

# Archived resources

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## UC-C160-T

### Crestron Flex C160-T – UC Video Conference System Integrator Kit for Microsoft Teams® Rooms

- > A custom video conferencing integration solution for Microsoft Teams<sup>®</sup>
- > Present, call, conference, and collaborate in any room using your choice of AV equipment
- > Native Microsoft Teams touch screen UX provides a consistent user experience with simple operation and one-touch meeting joins
- > A convenient kit solution that works with a range of display devices, USB cameras, and USB audio conferencing devices
- > Ideal for use with Crestron Avia™ DSPs and amplifiers
- > Easy to specify and install no programming or software installation required!
- > Easy to provision and manage through Crestron® XiO Cloud™
- > Works natively with any Microsoft Teams or Skype® for Business account — no MCUs, gateways, or other add-ons needed!
- > Connects and communicates securely over any enterprise or SMB network
- > Supports single or dual display configurations
- > USB 3.0 interface for camera and audio devices
- > HDMI® input for laptop and other AV content sources
- > Dual HDMI outputs for room display devices
- > 10" (257 mm) tabletop color touch screen
- > Support for a second touch screen (sold separately)
- > Active Directory<sup>®</sup> authentication and corporate directory access
- > Microsoft<sup>®</sup> Exchange and Office 365<sup>®</sup> integration
- > Onscreen calendaring and meeting management
- > Optional control of room lighting, shades, thermostats, and other equipment<sup>[1]</sup>
- > IoT cloud based provisioning and management
- > Enterprise-grade security
- > Complete kit contains the touch screen, UC Engine Assembly, cables, power supplies, and 1-year XiO Cloud Premium<sup>(2)</sup>

The Crestron Flex C160-T system (UC-C160-T) provides a customizable video conference room solution for use with the Microsoft Teams<sup>®</sup> intelligent communications platform. It supports single or dual video displays, and enables integration with your choice of displays, cameras, speakers, microphones, mixers, switchers, and audio conferencing interface (or speakerphone). It is ideal for custom designed applications using Crestron Avia<sup>™</sup> DSPs and amplifiers. Control of the complete system is provided via a high-definition 10" tabletop touch screen (included).

Crestron Flex transforms any room into a highly effective collaboration space, enabling people to work together and share content irrespective of location. Intuitive operation, exceptional full-duplex wideband audio, and full-motion HD video afford a gratifying and productive meeting experience for all participants. Crestron Flex is secure, easy to deploy, and easy to manage, with extensive features and capabilities engineered to maximize the value of your investment through increased efficiency and productivity.



#### **Crestron Flex**

**Crestron Flex** is a comprehensive line of unified communications and collaboration solutions for the enterprise. Current options include conferencing and desk phone solutions for Microsoft Teams<sup>®</sup> and Skype<sup>®</sup> for Business, with future solutions coming soon for Zoom Rooms<sup>™</sup> and Open UC (open-platform support for any web collaboration, conferencing, or telephony platform). From the desktop to the conference room and beyond, Crestron Flex delivers a distinctively simple and consistent user experience in all the places people work and meet.

Built on the IoT cloud based XiO Cloud<sup>TM</sup> platform, Crestron Flex empowers IT administrators and AV integrators to deploy, manage, monitor, and *evolve* thousands of networked UC devices — simply, quickly, and securely — all from a single dashboard. By standardizing on Crestron Flex, any organization can realize a more productive and stress-free workplace through greater acceptance and utilization of UC technology that's truly easy to use.

#### Native Microsoft Teams® Experience

Microsoft Teams is the hub for teamwork in Office 365<sup>®</sup> software, engaging people and bringing them together through messaging, voice over IP, online meetings, conferencing, content sharing, and collaboration. The Flex C160-T system brings the full Microsoft Teams IC experience to any meeting space in an enterprise or SMB facility, whether implementing a cloud based Microsoft Teams deployment, on-premises Skype for Business, or a hybrid of the two.



