) with lid open

## Weight

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5.2 lb (2.4 kg)

## MODELS & ACCESSORIES

### Available Models

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**FT-TS600-B:** FlipTop™ Touch Screen, Black Anodized  
**FT-TS600-BALUM:** FlipTop™ Touch Screen, Brushed Aluminum

### Available Accessories

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**CBL Series:** Crestron® Certified Interface Cables  
**CBLR2 Series:** Cable Retractors for FlipTops™  
**FTA-CBLRA-INSERT-2WIRE-102:** Cable Retractor Spacer Insert  
**FTA-CP:** FlipTop™ Connector Plates  
**FTA-PWR:** FlipTop™ AC Power Outlet Modules  
**CEN-SWP0E-16:** 16-Port Managed PoE Switch  
**CEN-NVS200:** Network Video Streamer  
**DM-TXRX-100-STR:** HD Streaming Transmitter/Receiver  
**SW-VMK-WIN:** TouchPoint® Virtual Mouse & Keyboard Software for Windows®

### Notes:

1. Supports audio conferencing with another Rava-enabled device over an IP network, or with any telephone device through integration with a SIP-compatible IP phone system or SIP server.
2. Item(s) sold separately.
3. H.264 compatible IP camera required.
4. Supports Smart Graphics only. Not compatible with "traditional" UI projects.

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](http://www.crestron.com/salesreps) or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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