#### **Custom Room Integration**

The Flex C160-T system provides the essential components needed to design a fully custom Microsoft Teams based video conferencing space using your choice of display devices, cameras, speakers, microphones, and other AV equipment. Any Microsoft Teams compliant USB camera and USB audio conferencing interface (or speakerphone) may be used. A non-USB camera or camera switcher may also be integrated by adding a video converter, model HD-CONV-USB-100 (sold separately).

The Flex C160-T system allows rooms of any size and scale to be designed using Crestron Avia digital signal processors and amplifiers, Saros<sup>®</sup> or Vector<sup>™</sup> speakers, and other equipment. Whether designing an executive boardroom, courtroom, council chamber, or blended learning classroom, Crestron Flex makes it easy to implement a totally integrated Microsoft Teams IC solution.

#### **Tabletop Touch Screen**

Whether starting or joining an online meeting, dialing or answering a phone call or video call, looking up contacts, or presenting and sharing content, the Flex C160-T system is incredibly easy and intuitive to use. Simple operation



and one-touch meeting joins are facilitated through a customizable, feature-rich touch screen UX familiar to users of Microsoft Teams and Office 365 software. Its native Teams UI means staff members can move effortlessly between using Crestron Flex in the meeting room and a phone or personal computer at their desk or workstation. Built-in calendaring and corporate directory access provide knowledge workers with the tools they need to work smart and efficiently.

The Flex C160-T system ships with one 10" tabletop touch screen included. A second touch screen (TSW-1060 Series) may be added to provide a second point of control. Additionally, Flex C160-T allows the ability to integrate with a Crestron control system to enable touch screen control over room lighting, motorized window shades, climate control, AV, and other amenities.<sup>[1]</sup>

The touch screen can sit freely on any tabletop, shelf, or credenza, or be permanently attached to the surface using the optional 330° swivel mount kit (TSW-560/760/1060-SMK sold separately). For ultimate flexibility, it can also be removed from its tabletop enclosure and installed in a custom podium or wall (additional accessories may be required). It can be powered using PoE from the network or the included 100-240V PoE injector.

#### UC Engine

All the capabilities of a complete Microsoft Teams video conferencing and content sharing solution are



empowered by the Crestron UC Engine. For ultimate performance, Crestron employs a powerful Intel<sup>®</sup> NUC Mini PC running Microsoft<sup>®</sup> software with built-in XiO Cloud provisioning. The UC Engine forms the core of the Flex C160-T system, providing extreme processing performance, Gigabit Ethernet, and complete connectivity for one or two HD displays, a USB camera, and a USB speakerphone or audio conferencing interface. Presenting and sharing content from a single laptop PC, or from the output of an AV switcher, is facilitated through a single HDMI<sup>®</sup> input, which supports fullmotion HD video and audio via the included HDMI to USB converter. The converter and UC Engine are mounted together on a bracket, which comes fully pre-assembled and ready to install behind the display device(s).



#### **Network Management and Security**

Crestron Flex is an enterprise-grade solution, engineered in partnership with Microsoft to integrate seamlessly into any Microsoft Teams or Skype for Business deployment. Crestron Flex is ideally equipped for mass deployment throughout any-sized corporate, university, medical, military, or governmental facility.

IoT cloud based provisioning enables complete network configuration in advance of hardware delivery, with touchless updates following installation. Crestron Fusion<sup>®</sup> or XiO Cloud management enables monitoring and logging of room and equipment usage, as well as centralized help desk support. Advanced security features ensure privacy, reliability, and compliance with the organization's IT policies.

#### XiO Cloud<sup>™</sup> Connected

XiO Cloud is Crestron's unifying IoT cloud based platform for remotely provisioning, monitoring, and managing Crestron devices across an enterprise or an entire client base. XiO Cloud enables installers and IT managers to deploy and manage thousands of devices in the amount of time it would ordinarily take to manage just one. It provides a zero-touch solution that allows complete configuration of device settings without any hardware in hand, then simply connect each device on site and let XiO Cloud push out the settings, licenses, drivers, and firmware updates – automatically and securely – for a quick and painless, ready-to-use deployment.

Ongoing XiO Cloud services facilitate daily management and monitoring of every device through a single dashboard with comprehensive reporting and logging, live status viewing and alerts, performance metrics and analytics, scheduled actions and updates, and more. As requirements grow and evolve, new features and functionality can be added easily to one or many devices at any time without ever going on site. XiO Cloud is a subscription-based service offering an adaptable SaaS (Software as a Service) solution with graduated levels of functionality and unlimited scalability. For more information about XiO Cloud, please visit https://www.crestron.com/xiocloud.



UC Engine - Front & Rear Panels



#### **SPECIFICATIONS**

#### **Included Components**

TSW-1060-B-S: 10" touch screen, black

TSW-1060-TTK-B-S: Tabletop kit for touch screen, black

UC-BRKT-100-ASSY: UC Engine Assembly, comprised of:

UC-ENGINE UC Engine for Microsoft Teams video;

HD-CONV-USB-200 HDMI to USB 3.0 converter for content ingest;

UC-CONN-HD EDID emulator for UC Engine display output;

CBL-MDP-HD-0.5 Mini DisplayPort to HDMI converter;

USB cable for HDMI to USB converter, USB 3.0 Type-B male to Type-A male, 3 ft (1 m);

Mounting bracket

**CBL-USBC-HD-9:** USB-C<sup>m</sup> to HDMI converter cable, USB Type-C male to HDMI Type A male, 9 ft (2.7 m)

**CBL-HD-20:** HDMI cable for content source, Type A male-to-male, 20 ft (6.1 m)

CBL-HD-THIN-HS-6 Thin HDMI cable for connecting display device, Type A male-to-male, 6 ft (1.8 m)

**CBL-CAT5E-7:** Ethernet LAN cable for UC Engine, RJ45-to-RJ45, black, 7 ft (2.1 m)

DM-CBL-ULTRA-PC-50: Ethernet LAN cable for touch screen, CAT6a, RJ45-to-RJ45, blue, 50 ft (15 m)

PWE-4803RU: PoE injector for touch screen

CCS-UCA-KB-USB: Wireless keyboard w/touchpad for setup

#### **Tabletop Touch Screen**

**Touch Screen:** 10.1 inch (257 mm) diagonal capacitive multi-touch TFT active matrix color LCD, 1280 x 800 pixels, displays Microsoft Teams UI plus optional Crestron Smart Graphics<sup>®</sup> room control UI<sup>[1]</sup>

**Ethernet:** 10/100 Mbps; enterprise grade security and management including IEEE 802.1X, Active Directory authentication, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), digest access authentication, password login, HTTPS secure provisioning, XiO Cloud client, IEEE 802.3at compliant **Power over Ethernet:** IEEE 802.3at compliant PoE or PoE+ PD

(Powered Device);

- Requests 15 Watts from an 802.3at Type 2 PSE with LLDP advanced power management;
- Requests 30 Watts (PoE+ Class 4) from an 802.3at Type 2 PSE without LLDP;
- Requests 15.4 Watts (PoE Class 0) from an 802.3af (or 802.3at Type 1) PSE

**PoE Injector:** A PoE injector is included to power the touch screen if network PoE is not available

**Construction:** Plastic tabletop housing, smooth black finish, edge-to-edge glass with black surround

**Dimensions:** 5.42 x 10.23 x 5.69 in (138 x 260 x 145 mm) HWD **Weight:** 41.2 oz (1166 g)

*Refer to the TSW-1060-B-S, TSW-1060-TTK-B-S, and PWE-4803RU spec sheets for additional specifications and compliances. One additional TSW-1060 series touch screen may be added.* 

#### **UC Engine Assembly**

Mini PC: Intel NUC Kit NUC6i7KYK

**Processor:** 6th generation Intel Core<sup>®</sup> i7-6770HQ processor with Intel Iris<sup>®</sup> Pro Graphics 580, 8 GB RAM, 128GB SSD, Intel I219-LM 10/100/1000 Mbps Ethernet, Windows<sup>®</sup> 10 IOT Edition OS

UC Client: Microsoft Teams or Skype for Business

Management Client: Crestron XiO Cloud, Microsoft Intune®

**USB:** USB 3.0 host supporting USB HID, UAC, and UVC for AEC-enabled speakerphone & camera (Microsoft Teams or Skype for Business compliant), content ingest, and keyboard/mouse devices

**Content Ingest:** HDMI input via HDMI to USB 3.0 converter (model HD-CONV-USB-200, included)

**Display Output:** Single or dual display support, native Mini DisplayPort (primary) and USB Type-C (secondary) outputs, HDMI outputs enabled via converter cables (included)

Camera Input Resolution: HD 1080p @ 30 fps

Content Input Resolution: HD 1080p @ 60 fps

Display Output Resolution: HD 1080p @ 60 fps

**Power:** 19 Volts DC via external 100-240V AC, 50/60 Hz adapter (included) **Construction:** Metal mounting bracket, black, preassembled with UC Engine and USB to HDMI converter

**Mounting:** Surface wall mount behind the display device, or attach to the rear of the display device via the bolts attaching the display to a VESA<sup>®</sup> compliant display mount; the Crestron bracket includes mounting holes on both side edges, spaced 100, 200, and 300 mm vertically, to allow for attachment to either side of the display mounting plate

Dimensions: 16.00 x 14.00 x 1.62 in (407 x 356 x 41 mm) HWD

*Refer to the UC-ENGINE, HD-CONV-USB-200, and UC-BRKT-100-ASSY spec sheets for additional specifications and compliances.* 

#### **MODELS & ACCESSORIES**

#### **Available Models**

UC-C160-T: Crestron Flex C160-T – UC Video Conference System Integrator Kit for Microsoft Teams  $^{\ensuremath{\circledast}}$ 

#### **Available Accessories**

TSW-1060 Series: 10.1" Touch Screen TSW-1060-TTK Series: Tabletop Kit for TSW-1060 TSW-560/760/1060-SMK: Swivel Mount Kit CEN-SWPOE-16: 16-Port Managed PoE Switch CEN-SW-POE-5: 5-Port PoE Switch SW-XIOC-S Series: XiO Cloud<sup>™</sup> Standard Provisioning and Management Service Subscription for one device SW-XIOC-P Series: XiO Cloud<sup>™</sup> Premium Provisioning and Management Service Subscription for one device SW-FUSION-C-3: Crestron Fusion<sup>®</sup> Cloud; 250 rooms; 3-year service, support, and updates SW-FUSION-P-L: Crestron Fusion<sup>®</sup> On-premises; Unlimited rooms; lifetime service, support, and updates DSP-1282: Crestron Avia<sup>™</sup> 12x8 Digital Signal Processor w/USB Audio, AEC, & Audio Conferencing Interface



DSP-1283: Crestron Avia<sup>™</sup> 12x8 Digital Signal Processor w/Dante<sup>™</sup>, USB Audio, AEC, & Audio Conferencing Interface MMX-6-USB: 6-Channel USB Microphone Mixer UC-SB1: UC Video Conference Smart Sound Bar UC-SB1-CAM: UC Video Conference Smart Sound Bar & Camera SAROS SB-200-P: Saros<sup>®</sup> Sound Bar 200, Powered HD-CONV-USB-100: HD to USB Video Converter

Notes:

- Room control capability (lighting, shades, thermostats, etc.) requires additional equipment and commissioning to be provided by a Crestron authorized integrator and/or programmer. Additional costs may apply.
- 2. Complimentary XiO Cloud subscriptions are subject to the terms of the Crestron Cloudware License Agreement at https://www.crestron.com/cloudwarelicensepdf, as well as additional terms of the Crestron Cloudware License Agreement Addendum at https://www.crestron.com/ cloudwarelicenseaddendumpdf, which control in any conflict with the Agreement. Complimentary subscriptions may be applied to new accounts only. New UC-P110-T phones may be added to existing XiO Cloud subscription account at a discounted rate. An additional purchase toward the existing subscription account term may be required. For more information, please contact license@crestron.com.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at https://www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty for 3 years, except for the touch screen display which is covered for 90 days. Refer to <a href="https://www.crestron.com/warranty">https://www.crestron.com/warranty</a> for full details.

The specific patents that cover Crestron products are listed online at https://www.crestron.com/legal/patents.

Certain Crestron products contain open source software. For specific information, visit https://www.crestron.com/opensource.

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